All Appropriate Inquiries Rule:
Reporting Requirements Checklist for Assessment Grant Recipients

WHAT IS "ALL APPROPRIATE INQUIRIES"?

"All appropriate inquiries," or AAI, is a process of evaluating a property's environmental conditions and assessing the likelihood of any contamination. Every Phase I assessment conducted with EPA Brownfields Assessment Grant funds ***must*** be conducted in compliance with the All Appropriate Inquiries Final Rule at 40 CFR Part 312. The All Appropriate Inquiries Final Rule provides that the ASTM E1527-21 and ASTM E2247-16 standards are consistent with the requirements of the final rule and may be used to comply with the provisions of the rule. In addition, all appropriate inquiries must be conducted in compliance with the Final Rule or the ASTM standard to obtain certain protections from liability under the federal Comprehensive Environmental Response, Compensation and Liability Act (CERCLA, aka Superfund).

WHAT ARE THE DOCUMENTATION REQUIREMENTS FOR ALL APPROPRIATE INQUIRIES?

The final rule requires that the results of an AAI investigation be documented in a written report. The specific reporting requirements are provided in 40 CFR §312.21 and §312.31 of the final rule and in §12 of the ASTM E1527-21 standard. All AAI final reports ***must***, at a minimum include the following:

1. An ***opinion*** as to whether the inquiry identified conditions indicative of releases or threatened releases of hazardous substances, and as applicable, pollutants and contaminants, petroleum or petroleum products, or controlled substances, on, at, in, or to the subject property.

2. An identification of ***"significant" data gaps*** (as defined in §312.10 of AAI final rule and §12.5 of ASTM E1527-21), if any, in the information collected for the inquiry. Significant data gaps include missing or unattainable information that affects the ability of the environmental professional to identify conditions indicative of releases or threatened releases of hazardous substances, and as applicable, pollutants and contaminants, petroleum or petroleum products, or controlled substances, on, at, in, or to the subject property. The documentation of significant data gaps must include information regarding the significance of these data gaps.

3. ***Qualifications*** **and** ***signature*** of the environmental professional(s). The environmental professional must place the following statements in the document and sign the document:

   - *''[I, We] declare that, to the best of [my, our] professional knowledge and belief, [I, we] meet the definition of Environmental Professional as defined in §312.10 of this part.''*

   - *''[I, We] have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. [I, We] have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.''*

   Note: Please use either "I" or "We."

4. In compliance with §312.31(b) of the AAI final rule and §12.6 of ASTM E1527-21, the environmental professional must include in the final report an ***opinion regarding additional appropriate investigation***, if the environmental professional has such an opinion.

For each Phase I Environmental Site Assessment, or AAI, conducted using EPA Brownfields Grant monies, the grantee must complete, sign, date, and submit the following check list with any AAI reports submitted to EPA.

Also see U.S. EPA's website at www.epa.gov/brownfields for additional information.

Checklist for Phase I Site Assessments Conducted using EPA Brownfields Assessment Grant Funds

Contact Information

Grantee Name: Rhode Island Department of Environmental Management

Grant Number: 4B-00A00985

ACRES Property ID: 259788

Program Manager Name: (Point of Contact) Rachel Simpson

Contact Phone Number: 401-537-4362

Name / Address of Property Assessed: Potter Hill Mill - 198 Potter Hill Rd., Westerly, RI

Checklist

Please indicate that each of the following All Appropriate Inquiries documentation requirements were met for the Phase I assessment conducted at the above listed property:

- ■ An ***opinion*** as to whether the inquiry has identified conditions indicative of releases or threatened releases of hazardous substances, and as applicable, pollutants and contaminants, petroleum or petroleum products, or controlled substances, on, at, in, or to the subject property.

- ■ An identification of ***"significant" data gaps*** (as defined in §312.10 of AAI final rule and §12.5 of ASTM E1527-21), if any, in the information collected for the inquiry, as well as comments regarding the significance of these data gaps. Significant data gaps including missing and unattainable information that affects the ability of the environmental professional to identify conditions indicative of releases or threatened releases of hazardous substances, and as applicable, pollutants and contaminants, petroleum or petroleum products, or controlled substances, on, at, in, or to the subject property.

- ■ ***Qualifications*** **and** ***signature*** of the environmental professional(s). The environmental professional must place the following statements in the document and sign the document:
  - ■ *''[I, We] declare that, to the best of [my, our] professional knowledge and belief, [I, we] meet the definition of Environmental Professional as defined in §312.10 of this part.''*
  - ■ *''[I, We] have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. [I, We] have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.''*

  Note: Please use either "I" or "We."

- ■ In compliance with §312. 31(b) of the AAI final rule and §12.6 of ASTM E1527-21, the environmental professional must include in the final report an ***opinion regarding additional appropriate investigation***, if the environmental professional has such an opinion.

Rachel T. Simpson	7/22/2024
Signature of Grantee Program Manager	Date

Phase I Environmental Site Assessment Report

Potter Hill Mill

198 Potter Hill Rd, Westerly, RI 02891

Grant Number 4B-00A00985

July 31, 2024

Phase I Environmental Site Assessment Report

Potter Hill Mill
198 Potter Hill Road
Westerly, RI 02891

Grant Number:
4B-00A00985

Prepared for:
Town of Westerly, RI
45 Broad Street
Westerly, RI 02891

Prepared by:
Groundwater & Environmental Services, Inc.
425E Hayden Station Road
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Date:
July 31, 2024



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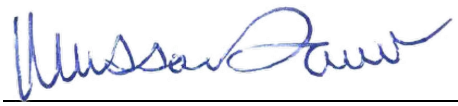

Senior Reviewer
Melissa Davis
Senior Project Manager
Groundwater & Environmental Services, Inc.

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1 Executive Summary

1.1 Site Description

Groundwater and Environmental Service, Inc. (GES), on behalf of the Town of Westerly, Rhode Island (RI), has prepared this *Phase I Environmental Site Assessment* (ESA) for the Potter Hill Mill located at 198 Potter Hill Road in Westerly, RI (the 'Subject Property'). GES has completed this ESA in general accordance with the standard practice guidelines established in American Standard for Testing and Materials (ASTM) Practice E1527-21. GES has performed this ESA in conformance within the scope and limitations of ASTM E1527-21. Any exceptions to, or deletions from, this practice are described within.

The Subject Property consists of a loosely rectangular shaped parcel of land, approximately 4.55 acres in size and is located approximately 170 feet west of the intersection of Potter Hill Road and River Road in Westerly, RI. The Subject Property is identified by the Town of Westerly, RI as Map 8 Block 23. Based on site reconnaissance completed on July 1, 2024, the Subject Property is a vacant, overgrown parcel of land that consists of several dilapidated buildings, debris piles and abandoned textile equipment. A dam across the Pawcatuck River located to the east of the Subject Property channels river water onto the Subject Property via a network of channels (raceway). A Site Location Map depicting the local area and Subject Property Aerial Site Map are provided as **Figure 1** and **Figure 2,** respectively.

1.2 Data Gaps

Reasonable efforts have been made during this assessment of potential Recognized Environmental Concerns (RECs). Reasonable efforts are limited to information gained from visual observation of largely unobstructed areas, inaccessible buildings during site reconnaissance, and recorded database information held in public record. Such methods may not identify subsurface equipment that may have been hidden from view due to dense vegetative cover, paving, construction or debris pile storage or incorrect information from sources.

Due to the dilapidated condition of the remaining buildings observed at the Subject Property during site reconnaissance, including collapsed roofs and structurally unsafe floors, the interior spaces could not be assessed other than what was readily viewable from exterior access points. Even from exterior locations, the surfaces of the remaining buildings were obstructed from view by vegetation and/or rubble. Additionally, dense vegetation covered much of the Subject Property, which made it difficult to transect, access, and observe the Subject Property. Specific areas of the Subject Property that were not accessed included:

- The western area of the Subject Property could not be accessed due to heavy vegetation.
- The eastern property boundary along the Pawcatuck River was not inspected due to heavy demolition debris and raceway(s) obstructed by vegetation. Discharge features from the former mill buildings are allegedly present along the banks of the Pawcatuck River and were not inspected.

Due to these access limitations, the environmental professional could not identify all conditions indicative of releases or threatened release of hazardous substances, and as applicable, pollutants and contaminants, petroleum or petroleum products or controlled substances on, at, in or to the Subject Property. Interior building spaces and exterior areas of the Subject Property that could not be assessed are considered to be a data gap.

1.3 Environmental Report Summary

GES has prepared this ESA in conformance with the provisions of ASTM E1527-21. Any exceptions to, or deletions from, this practice are described herein.

Within the scope of this investigation, GES discovered evidence of the following RECs:

- Rhode Island Department of Environmental Management (RIDEM) Remediation Case SR-38-1074
- Observed coal piles and/or suspect buried coal
- Discarded demolition and solid waste pile, including a deteriorating automobile and any other buried solid waste
- Elevator
- Electrical equipment possibly containing polychlorinated biphenyls (PCBs) and/or mercury
- Painted surfaces possibly containing lead-based paint
- Asbestos containing materials (ACM) in any unsampled building materials
- Boiler room
- Chimney

Within the scope of this investigation, GES discovered evidence of the following Historical Recognized Environmental Concerns (HRECs):

- Historical leaking underground storage tank (LUST) case 1402-LS issued No Further Action (NFA), at an upgradient property located at 3 & Maxson Street in Hopkinton, RI.
- Historical LUST case 1412-LS issued NFA, at an upgradient property located at 24 and 8 Laurel Street, Hopkinton, RI.

Within the scope of this investigation, GES discovered evidence of the following Controlled Recognized Environmental Concerns (CRECs):

- None identified.

Within the scope of this investigation, GES discovered evidence of the following environmental concerns, which are not considered to be RECs:

- Suspect septic system
- Historic “oil house”

- Historic “engine room”
- The Pawcatuck River, which bounds the Subject Property to the east and north, was identified with “tissue samples” collected in 2018 containing PFAS.

Report Section		No Further Action	REC	HREC	CREC	EC	Further Investigation	Comments
4.3	Current Use of Property		X				X	Abandoned textile mill that utilized coal. Coal piles observed in at least two areas of the Subject Property. A coal boiler chimney was observed adjacent to the boiler room.
4.5	Adjoining Property Information	X						
5.1	Standard Environmental Records Sources		X				X	Subject Property identified with active RIDEM remediation case SR-38-1074.
5.2	Additional Environmental Records Sources			X		X		HREC: Historical LUST case(s) issued NFA at upgradient properties. EC: “Tissue Samples” containing PFAS in Pawcatuck River adjacent to Subject Property.
5.3	Regulatory File Review		X				X	Subject Property identified with active RIDEM remediation case SR-38-1074.
5.4	Municipal and Local Records		X				X	Record of previous ACM testing being completed, results <1% in buildings tested. ACM possible in any remaining unsampled buildings.
5.5	Desktop Records	X						
5.6	Vapor Encroachment Screen	X						
6.2.1	Hazardous Substances	X						
6.2.2	Petroleum Products					X	X	Petroleum products presumed in historic “oil house,” “engine room,” elevator. Buildings no longer exist.
6.2.3	USTs	X						
6.2.4	ASTs	X						

Report Section		No Further Action	REC	HREC	CREC	EC	Further Investigation	Comments
6.2.5	Other Suspect Containers	X						
6.2.6	Equipment likely to contain PCBs		X				X	Electrical equipment in mill buildings.
6.2.7	Interior Staining/Corrosion		X				X	Painted surfaces in remaining buildings may be lead-based paint.
6.2.8	Discharge Features					X	X	Possible historic septic system.
6.2.9	Pits, Ponds Lagoons	X						
6.2.10	Solid Waste Dumping/Landfills		X				X	Solid waste pile with automobile. Historic violations for improperly discarded demolition/solid waste. Coal piles observed in at least two areas of the Subject Property.
6.2.11	Stained Soil/Stressed Vegetation	X						
6.2.12	Wells						X	Five monitoring wells and one possible drinking water well.

1.4 Recommendations

It is the opinion of GES that additional investigation is appropriate at this site, to include the following recommendations:

- Clear the property of over-vegetation, both for access to facilitate additional investigation, and to visually observe the Subject Property for additional coal piles, dumped solid waste, or suspect containers.
- Completion of a geophysical survey in order to attempt to locate a former septic system, underground storage tanks and other buried debris which would be considered an area of concern.
- Collection of shallow soil samples in areas of observed coal piles, or any other discovered areas of coal piles, for analysis of constituents of concern (COCs). Historic soil analytical may be utilized to supplement investigation. Based on results of shallow soil sampling, additional horizontal and vertical delineation sampling would be needed to evaluate the degree and extent of contamination, if present.

- Collection of shallow soil samples in area of discarded demolition and solid waste pile, including a deteriorating automobile and any other buried solid waste, for analysis of COCs. Historic soil analytical may be utilized to supplement investigation. Based on results of shallow soil sampling, additional horizontal and vertical delineation sampling would be needed to evaluate the degree and extent of contamination, if present.
- Collection of shallow soil samples in the area of the historic “oil house,” and “engine room,” for analysis of COCs. Based on results of shallow soil sampling, additional horizontal and vertical delineation sampling would be needed to evaluate the degree and extent of contamination, if present.
- Collection of shallow soil samples within a selected radius of the chimney for analysis of COCs. Based on results of shallow soil sampling, additional horizontal and vertical delineation sampling would be needed to evaluate the degree and extent of contamination, if present.
- A minimum of three monitoring wells should be installed/utilized to evaluate the presence or absence of COCs in groundwater. Based on the findings of the site investigation, additional monitoring wells may be warranted. Five monitoring wells installed at the site, the historic drinking water well and any other wellheads on the Subject Property should be located and evaluated, if possible. If wells are not utilized, and will not be needed in the future, they should be property abandoned in accordance with RIDEM rules and regulations.
- A demolition survey should be completed for all dilapidated buildings and buildings in ruins that were not previously evaluated. The demolition survey should be completed at a time where the buildings can safely be accessed. Hazardous building materials (ACM, lead-based paint, PCBs/mercury equipment, and/or petroleum products) should be handled and disposed of in accordance with local, state and federal regulations.

2 Introduction

2.1 Purpose

The purpose of this ESA is to provide the User the results of a commercially prudent and reasonable inquiry designed to identify RECs at the Subject Property, while taking into account reasonable ascertainable information. GES completed this Phase I ESA in accordance with the standard practice guidelines established in the ASTM Practice E1527-21 (see Section 1.4 for Limitations and Exceptions).

RECs are defined by ASTM as:

- Recognized Environmental Condition (REC): (1) The presence of hazardous substances or petroleum products in, on, or at the Subject Property due to a release to the environment; (2) the likely presence of hazardous substances or petroleum products in, on, or at the Subject Property due to a release or likely release to the environment; or (3) the presence of hazardous substances or petroleum products in, on, or at the Subject Property under conditions that pose a material threat of a future release to the environment. De minimis conditions are not recognized environmental conditions. The term is not intended to include *de minimis* conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate government agencies.
- Historical Recognized Environmental Condition (HREC): A previous release of hazardous substances or petroleum products affecting the Subject Property that has been addressed to the satisfaction of the applicable regulatory authority or authorities and meeting unrestricted use criteria established by a regulatory authority or authorities without subjecting the Subject Property to any controls (for example, activity and use limitations or other property use limitations). An HREC is not a REC.
- Controlled Recognized Environmental Condition (CREC): A recognized environmental condition affecting the Subject Property that has been addressed to the satisfaction of the applicable regulatory authority or authorities with hazardous substances or petroleum products allowed to remain in place subject to implementation of required controls.

The ASTM guidance defines “material threat” as “an obvious threat which is likely to lead to a release and that, in the opinion of the environmental professional, would likely result in impact to public health or the environment.” It is not sufficient to establish a Subject Property feature as a “REC” just because it exists.

2.2 Scope of Work

The Phase I ESA conducted at the Subject Property included the following:

- GES conducted a review of appropriate federal, state, and local environmental regulatory agency databases, public records, and User-provided data (if available) pertaining to the

Subject Property and the surrounding area, which could be obtained within a reasonable time frame. This data was used in an effort to identify known or suspected hazardous waste activity located at or near the Subject Property, and historical land usage and property occupancy information to aid with the identification of RECs in connection with the Subject Property.

- GES conducted interviews with individuals knowledgeable about the Subject Property for the purpose of gathering information regarding the potential for RECs at the Subject Property.
- GES conducted site reconnaissance at the Subject Property to visually identify potential environmental conditions that may likely indicate the presence of such items as hazardous or toxic materials, hazardous wastes, petroleum products, underground storage tanks (USTs), above ground storage tanks (ASTs), dry wells, septic tanks, PCB-containing equipment, areas of stained or discolored soil, surface water, pavement and/or flooring, and areas of stressed or dead vegetation, that could be visually identified on the Subject Property. A visual assessment of the adjacent properties also was conducted from the adjacent public right-of-ways to detect the presence of off-site environmental conditions that potentially could have an adverse impact on the Subject Property. Color photographs were taken to document the current conditions of the Subject Property and adjoining properties at the time of the site reconnaissance (see **Appendix A**).

Environmental sampling, including testing of air, soil, groundwater and surface water was not included as a part of this Phase I ESA. These activities will be carried out in a Phase II ESA, where applicable.

2.3 Significant Assumptions

There is a possibility that even with proper application of these methodologies, conditions may exist that could not be identified within the scope of this assessment or which were not reasonably identifiable from the available information. GES believes that the information obtained from the record review and the interviews concerning the Subject Property is reliable. However, GES cannot and does not warrant or guarantee that the information provided by these other sources is accurate or complete. The methodologies of this assessment are not intended to produce all-inclusive or comprehensive results, but rather to provide RIDEM with information relating to the Subject Property.

2.4 Limitations and Exceptions

GES has prepared this Phase I ESA using reasonable efforts in each phase of its work to identify RECs associated with hazardous substances, wastes, and petroleum products at the Subject Property. The methodology of this Phase I ESA was consistent with the ASTM E1527-21. Findings within this report are based on the information collected from observations made on the day of site reconnaissance and from reasonable ascertainable information obtained from governing public agencies and private sources.

The report is not definitive and should not be assumed to be a complete or specific definition of the conditions above or below grade. GES makes no representation or warranty the past or

current operations at Subject Property are or have been in compliance with all applicable federal, state, and local laws, regulations or codes.

This report does not warrant against future operations or conditions, nor does it warrant against operations or conditions present of a type or at a location not investigated.

The regulatory database report provided is based on an evaluation of the data collected and compiled by a contracted data research company. The report focuses on the Subject Property and neighboring properties, which could impact the Subject Property. Neighboring properties listed in governmental environmental records are identified within specific search distances. The search distance varies depending on the particular government record being checked. The regulatory research is designed to meet the requirements of ASTM E1527-21. The information provided in the regulatory database report is assumed to be correct and complete.

Subsurface conditions may differ from the conditions implied by the surface observations and can only be reliably evaluated through intrusive techniques.

The Phase I ESA scope of work does not include non-CERCLA issues such as an assessment for wetlands, asbestos, lead-based paint, radon, lead in drinking water, regulatory compliance, cultural and historical resources, industrial hygiene, health and safety, ecological resources, endangered species, indoor air quality and mold, high voltage power lines, and other non-scope items.

The following limitations or exceptions were identified in accordance with the scope set forth in ASTM Practice E1527-21:

- The presence of an Activity and Use Limitation (AUL) at a property is an indication that there may be residual levels of hazardous substances or petroleum products present above unrestricted land use levels. Although Environmental Liens and AULs are often recorded with the property deed at the local land title office, in some cases they are filed in a separate environmental agency database or in Subject Property documentation, such as agency closure letters. ASTM E1527-21 does not require the environmental professional to undertake a review of recorded land title records and judicial records for environmental liens and AULs. Such a review is performed at the discretion of the User, based on their need to meet the requirements of 40 CFR 312.20 and 312.25. The User did not engage GES to review title and judicial records for environmental liens or AULs recorded against the Subject Property. Furthermore, these documents were not provided to GES for review. The lack of this information represents a data gap. However, based on the other information obtained during the completion of this assessment, the lack of the Environmental AUL/Lien search does not represent a significant data gap.
- Reasonable efforts have been made during this assessment of potential RECs. Reasonable efforts are limited to information gained from visual observation of largely unobstructed areas, inaccessible buildings during site reconnaissance, and recorded database information held in public record. Such methods may not identify subsurface equipment that may have been hidden from view due to dense vegetative cover, paving, construction or debris pile storage or incorrect information from sources. Due to the dilapidated condition of the remaining

buildings observed at the Subject Property during site reconnaissance, including collapsed roofs and structurally unsafe floors, the interior spaces could not be assessed other than what was readily viewable from exterior access points. Even from exterior locations, the surfaces of the remaining buildings were obstructed from view by vegetation and/or rubble. Additionally, dense vegetation covered much of the Subject Property, which made it difficult to transect, access, and observe the Subject Property. Specific areas of the Subject Property that were not accessed included:

- The western area of the Subject Property could not be accessed due to heavy vegetation.
- The eastern property boundary along the Pawcatuck River was not inspected due to heavy demolition debris and raceway(s) obstructed by vegetation. Discharge features from the former mill buildings are allegedly present along the banks of the Pawcatuck River and were not inspected.

Due to these access limitations, the environmental professional could not identify all conditions indicative of releases or threatened release of hazardous substances, and as applicable, pollutants and contaminants, petroleum or petroleum products or controlled substances on, at, in or to the Subject Property. Interior building spaces and exterior areas of the Subject Property that could not be assessed are considered to be a data gap.

2.5 Special Terms and Conditions

Authorization to perform this assessment was given by RIDEM on June 6, 2024, including instructions as to the location of the property and an explanation of the Subject Property and facilities to be assessed. Authorization to access the property, including instructions on how to access the property was provided by the Town of Westerly, RI on June 25, 2024.

2.6 User Reliance

This report is provided for the sole use and benefit of the parties listed below and may not be used or relied upon by any other party whatsoever. Reliance on this report by a party other than the listed parties shall be at the party's sole risk unless that party has written authorization from GES to use this document.

The purpose of this restriction is to attempt to protect the interest of parties for whom the report may not be appropriately directed.

- Town of Westerly, Rhode Island
- The Rhode Island Department of Environmental Management
- Groundwater & Environmental Services, Inc.

3 User Provided Information

In order to qualify for one of the Landowner Liability Protections (LLPs) offered by the Small Business Liability Relief and Brownfield's Revitalization Act of 2001 (the "Brownfields Amendments") (if desired), the User must provide certain information (if available) identified in the User Questionnaire to the environmental professional. Failure to provide this information could result in a determination that "all appropriate inquiry" is not completed.

ASTM guide's definition of User, that is, the party that retains GES for the preparations of a baseline Environmental Site Assessment of the Subject Property. A User may include, without limitation, a purchase, potential occupant, owner, existing or potential mortgagee, lender, or property manager of the Subject Property.

Additional inquiries are required to be conducted by the User, in accordance with the ASTM Guidelines. These inquiries include: 1 - Identification of environmental cleanup liens against the subject properties, 2 - Specialized knowledge or experience regarding the subject properties, 3 - Relationship of the purchase price to the fair market value, if the subject properties were not contaminated, 4 - Commonly known or reasonably ascertainable information regarding the subject properties, and 5 - The degree of obviousness to the presence, or likely presence, of contamination at the subject properties.

3.1 Commonly Known or Reasonably Ascertainable Information

GES was provided with a Phase I Environmental Site Assessment for the Subject Property dated March 14, 2006 by Jacques Whitford. This facility concluded three RECs were identified for the Subject Property:

- According to the Phase I report by Jacques Whitford, records available from the Town of Westerly indicated the Subject Property previously utilized a septic system, but upon GES review of files provided by the town, no such system could be found in reference. Additionally, the former owner of the Subject Property claimed to Jacques Whitford that all wastewater was believed to be discharged directly to the adjacent Pawcatuck River.
- According to the previous Phase I report, as well as observations made during GES site reconnaissance activities on the Subject Property, coal was used for fuel on the Subject Property, and piles of coal, creosote, and slag were observed in the vicinity of the boiler room and on the northern end of the Subject Property in the vicinity of the former storage and carpenter shop.
- An area of dumping was observed in the northwestern part of the Subject Property, with significant debris including several empty and rusted unlabeled 55-gallon drums. These drums were not observed during GES's site reconnaissance of the Subject Property.

Although significant impacts resulting from the offsite recognized environmental conditions are considered unlikely on the basis of collective ESA data, it may be advisable to evaluate baseline environmental conditions by conducting a subsurface evaluation (i.e., Phase II Environmental Site

Assessment) on the Subject Property. The purpose of this evaluation is to determine if contaminants of concern occurring as a result of historical land use activities have impacted the Subject Property. This evaluation will facilitate the identification of environmental impacts to soil and groundwater, if any, and develop appropriate recommendations pertaining to release reporting and corrective action requirements promulgated by RIDEM in the event that contaminants are identified.

4 Subject Property Description

4.1 Location and Legal Description

The Subject Property is located at 198 Potter Hill Road in Westerly, RI and is identified by the Town of Westerly, RI as Map 8 Block 23. The Subject Property is currently owned by the Town of Westerly, zoned "RR-60," defined as Rural Residential within a minimum size lot of 60,000 square-feet.

Legal descriptions of the Subject property were located in the Town of Westerly, RI's Clerk's Office which catalogs land evidence records via an online database. The legal description for the Subject Property is included in the most recent land evidence record in Deed Book 2022, page 14733.

The Subject Property is geographically located at approximately 41°24'53.50"N, 71°47'49.76"W based on the North American Datum of 1983 (NAD83). A Subject Property location map derived from the United States Geological Survey (USGS) *7.5-minute Topographic Quadrangle for Ashaway, Rhode Island* is included as **Figure 1**.

4.2 Subject Property Vicinity and Characteristics

The Subject Property consists of approximately 4.55 acres and is located at 198 Potter Hill Road, approximately 170 feet west of the intersection of Potter Hill Road and River Road in Westerly, RI. A Subject Property map depicting pertinent Subject Property features is included as **Figure 2**.

Based on site reconnaissance complete on July 1, 2024, the properties surrounding the Subject Property consists primarily of residential properties to the west, Pawcatuck River to the north and east, and Potter Hill Road, followed by undeveloped land owned by the Westerly Land Trust to the south. The local area is developed primarily with residential properties.

4.3 Current Uses of Property

The Subject Property is currently a vacant and abandoned mill site in ruins.

4.4 Description of Structures, Roads and Improvements

Based on site reconnaissance completed on July 1, 2024, the sole entrance to the Subject Property from Potter Hill Road is via an approximate 80-foot-long asphalt driveway leading to a gated fence. Access to the Subject Property is gained via a locked fence. Once through the gate, a gravel-paved path travels in a northerly direction towards the location of several dilapidated brick, granite stone, and wooden former mill buildings. Several concrete pads are present under existing structures or presumed to be foundations of former structures in ruins. Much of the Subject Property is unsurfaced with heavily vegetated and wooded areas observed within the fenced area, and significant overgrowth covering much of the parcel and dilapidated buildings. Along the southeastern property boundary, portions of concrete raceway(s) were observed, which

divert water from the Pawcatuck River Dam onto the Subject Property and back to the Pawcatuck River. The remains of the former mill buildings, including roofs, exterior walls and concrete slabs of many of the former buildings, coal fired boilers and chimney, abandoned textile machinery, water hydrants, debris piles, and the shell of a former automobile were observed on the Subject Property.

The Subject Property does not appear to be connected to any active utilities, although municipal water, electricity, telephone service and natural gas were available and observed in the right-of-way of Potter Hill Road. When the former mill was in operation, the Subject Property relied on an on-site well for water, which was stored in a water storage tank. The water tank is reportedly no longer present on the Subject Property, and was utilized for a fire suppression system. One fire hydrant was observed in the overgrowth, in proximity of the granite stone mill. There were no municipal sewers identified during site reconnaissance on July 1, 2024; however, the field property record card obtained from the Town of Westerly, RI's tax assessment office indicated that the site utilizes septic. Evidence of a septic system was not observed during site reconnaissance, and historical interviews with past property owners suggest that wastewaters were historically discharged to the Pawcatuck River.

4.5 Adjoining Property Information

Details concerning the surrounding land use in the vicinity of the Subject Property, as observed by GES on July 1, 2024, are described below. GES completed a visual evaluation of the area surrounding the Subject Property in order to identify sites with the potential to impact the Subject Property. Below is a summary of the adjoining properties and their direction from the Subject Property.

North: The Subject Property is bordered to the north by the Pawcatuck River followed by 72 Laurel Street, Hopkinton (Ashaway), RI (residence).

South: The Subject Property is bordered to the south by 196 Potter Hill Road, Westerly, RI (residence), followed by 159 Potter Hill Road, Westerly, RI (the Westerly Land Trust).

East: The Subject Property is bordered to the east by the Pawcatuck River, followed by Laurel Street and Maxon Street in Hopkinton (Ashaway), RI. Properties along Laurel and Maxon Street are primarily residential.

West: The Subject Property is bordered to the west by several residential properties including 194 Potter Hill Road, 15 and 17 Post Office Lane, and undeveloped wooded land at 30 Post Office Lane and owned by RIDEM.

5 Environmental Records Review

The purpose of the records review is to obtain and review records that will help identify RECs. ASTM E1527-21 requires the review of reasonably ascertainable records from standard sources as defined in Section 8.2.1 of ASTM E1527-21. Additional records sources, such as local fire department records, local building department records, and local environmental health department records may be obtained and reviewed at the discretion of the environmental professional.

5.1 Standard Environmental Records Sources

At the request of GES, Environmental Data Resources, Inc. (EDR) was contacted to conduct a search of Federal and State databases containing known and suspected sites of environmental contamination, which could have an adverse impact on the Subject Property. This data obtained from EDR, is presumed to be complete and accurate. The EDR environmental data are summarized in the database review of *The EDR Radius Map™ Report with GeoCheck®* (June 21, 2024), and provided in **Appendix B**.

In addition, GES conducted a review of supplemental federal, state, and local environmental records to enhance and supplement the federal and state sources required within the ASTM Practice E1527-21. The supplemental environmental data included information obtained from federal and state databases searched by EDR and summarized in *The EDR Radius Map™ Report with GeoCheck®*, county or local environmental records obtained from the county environmental department; state environmental records obtained from RIDEM; and site-specific data records (if available) obtained from the Town of Westerly.

For the purpose of assigning potential risk for confirmed off-site contaminated sources, GES considers the relative location of the off-site facilities with respect to the Subject Property and with respect to the expected local or regional groundwater flow directions. Based on the review of the USGS topographical map, the regional groundwater flow direction in the vicinity of the Subject Property is estimated to be east/northeast. EDR did not report the general groundwater flow direction or the depth to groundwater for the Subject Property (see **Appendix B**). Local flow may vary from the regional flow direction and possibly could be influenced by local drainage features, seasonal groundwater level fluctuations, subsurface geology, active pumping of area water-supply wells, if present, surface topography and/or other local Subject Property features. GES would consider off-site properties that have the potential or have had a petroleum or hazardous substance release to the environment and that are located in close proximity to the Subject Property as potential RECs.

The standard (or required) federal and state environmental record sources and the approximate minimum search distances are as follows:

RECORD SOURCE	SEARCH DISTANCE (MILES)	TARGET PROPERTY	TOTAL PLOTTED
NPL	1.0	0	0

RECORD SOURCE	SEARCH DISTANCE (MILES)	TARGET PROPERTY	TOTAL PLOTTED
Proposed NPL	1.0	0	0
NPL LIENS	1.0	0	0
Delisted NPL	1.0	0	0
Federal Facility	0.5	0	0
SEMS	0.5	0	0
SEMS-Archive	0.5	0	0
CORRACTS	1.0	0	0
RCRA-TSDF	0.5	0	0
RCRA-LQG	0.25	0	0
RCRA-SQG	0.25	0	0
RCRA-VSQG	0.25	0	0
LUCIS	0.5	0	0
US ENG Controls	0.5	0	0
US INST Controls	0.5	0	0
ERNS	0.001	0	0
RI SHWS	1.0	1	1
CT SHWS	1.0	0	0
RI SWF/LF	0.5	0	0
CT SWF/LF	0.5	0	0
RI LCP	0.5	0	0
RI LUST	0.5	0	1
CT LUST	0.5	0	0
INDIAN LUST	0.5	0	0
FEMA UST	0.25	0	0
RI UST	0.25	0	1
CT UST	0.25	0	0
RI AST	0.25	0	0
CT AST	0.25	0	0
INDIAN UST	0.25	0	0
RI AUL	0.5	0	0
CT AUL	0.5	0	0
INDIAN VCP	0.5	0	0
RI Brownfields	0.5	0	0
CT Brownfields	0.5	0	0

The EDR report identified three Standard Environmental Records within one-mile of the Subject Property. Copies of the EDR research data and a description of the databases are included in *The EDR Radius Map™ Report with GeoCheck®* attached as **Appendix B**. Listings that may be of environmental concern to the Subject Property are discussed in detail below in the following sections.

Subject Property: Pawcatuck Woolen Mill (Potter Hill Mill), 198 Potter Hill Road, Westerly, Rhode Island

Listings of Potential Concern: RI SHWS

Description: The Subject Property is identified by RIDEM as an active Remediation Site (SR-38-1074) with release date of September 28, 2006. The active remediation case at the Subject Property constitutes a REC.

St. Vincent DePaul Church, 7 Church Street, Westerly, RI
Listings of Potential Concern: RI UST

Description: This parcel, located approximately 0.159 miles to the north-northeast and upgradient of the Subject Property formerly utilized a 1,000-gallon underground storage tank (UST) installed in October 1984 for the storage of No. 2 heating oil. The tank status is listed as permanently closed. The presence of a historical UST upgradient of the Subject Property, that was closed without a reported incident, does not constitute a REC.

Kenyon's Variety, Rte. 3 & Maxon Street, Hopkinton, RI
Listings of Potential Concern: RI LUST, RI UST

Description: This parcel, located approximately 0.302 miles to the east and upgradient of the Subject Property formerly utilized one 350-gallon kerosene UST installed in 1968, one 8,000-gallon gasoline UST installed in 1968, two 1,000-gallon gasoline USTs installed in 1958, and one 1,000-gallon gasoline UST installed in 1997. The five UST statuses are listed as permanently closed. A LUST (1402-LS) was reported on June 7, 1988. Soil removal was completed and a NFA was issued. The record of a historical LUST upgradient of the Subject Property that was issued NFA constitutes a HREC.

5.2 Additional Environmental Records Sources

Supplemental environmental records may be checked at the discretion of the environmental professional to enhance and supplement the federal and state sources. The review of other federal, state, or local environmental records are consistent with the standard practice guidelines established in the ASTM Practice E1527-21.

The following supplemental sources indicated facilities within the search distances:

RECORD SOURCE	SEARCH DISTANCE (MILES)	TARGET PROPERTY	TOTAL PLOTTED
PFAS WQP	0.25	0	1
UST FINDER RELEASE	0.5	0	1
RI RGA HWS	0.001	3	3

The EDR report included five Additional Environmental Records within 0.5-mile of the Subject Property. Copies of the EDR research data and a description of the databases are included in *The EDR Radius Map™ Report with GeoCheck®* attached as **Appendix B**. Listings that may be of environmental concern to the Subject Property are discussed in detail below in the following sections.

Ashaway Line & Twine MFG. CO., 24 Laurel and 8 Laurel Street, Hopkinton, RI
Listings of Potential Concern: UST FINDER RELEASE

Description: The parcel located at 24 Laurel Street, located approximately 0.3 miles north-northeast and upgradient of the Subject Property formerly utilized a 2,500-gallon UST installed in 1965. The UST status is listed as closed. The parcel located at 8 Laurel Street is listed in the LUST database as RI1412-LS with a report date in 1997. The UST is listed as NFA. The record of a historical LUST upgradient of the Subject Property that was issued NFA constitutes a HREC.

Potter Hill Mill, 198 Potter Hill Road, Westerly, RI
Listings of Potential Concern: RGA HWS

Description: The Subject Property listed as archived hazardous waste facility for the years 2007, 2008, 2009, 2010, 2011, and 2012. The status of the facility is listed as active. The historical archive as a hazardous waste facility is considered a REC.

Pawcatuck River, Westerly RI
Listings of Potential Concern: PFAS WQP

Description: The Pawcatuck River, which bounds the Subject Property to the east and north, was identified with "tissue samples" collected in 2018 containing PFAS. The record of "tissue samples" containing PFAS in the Pawcatuck River, without a known contaminant source(s) or sample locations is considered an environmental concern, but not a REC.

5.3 Regulatory File Review

On July 10, 2024, at the request of GES, RIDEM personnel completed a review of available online environmental records. Copies of the electronic files received are included in **Appendix C**. A summary of the files received from RIDEM are included below:

Jacques Whitford: Site Investigation Report, November 28, 2006
Summary: A *Site Investigation (SI) Report* was prepared by Jacques Whitford for Renewable Resources, Inc. The purpose of the SI was to evaluate RECs identified at the property, reported in a Phase I ESA, dated March 14, 2006. RECs included: potential asbestos containing materials in remaining buildings, potential lead-based paint, possible historic septic system, coal piles, area of dumping including several rusted 55-gallon drums, electrical equipment possibly containing PCBs and/or mercury. The SI Report defined two areas of concerns (AOCs):

- AOC #1 – Northwestern Debris Area.
- AOC #2 – Potential Former Coal Storage

In April 2006, six test pits (TP-1 through TP-6) advanced to approximately six feet below grade (fbg) were completed on the Subject Property. Test pits TP-1 through TP-3 were advanced in the area of a debris pile, and test pits TP-4 through TP-6 were advanced to the west of the building near the former boiler building. Soil samples collected from the test pits were screened with a photoionization (PID) detector, no volatile organic compounds (VOCs) were detected. Test pit TP-3 contained various debris and TP-5 contained what appeared to be coal ash. Two soil samples

collected from TP-3 and TP-5 were submitted for laboratory analysis of Priority Pollutant 13 Metals (PP 13 Metals) and polycyclic aromatic hydrocarbons (PAHs).

To evaluate the extent of impacts near the former boiler building, an additional 26 surface soil samples were collected with a hand auger or geoprobe from the vicinity of test pit TP-5 between September and November 2006. All 26 samples were submitted for analysis of arsenic, six were submitted for analysis of Resource Conservation and Recovery Act (RCRA) 8 metals, and three samples were submitted for analysis of PAHs. In October 2006, two borings, B-1 and B-2 were completed as 1-inch groundwater monitoring wells identified as monitoring well MW-1 and MW-2, respectively. Both monitoring wells were installed to approximately 15 fbg, completed with 10-feet of screen and finished with flush mounted roadboxes. Groundwater samples were collected from MW-1 and MW-2 in October 2006 for analysis of RCRA 8 metals and PAHs.

Analytical results from soil samples indicated arsenic was detected in multiple samples at concentrations greater than RIDEM Residential Direct Exposure Criteria (RDEC). Beryllium and lead were also detected in at least one soil sample at concentrations greater than RIDEM RDEC. Concentrations of other metals and PAHs detected in soil samples did not exceed RIDEM RDEC. Analytical results from monitoring wells MW-1 and MW-2 indicated barium was detected in both monitoring wells, at concentrations below RIDEM GA Groundwater Objectives (GOs). Other metals and PAHs were not detected at concentrations above laboratory detection limits or applicable RIDEM GA GOs.

Based on the observations made during the advancement of test pits at the site, and including soil and groundwater analytical results, the following conclusions were made:

- The Subject Property and surrounding area is serviced by municipal water and sewer
- Metals and PAHs exist in surficial soils at concentrations greater than RIDEM RDEC. The impacted soils appear to be limited to an area near a mound containing coal ash and slag.
- An area of approximately 9,750 square-feet was impacted by mounded coal ash and slag.
- The coal ash and slag have not impacted groundwater.

Emergency Response Report, Received October 26, 2007

Summary: Anonymous report of materials from mill falling into river. Westerly Fire Department responded on October 26, 2007 to evaluate and indicated no sheen was observed in Pawcatuck River. RIDEM responded on October 29, 2007 and did not observe a sheen. Further correspondence with the property owner indicated a Site Investigation was in process, the Potter Hill Mill never utilized oil heat at the property, and that the buildings were slated to be demolished in the near future. Coal ash remains onsite and no other hazardous materials were identified at the site.

Fuss & O'Neill: Summary of Documented Environmental Activities, November 16, 2007

Summary: A *Summary of Documented Environmental Activities* letter was prepared by Fuss & O'Neill for RIDEM. The purpose of the letter was to provide a summary of environmental activities conducted at the Potter Hill Mill, including an evaluation of available reports, pertinent correspondences, an assessment of potential response actions remaining to be performed, and

an assessment of potential remediation activities needed to bring the Potter Hill Mill into compliance with RIDEM regulations.

The letter identified the following:

- September 27, 2006, *Hazardous Material Release Notification*: Jacques Whitford on behalf of the property owner, Renewable Resources, Inc., notified RIDEM of a hazardous material release of arsenic and beryllium to soil.
- October 16, 2006: RIDEM issued a *Letter of Responsibility* and directed the completion of a SI in accordance with the *Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases* (Remediation Regulations).
- November 28, 2006, *Site Investigation Report.*
- January 11, 2007, Solid Waste: RIDEM notified Renewable Resources, Inc. that as a result of compliance inspections completed by RIDEM, solid waste had been disposed of on the Subject Property. RIDEMs inspection noted the following:
  - 30 cubic yards of demolition debris from a collapsed building.
  - 298 cubic yards of solid waste including scrap metals, deteriorating lumber, an abandoned automobile, demolition debris from collapsed buildings and landfilled solid waste including empty steel drums, scrap metal, bottles and cans.
  - 90 cubic yards of solid waste consisting of scrap metal, deteriorated lumber, asphalt shingles, discarded metal pipe, and demolition debris from collapsed buildings.
  - RIDEM indicated that to archive compliance with Rhode Island General Laws, Renewable Resources, Inc. needed to demonstrate that all solid waste from the property was removed from the Subject Property within 60 days of January 11, 2007 and disposed of at a licensed solid waste management facility.
  - Correspondence from Jacques Whitford on July 5, 2007 indicated that “All buried debris has been excavated from the area (AOC #1) and disposed under the oversight of RIDEM.” However, further documentation of the solid waste disposal was not included in the RIDEM file.
- January 26, 2007, SIR Review: RIDEM notified Renewable Resources, Inc. that the SIR did not meet the requirements of the Remediation Regulations and provided comments, including wool mills typically use dyes containing heavy metals, dye-aids which may have chlorinated solvents and lubricants in the machinery itself. RIDEM also provided specific comments regarding deficiencies in the SIR, the most significant including:
  - Clarifications was required for whether the site contained an on-site septic field, or discharged directly to the river. Piping to the river should be investigated and sediment sampling at each of the outfalls should be conducted. RIDEM also required a determination regarding whether the site had ever utilized heating oil.

- The soil sampling conducted as part of the SI was insufficient to fully characterize the site, potential impacts to off-site properties or to sensitive areas including the Pawcatuck River.
- RIDEM recommended conducting a geophysical survey in order to attempt to locate a former septic system, underground storage tanks and other buried debris which would be considered an area of concern. RIDEM also indicated that AOC #1 had not been adequately characterized and that additional soil sampling was necessary to characterize the site.
- RIDEM indicated that additional monitoring wells should be installed on the property in order to adequately characterize for groundwater contamination and that groundwater samples should be analyzed for the parameters listed in Table 3 of the Remediation Regulations. RIDEM also indicated that private drinking water wells for the adjoining properties were present on the Subject Property and that additional investigation into private drinking water wells on adjoining properties should be conducted in order to characterize potential impacts to off-site and/or private drinking water wells.
- The groundwater flow direction identified in the SIR was inadequate. RIDEM stated that further subsurface investigation and a hydrogeological survey were required to determine the actual groundwater flow directional, and as a part of that investigation, additional monitoring wells should be installed and a groundwater contour map developed.
- Additional soil sampling should be performed at the identified AOCs, at newly identified AOCs and also from across the site. RIDEM also requested a comparison of analytical to the RIDEM GA Leachability Criteria (LC).
- RIDEM concluded that a determination regarding environmental concerns on the site could not be made until additional investigations are conducted, and requested updated conclusions at that time.
- RIDEM did not review the remedial alternatives proposed, but recommended that remedial alternatives should "address the fact that the site is in a flood zone and how this impacts the use of impermeable caps and stormwater management."

- July 5, 2007, Response to RIDEM SIR Review: In response to RIDEM review of the November 28, 2006, *Site Investigation Report,* Jacques Whitford provided the following comments:
  - Based on observed conditions, they believed that coal was always used on the site and that no evidence of heating oil tanks was observed on the site.
  - Sediment sampling of the Pawcatuck River was planned at observed pipe discharges.
  - "All buried debris has been excavated from the area (AOC #1) and disposed under the oversight of RIDEM." However, further documentation of the solid waste disposal was not included in the RIDEM file.
  - Three additional monitoring wells were proposed to be installed at the site, and the five on-site monitoring wells were proposed to be re-sampled.

- Subsequent to the completion of additional proposed activities, a Revised Site Investigation Report would be submitted to RIDEM.

- In response to the July 5, 2007 letter prepared by Jacques Whitford, RIDEM prepared a letter, July 31, 2007, recommending that Renewable Resources, Inc. submit a work plan for RIDEM approval of additional work to be performed at the site. Jacques Whitford submitted a work plan to RIDEM on August 13, 2007. RIDEM responded to the work plan in a letter dated September 7, 2007, and Jacques Whitford further discussed the work plan in a letter dated October 19, 2007.

Based on the review of the available documents, Fuss & O'Neill summarized the remaining assessment activities to be performed by the Responsible Party in order to achieve approval of the SIR:

- Further research of the historical operational history of the site to determine former uses and potential hazardous materials.
- Conduct a geophysical survey at the site in attempt to locate the former septic system, possible USTs and other buried debris.
- Collect groundwater samples from drinking water wells located on or adjacent to the site.
- Install additional soil borings and groundwater monitoring wells, collect soil & groundwater samples.
- Conduct soil sampling in the area of AOC #2 and evaluate for compliance with RIDEM GA LC.
- Conduct sediment sampling at/near the outfall pipes leading from the site to the Pawcatuck River.
- Perform an elevation survey of the groundwater monitoring wells and develop a groundwater contour map for the site, indicating the direction of likely groundwater flow.
- Review site development plans and potential future uses to determine additional sampling requirements, potentially including under existing or former buildings.
- Update the SIR to reflect information obtained during the recommended investigations, and prepare conclusions based on investigations, including identification of three potential remedial alternatives for the subject property with consideration of the Subject Property location within a flood zone.

Fuss & O'Neill concluded that based on the additional SI needed, it was not feasible to propose a potential remedial alternative for the Subject Property at the time, however, suggested remedial excavation(s) or implementation of an Environmental Land Use Restriction may be future options for the site.

Jacques Whitford: Revised Site Investigation Report, March 17, 2008

Summary: A *Revised Site Investigation (SI) Report* was prepared by Jacques Whitford for Renewable Resources, Inc. The purpose of the revised SI was to further evaluate the degree and

extent of potential contamination at the Subject Property in accordance with the Remediation Regulations.

In order to assess the location of historic discharges from the Subject Property, on February 1, 2007, Joseph T. Unsworth, P.E. (Jacques Whitford) and Edward Carapezza (Renewable Resources, Inc.) inspected the basement of the main building and all other building crawl spaces, reporting that all piping in the main building is routed to one common pipe that discharges to the river. Pipes were also observed in the building where apparent washing of wool was completed. A total of six pipes protrudes from the eastern wall of the wool washing building. There also appeared to be an open area in the eastern wall of this building where wash water may have discharged into the river. The building on the southern portion of the site (single story brick building) is underlain by the raceway. No other buildings were noted to have basements, no pipes were observed protruding from any buildings with crawl spaces. Based on the observations, Jacques Whitford concluded that it's likely that all waste was discharged from seven pipes and an opening in the east wall of a building where washing was completed, and there is no evidence that a septic system has ever been utilized at the site.

On February 1, 2007, the boiler building was also thoroughly inspected for evidence of any use of fuel oil in the boiler at the site. Jacques Whitford indicated that the boiler is a direct coal fired boiler and the boiler still contained remnants of unburned coal. Additionally, there was no evidence of fill/vent pipes or fill ports anywhere on the site. Based on these observations, Jacques Whitford concluded that coal was always used to fire the boiler.

Further research of historical operations at the Subject Property were completed via desk top reviews and visits to the National Archives in Washington D.C., Rhode Island Historic Preservation Society, libraries in Ashaway, Hope Valley and Westerly, RI and the American Textile Museum in Lowell, MA. Research indicated a reference that the mill was used for "men's fabric only," which suggests the dyes were limited to blues, browns, blacks and greens. Historically, men's clothing was not dyed with reds, yellows, purple, etc. Available records also indicated that the mill was considered a "small mill," with less than 20 looms. Two historic maps of the Subject Property were obtained and included in the report as Figure 3 (dated 1895) and Figure 4 (dated 1907). The 1907 map indicated a "coal pile." Based on Jacques Whitford's research, they concluded that the Subject Property was first developed in the mid-1800s as a woolen mill. Available information suggests that the Subject Property was used for the production of wool textiles until approximately the early 1960s at which time the property was vacated/abandoned.

In November 2007, two soil samples (SS-32 and SS-33) were collected between 0-2 fbg utilizing a hand auger, in areas of previously collected samples that had the highest concentrations of total lead. The two soil samples were submitted for laboratory analysis of leachable lead utilizing synthetic precipitation leaching procedure (SPLP) method. Additionally, two samples (SS-30 and SS-31) were collected from 0-2 fbg utilizing a Geoprobe, from the area where buried debris was removed in the northwestern area of the Subject Property. These two samples were submitted for laboratory analysis of VOCs, semi-volatile organic compounds (SVOCs), and PP 13 Metals. On November 8, 2007 three soil borings, B-3, B-4 and B-5 were advanced and completed as

monitoring wells MW-3, MW-4 and MW-5, respectively. Geoprobe refusal was encountered during the advancement of the three boring locations, at depths ranging from 18.5 fbg (MW-5) to 33 fbg (MW-4). Samples were screened with a PID; no VOCs were detected in the samples screened. One sample was collected from each of the soil borings between 5-7 fbg, which was above the observed groundwater table. Soil samples were submitted for laboratory analysis of VOCs and 16 metals referenced in the Remediation Regulations. On November 8, 2007, three monitoring wells (MW-3, MW-4 and MW-5) were completed as 1-inch groundwater monitoring wells. Monitoring well MW-3 was installed to monitoring wells were installed to approximately 22 fbg and completed with 10 feet of screen, MW-4 installed to 33 fbg and completed with 10 feet of screen, and MW-5 installed to 18.5 fbg and completed with 10 feet of screen. The three monitoring wells were finished with flush mounted roadboxes. On November 14, 2007, groundwater samples were collected from MW-1 through MW-5 and submitted for laboratory analysis of RCRA 8 metals and PAHs. Additionally, on November 14, 2007, a groundwater elevation survey was completed at each of the five monitoring wells and based on the hydrological survey completed, groundwater flow was generally in an easterly/northeasterly direction.

Between November and December 2007, 11 sediment samples were collected from the Pawcatuck River, at points where piping or discharge features were observed from the mill buildings. All samples were collected from 0-1 fbg and submitted for laboratory analysis of VOCs, SVOCs and 16 metals referenced in the Remediation Regulations.

Soil analytical results reported in the *Revised Site Investigation Report* included the results of the previous SI. Soil samples collected during the two SIs indicated arsenic was detected in multiple samples at concentrations greater than RIDEM RDEC. Beryllium and lead were also detected in at least one soil sample at concentrations greater than RIDEM RDEC. Leachable lead was detected in one of two samples analyzed, at concentrations below RIDE GA LC. Concentrations of other metals and PAHs detected in soil samples did not exceed RIDEM RDEC.

Analytical results from the November 2007 sampling of monitoring wells MW-1 through MW-5 indicated detections of metals (Copper, Nickel, and Zinc) at concentrations below RIDEM GA GOs. Other metals and PAHs were not detected at concentrations above laboratory detection limits or applicable RIDEM GA GOs. Methyl tert butyl ether (MTBE) was detected in monitoring well MW-4 only, at a concentration below the RIDEM GA GO.

Sediment analytical results were compared against nationally published sediment criteria. If the guidelines did not have a criterion, then the RIDEM RDEC was used for comparison. VOCs were detected at concentrations below RIDEM RDEC. Select metals including beryllium, copper, chromium, lead and zinc were detected in sediment samples at concentrations greater than the sediment criteria. SVOCs were detected in sediment samples at concentrations above the sediment criteria or RIDEM RDEC. The highest detections of PAHs were at sediment sample SED-1. In order to assess the extent of PAHs and metals detected in SED-1, three additional sediment samples (SED-9 through SED-11) were analyzed. Metals were not detected in the additional sediment samples collected. Concentrations of PAHs decreased significantly in SED-9 as compared to SED-1. PAHs detected in SED-10 were similar to those in SED-1, and PAHs were note detected in SED-11.

Based on the observations made during the advancement of soil borings at the site, and evaluation of additional soil, groundwater and sediment analytical results, the following conclusions were made:

- Soil near the former boiler building is impacted by historical coal storage and use at the Subject Property. Based on the sampling completed, the area impacted by mounded coal ash and slag appears to be approximately 9,750 square-feet.
- The source of PAHs and metals in sediment samples is not known. The PAHs and metals detected do not appear to be related to the former wool dying operations at the Subject Property, but are similar to those detected in soils near the former boiler house. The PAHs and metals could also be the result of atmospheric deposition from burning coal, or erosion from roads. The concentrations of PAHs in the sediment samples are at higher concentrations than the PAHs in soil samples near the former boiler house. This suggests that although the Subject Property may have contributed to the PAHs and metals detected in sediments, other off-site sources also likely attributed to the impacts observed in sediments samples.

Jacques Whitford: Comments Letter re: Supplemental Site Investigation Report, August 13, 2008

Summary: Jacques Whitford appears to have submitted a comment letter to RIDEM to address questions/comments RIDEM presumably had regarding the *Revised Site Investigation Report,* (March 17, 2008). The letter included:

- Documentation of the public notice sent to the Town of Westerly, RI and abutting property owners
- Clarification on the historical operations and conceptual site model for the site, including detailed discussion on historical wool dying processes, and chemicals (or lack thereof) believed to have been utilized for dying wool at the site
- A listing of previous occupants at the site between 1955 and 1870
- Photos of the basement, crawl space, river bank and boiler inspections
- Clarification on constituents of concern for the property
- Soil boring logs
- Revised site plan depicting location of private wells
- Discussion on local wellhead protection areas and potential impacts
- Revised objective for the SI
- Surveyed well elevations, measured depth to groundwater and groundwater elevation
- Clarification and discussion on soil analytical results
- Discussion on potential releases in the buildings
- Discussion on the selected remedial alternative. RIDEM disagreed with the recommended alternative (ELUR) due to the location of the Subject Property within a floodplain. Jacques Whitford disagreed with RIDEM and indicated that a discussion on the implementation of an

ELUR, including soil capping, with consideration of the Subject Property's location within a floodplain, would be discussed in a Remedial Action Work Plan (RAWP) at a future date.

RIDEM: OCI Case Summary OCI-FW-13-15, January 2, 2013 & March 28, 2013

Summary: Edward Carapezza demolishing a mill building without permit, and ceiling and wall of the building in the river. The case was administratively closed and referred to other.

RIDEM: OCI Correspondences and Verbal Warning, January through March 2013

Summary: Various correspondences and complaints from neighbors about demolition debris from the mill entering the Pawcatuck River. One neighbor noted boilers on the property as containing asbestos. On January 29, 2013, RIDEM gave Edward Carapezza of Renewable Resources, Inc. a verbal warning to install protective barriers to prevent demolition debris from entering the river and from disturbing the river banks.

RIDEM: OCI Case Summary OCI-FW-14-56, April 2, 2014

Description: Wood and debris from Potter Hill Mill falling into and being carried downstream by the river. The case was administratively closed due to lack of resources.

5.4 Municipal and Local Records

An in-person review of Westerly, RI town hall files was completed on July 1, 2024. Copies of the files obtained are included in **Appendix D**. A summary of the offices visited and files obtained are detailed below.

Assessor Office

A copy of the field card for the Subject Property was obtained from the Town of Westerly's assessor's office. The information indicates the Subject Property is owned by the Town of Westerly and identified as Map 8 Block 23.

Town Clerk Office

A title search was completed and property owners were determined dating back 50 years, and is further discussed in Section 5.8.1.

Building Department

Personnel within the Building Department were not able to provide any additional files pertinent to historical operations, building permits or hazardous materials utilized at the site.

Planning and Zoning Department

Personnel within the Planning and Zoning Department provided a map of the property, including pertinent Subject Property features, with the exception of any maps depicting the location of the potential former septic tank. The Department also provided a demolition plan prepared by the Town of Westerly, RI. The July 1, 2024 date of the report included in **Appendix D**, was the date printed; however, the report is believed to have been a drafted in 2013. The demolition plan discussed historical bulk sampling for suspect ACM, completed in 2013. Analytical results from the bulk sampling indicated that none of the suspect building materials were found to contain greater than 1% asbestos; therefore, the buildings associated with the sampling were considered

to be free of asbestos. A copy of the asbestos sampling report from 2013 was not included with the record.

Office of the Fire Marshall

The Fire Marshall was not available at the time of GES personnel's visit to the Fire Department.

5.5 Desktop Records

A desktop search of readily available records pertaining to the Subject Property was completed on June 21, 2024. Copies of the records obtained are included in **Appendix D**. A summary of the records obtained are detailed below.

Rhode Island Historical Preservation Commission, Historical and Architectural Resources of Westerly, Rhode Island: A Preliminary Report, March 1978

Summary: Potter Hill Mill operations began as a small-scale manufacturing enterprise. Around 1762, a gristmill and sawmill were established at the Subject Property. In 1775 when George Potter bought the site, there was a gristmill, sawmill, fulling mill, two dwellings and soon after, a store. At "Potter's Bridge," as it was called then, Joseph Potter began the manufacture of cotton in part of an old mill in 1810, and in 1812 he started manufacturing cotton in a new factory. Joseph and Nathan Potter began building boats around 1810, most of a small size, an industry which lasted for a short time. Edwin and Horace Babcock purchased the mills and water privilege at Potter Hill in 1844 and began manufacturing. In 1847, they built two mills, one of stone and one of wood. The mills, which subsequently were owned by the Campbell Mills Company and by the Switch River Woolen Company, ceased manufacturing in the 1960s. A 2 ½ story wooden mill building, reportedly erected around 1835, was destroyed by fire in November 1977. The site was recommended for the National Registry in 1978, due to the nineteenth-century dwelling and store that retained their basic integrity and visual appeal with no modern intrusions.

Town of Westerly, RI Fire Department, Chief Joseph Fusaro, Blaze from the Past – Potter Hill Mill Fire – November 7, 1977, November 4, 2021

Summary: On November 7, 1977 around 6:20 AM, local residents surrounding the Subject Property reported a fire engulfing a 2 ½ story wooden mill building located at the southern end of the property along the Pawcatuck River. Westerly Fire Station and Ashaway Fire Station received the call and both responded. Water was siphoned from Pawcatuck River via pump trucks and distributed to engines to fight the blaze. The fire was under control within half an hour, full extinguishment took several hours. The cause of the fire was deemed suspicious.

5.6 Vapor Encroachment Screen

Indoor air quality concerns are generally excluded from the scope of ASTM E1527-21 and this assessment. However, the migration of vapors caused by a release of hazardous substances or petroleum products into the environment can represent a recognized environmental condition in certain conditions.

For the purposes of this assessment, the potential for migrating vapors to represent a recognized environmental condition was evaluated using a limited screening method based on technical

guidance documents from the US EPA and ASTM E2600-15 *Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions*. In addition, screening tools created by regulatory agencies may be used to evaluate the significance of a release with respect to the vapor migration and/or vapor intrusion potential. GES's vapor migration screening is not a human health risk assessment and is not intended to comply with regulatory requirements that might exist for the evaluation of vapor migration.

Based on the review of regulatory database records in Sections 5.2 and 5.3, no significant vapor migration concerns were identified.

5.7 General Site Setting

ASTM E1527-21 requires that the current 7.5-minute USGS Topographic Map (or equivalent) showing the area on which the Subject Property is located be reviewed. Additional physical setting sources, such as soil survey maps, groundwater maps and geologic maps may be obtained and reviewed at the discretion of the environmental professional. The purpose of this review is to evaluate whether hazardous substances or petroleum products are likely to migrate to the Subject Property.

5.7.1 Topography

Topography at the Subject Property slopes gently to the north, with a steeper slope observed along the eastern and northern property boundaries where the Subject Property meets the Pawcatuck River. Based on the USGS *7.5-minute Topographic Quadrangle for Ashaway, Rhode Island* (**Figure 1**) the Subject Property is located between approximately 25 to 30 feet above mean sea level.

5.7.2 Geology

The EDR Radius Map™ Report with GeoCheck® (**Appendix B**) provides a summary of the dominant, near surface soil type and composition that may be present at the Subject Property or in the general area of the Subject Property. This information was obtained by EDR from the United States Department of Agriculture's Soil Conservation Service. The dominant soil type is Rippowam. This soil type is poorly drained with slow infiltration rates and layers impeding downward movement of water or moderate fines and fine textures.

According to the *Bedrock Geologic Map of Rhode Island,* the bedrock stratigraphic unit underling the Subject Property is a portion of the Sterling Igneous Suite series mapped as "Zsgg," and defined as pale-pink to gray medium-grained granite gneiss from the Ediacaran Period of the Neoproterozoic Era.

5.7.3 Hydrogeology

Based on the review of the USGS topographical map and previous environmental assessment, the groundwater flow direction at the Subject Property is anticipated to be generally to the east/northeast.

According to the *Summary of Rhode Island Groundwater Classification and Groundwater Standards* (RIDEM, 2009), groundwater at the property is classified as “GAA”. Groundwater within GAA-classified areas is presumed suitable for human consumption without treatment, and is located in one of the areas defined by RIDEM, either within the state’s major stratified drift aquifers capable of serving as a significant source for a public water supply, or is a wellhead protection area for public water system community water supply wells.

5.7.4 Surface Water

During site reconnaissance completed on July 1, 2024, a dam was observed across the Pawcatuck River, located to the east of the Subject Property, which channels river water onto the Subject Property via a raceway. There were no other surface water bodies observed on the Subject Property, however, much of the parcel was obstructed from observation due to heavy vegetation and overgrowth. The closest surface water body in the vicinity of the Subject Property is the Pawcatuck River, which abuts the Subject Property to the east and north. The Pawcatuck River eventually discharges into the Long Island Sound approximately 7 miles to the southwest of the Subject Property.

According to the RIDEM *Environmental Resource Map,* the surface water quality of the Pawcatuck River is classified as “B.” Class “B” waters are designated for fish and wildlife habitat and primary and secondary contact recreational activities. They shall be suitable for compatible industrial processes and cooling, hydropower, aquacultural uses, navigation and irrigation and other agricultural uses. These waters shall have good aesthetic values. The Pawcatuck River is currently listed on the 303(d) list for impaired waters (Category 5). The Clean Water Act section 303(d) defines impaired waters as a waterbody that is either impaired or threatened needing a total maximum daily load (TMDL) restoration plan. The Pawcatuck River is currently impaired by enterococcus bacteria (e. Coli) as of 2022.

5.7.5 Flood Plain Setting

A flood plain is the area adjoining a river, stream, drain, or lake that is utilized to convey floodwaters during high water events. The flood plain primarily is divided into two categories: 1 - The 100-year flood zone and, 2 - The 500- year flood zone. The 100-year flood zone is defined as having a one percent, or higher, chance of floodwaters reaching that level of floodwater conveyance.

Many cities participate in the National Flood Insurance Program and usually have Flood Insurance Rate Maps (FIRM) developed by the Federal Emergency Management Association (FEMA) or an equivalent map. The FEMA maps typically have designated five primary zones of flooding potential. These zones are identified as AO, AE, AH, VE, and X. Areas designated as "Zone AO" correspond to shallow flooding (usually sheet flow on sloping terrain) with average depths between 1 and 3 feet. Areas designated as "Zone AE" correspond to flood depths greater than 3 feet and areas designated as "Zone AH" correspond to shallow flooding with average depths between 1 and 3 feet. Areas designated as "Zone VE" correspond to coastal areas that have additional hazards associated with storm waves.

Properties located in areas designated as Zones AO, AE, AH and VE, require mandatory flood insurance. Areas designated as “Zone X” correspond to areas that are outside the flood plain or the average flood depths are less than 1 foot. Properties located in areas designated as Zone Z do not require flood insurance.

Based on the review of the National Flood Hazard Layer FIRMette, the Subject Property is primarily located in a special flood hazard area. The area directly bordering the Pawcatuck River, abutting the north and east of the Subject Property, is a Regulatory Floodway and is reported as Flood Zone AE. The southwestern section of the Subject Property is within a Without Base Flood Elevation area and is reported as Zone BA. The FEMA National Flood Hazard Layer FIRMette is included as **Appendix D.**

5.8 Historical Site Use

GES reviewed appropriate historical sources and documentation in order to identify obvious uses of the Subject Property from the present back to first developed use, soon after 1762. The historical sources included, but were not limited to, Aerial Photographs, Sanborn Fire Insurance Maps, historical USGS Topographic Maps, City Directories, and Local Government Records, where available. GES’ evaluation is summarized in the following subsections.

5.8.1 Title Search and Past Ownership

Based on available files, the following ownership histories were identified for the Subject Property:

- Current – August 18, 2022: Town of Westerly (Book 2022, Page 14733)
- August 18, 2022 – October 8, 1992: Renewable Resources Inc. (Book 432, Page 53)
- October 8, 1992 – August 15, 1955: Helen E. Cottrell (Book 74, Page 54)
- August 15, 1955 – May 6, 1930: Swift River Woolen Company (Book 53, Page 443)
- May 6, 1930 – September 14, 1929: Fredrick T. Lawrence (Book 53, Page 190)
- September 14, 1929 – July 16, 1920: Pawcatuck Woolen Mills (Book 46, Page 161)

Prior to 1920, the Subject Property was reportedly owned by the following occupants for the approximate timeframes:

- Pawcatuck Woolen Mill: 1920 – 1907
- J.P. Campbell Mills Company: 1907 – 1885
- Edwin and Horace Babcock Mills: 1885 – 1844
- Joseph & Nathan Potter Family (operating a cotton mill and small-scale boat building) 1844 – 1810
- George Potter Family (operating gristmill, sawmill, fulling mill, and a store): 1810 – 1775
- Unknown Owner (operating gristmill and sawmill): 1775 - 1762

5.8.2 Sanborn Maps

Sanborn Maps identify the locations and types of industrial, commercial, and residential properties and identify potential fire hazards existing within individual structures. Many times, areas of potential environmental concern, such as the location of former ASTs, USTs, or other areas of hazardous substance storage, can be identified by referencing the Sanborn Maps. GES contacted EDR and requested a Sanborn Maps search for the Subject Property and surrounding properties.

Available Sanborn Maps dated 1946 and 1964, from EDR were reviewed for this environmental site assessment. A copy of the June 22, 2024, *Certified Sanborn® Map Report* is included in **Appendix B** of this report. A summary of GES' observations are detailed below:

Summary of *Certified Sanborn® Map Report*

Year	Subject Property	Neighboring Properties
1946	Identified as the "not in operation" "Westerly Woolen Company", the Subject Property is depicted with several structures utilized for mill operations. The structures depicted are centralized along the eastern boundary of the Subject Property, abutting the Pawcatuck River. Structures identified include: Multiple storage structures, sheds, carpenter shop, dye house, boiler house, machine shop, picking and dyeing room, gauze room, engine house (125 hp), oil house, dressing and spooling house, spinning house, carding house, hose reel house, weaving house, shipping room, dry & wet finishing, pattern and sewing house, and an office. A dam is depicted across the Pawcatuck River with gates along the southern extent of the dry & wet finishing building. A water tower is depicted in the southwestern corner of the Subject Property, which connected to 6-inch and 4-inch water pipes connecting to the structures. Several dry hydrants are depicted throughout the Subject Property and most structures are depicted with automatic sprinklers. No structures are depicted in the western area of the Subject Property. A note on the map indicates: Heat steam, power steam, water & electric independent electric plant (IEP). Fuel coal. 15,000-gallon tank elevated on 75-foot steel frame. 750 gallons per minute (GPM) F.P. and 500 GPM rotary F.P. drawing from pond. 6 hydrants, 2 ½-inch hose.	The Pawcatuck River is depicted to the east and north of the Subject Property, with a dam depicted across the river. Dwellings are depicted to the west, southwest and east of the Subject Property (beyond the Pawcatuck River). A wooden bridge is depicted over the Pawcatuck River to the south-southeast of the Subject Property.
1964	The Subject Property appears similar to 1946.	The neighboring properties appear similar to 1946, with the exception of the bridge over the Pawcatuck River, which is depicted as concrete.

5.8.3 Historical Aerial Photographs

Aerial photographs are a historical resource that can provide a chronological "snapshot" of past land use and development and where potential environmental conditions may exist at a particular site or area. GES contacted EDR and requested a historical aerial photograph search for the Subject Property and surrounding properties.

Available aerial photographs dated 1934, 1939, 1941, 1951, 1957, 1960, 1962, 1970, 1974, 1981, 1985, 1992, 1996, 2001, 2006, 2010, 2014 and 2018 were reviewed for this environmental site assessment. The June 22, 2024, *EDR Aerial Photo Decade Package* which includes all aerial photography is included as **Appendix B** of this report. A summary of GES' observations are detailed below:

Summary of *EDR Aerial Photo Decade Package*

Year	Subject Property	Neighboring Properties
1934	At least 15 structures of varying size are discernable on the Subject Property. The structures appear to be centralized along the eastern boundary of the Subject Property, abutting the Pawcatuck River. At least two structures are depicted over the Pawcatuck River. The western area of the Subject Property appears to be maintained; however, no structures are discernable. An access drive appears to travel from the southern property boundary in a generally north-northeasterly direction to the northern extent of the property boundary.	The neighboring property to the west and southwest appears to be developed with several structures. The Pawcatuck River abuts the Subject Property to the east and north. The local area to the east of the Pawcatuck River is developed with structures which appear to be for residential use. Undeveloped land is located to the west-northwest of the Subject Property and to the north, beyond the Pawcatuck River. What appears to be a dam is located across the Pawcatuck River, intersecting the southern extent of the Subject Property. What appears to be a bridge is located across the Pawcatuck River to the south-southeast of the Subject Property
1939	The Subject Property appears similar to the 1934 photograph.	The neighboring properties appear similar to the 1934 photograph.
1941	The Subject Property appears similar to the 1939 photograph.	The neighboring properties appear similar to the 1939 photograph.
1951	The Subject Property appears similar to the 1941 photograph.	The neighboring properties appear similar to the 1941 photograph.
1957	The Subject Property appears similar to the 1951 photograph.	The neighboring properties appear similar to the 1951 photograph.

Summary of *EDR Aerial Photo Decade Package*

Year	Subject Property	Neighboring Properties
1960	Due to the quality of the photograph, features on the Subject Property are difficult to discern; however, appear to be similar to the 1957 photograph.	Due to quality of the photograph, features in the neighboring area are difficult to discern; however, appear to be similar to the 1957 photograph.
1962	Due to the quality of the photograph, features on the Subject Property are difficult to discern; however, appear to be similar to the 1960 photograph.	Due to quality of the photograph, features in the neighboring area are difficult to discern; however, appear to be similar to the 1960 photograph.
1970	The Subject Property appears similar to the 1962 photograph.	The neighboring properties appear similar to the 1962 photograph.
1974	Due to the quality of the photograph, features on the Subject Property are difficult to discern; however, appear to be similar to the 1970 photograph.	Due to quality of the photograph, features in the neighboring area are difficult to discern; however, appear to be similar to the 1970 photograph.
1981	Two structures on formerly overlaying the Pawcatuck River appear to be gone. Several smaller structures observed in previous photographs are difficult to discern. The western area of the Subject Property appears to be increasingly vegetated.	The neighboring properties appear similar to the 1974 photograph.
1985	The Subject Property appears to be increasingly vegetated since the 1981 photograph.	The neighboring properties appear similar to the 1981 photograph.
1992	The Subject Property appears to be increasingly vegetated since the 1985 photograph. Smaller structures are becoming difficult to discern.	The neighboring properties appear similar to the 1985 photograph.
1996	The Subject Property appears to be more densely vegetated since the 1992 photograph.	The neighboring properties appear similar to the 1992 photograph.
2001	The Subject Property appears to be more densely vegetated since the 1996 photograph. Structures are becoming more difficult to discern as vegetation encroaches.	The neighboring properties appear similar to the 1996 photograph.

Summary of *EDR Aerial Photo Decade Package*

Year	Subject Property	Neighboring Properties
2006	The Subject Property appears to be more densely vegetated since the 2001 photograph. Structures are becoming more difficult to discern as vegetation encroaches.	The neighboring properties appear similar to the 2001 photograph.
2010	The Subject Property appears to be similar to the 2006 photograph, with the exception one large structure whose roof appears to be partially collapsed.	The neighboring properties appear similar to the 2006 photograph.
2014	The Subject Property appears to be similar to the 2006 photograph, with the exception of some vegetation clearing localized to the area of the structures.	The neighboring properties appear similar to the 2010 photograph.
2018	The Subject Property appears to be more densely vegetated since the 2014 photograph. One large structure's roof appears to be fully collapsed.	The neighboring properties appear similar to the 2014 photograph.

5.8.4 Historical Topographic Maps

USGS topographic maps are produced and published by the Department of the Interior at various scales for the entire United States. USGS topographic maps depict the topography of the Earth's surface that is portrayed by contour lines which follow the land surface or the bottom of a body of water of constant elevation above or below sea level. USGS topographic maps also can include key map features such as buildings and other structural improvements, roadways, railroads, transmission lines, pipelines, state and federal landmarks or points of interest, vegetation, bodies of water and local, state, and federal boundaries. GES contacted EDR and requested a USGS topographic map search for the Subject Property and surrounding properties.

Available topographic maps dated 1889, 1893, 1913, 1921, 1943, 1947, 1953, 1970, 1975, 1984, 2001, 2012, 2015, 2018, and 2021 from EDR were reviewed for this environmental site assessment. Copies of the topographic maps are included in the June 21, 2024, *EDR Historical Topo Map Report* included as **Appendix B**. A summary of GES' observations are detailed below:

Summary of *EDR Historical Topo Map Report*

Year	Subject Property	Local Area
1889	The Subject Property is depicted with one structure and a gentle slope to the north.	The Pawcatuck River is depicted to the east and north of the Subject Property. The local area slopes towards the Pawcatuck River. Wetlands are depicted to the northeast of the Subject Property and southeast along the Pawcatuck River. Several structures are depicted along a roadway in Ashaway.

Summary of *EDR Historical Topo Map Report*

Year	Subject Property	Local Area
1893	The Subject Property appears similar to the 1889 map.	The local area appears similar to the 1889 map, with additional structures depicted to the south of the Subject Property along the Pawcatuck River.
1913	The Subject Property appears similar to the 1893 map.	The local area appears similar to the 1893 map, with a railroad depicted beginning/ending in Ashaway, trending north-south along the eastern side of the Pawcatuck River.
1921	The Subject Property appears similar to the 1913 map.	The local area appears unchanged from the 1913 map.
1943	The Subject Property is depicted with multiple large structures along the eastern extent of the property, abutting the Pawcatuck River. Topographic contours are more detailed; and the site appears relatively flat. A presumed flood zone is depicted along the Pawcatuck River and on the Subject Property.	Topographic contours in the local area are more detailed; however, the local area still appears to slop towards the Pawcatuck River. Multiple structures are depicted to the west, southwest and east of the Subject Property, across the Pawcatuck River. Nooseneck Hill Road (Route 3) appears to the run north-south to the east of the Subject Property. The railroad observed in the 1913 photograph is no longer depicted.
1947	The Subject Property appears similar to the 1943 map.	The local area appears similar to the 1943 map.
1953	The Subject Property appears similar to the 1947 map, with one additional structure depicted	The local area appears similar to the 1947 map.
1970	The Subject Property appears similar to the 1953 map.	The local area appears similar to the 1953 map, with additional structures and roads depicted.
1975	The Subject Property appears similar to the 1970 map.	The local area appears similar to the 1970 map.
1984	The Subject Property appears similar to the 1975 map.	The local area appears similar to the 1975 map.
2001	The Subject Property appears similar to the 1984 map, with the exception that the large structures are no longer depicted and are replaced with one small structure.	The local area appears similar to the 1984 map.
2012	The Subject Property appears similar to the 2001 map, with the exception that no structures are depicted.	The local area appears similar to the 2001 map.
2015	The Subject Property appears similar to the 2012 map.	The local area appears similar to the 2012 map.
2018	The Subject Property appears similar to the 2015 map.	The local area appears similar to the 2015 map.
2021	The Subject Property appears similar to the 2018 map.	The local area appears similar to the 2018 map.

5.8.5 City Directories

City directories list the resident's name, street address, and sometimes even the resident's occupation for a given year. They also frequently contain similar information about commercial and business establishments, thus providing specific names and addresses of commercial or business establishments over time. City directories allow a researcher to build a history of a property and surrounding area over time, and may give an indication if an area has been occupied by an occupant that may have caused potential environmental problems at or near the Subject Property.

The city directories provided by EDR for the Subject Property and adjoining properties covered the years covered the years 1938, 1941, 1945, 1950, 1960, 1963, 1967, 1971, 1975, 1980, 1984, 1988, 1992, 1995, 2000, 2005, 2010, 2014, 2017, and 2020. Copies of the city directories are included in June 26, 2024 *EDR-City Directory Image Report* **Appendix B** of this report. A summary of GES' observations are detailed below:

Summary of *EDR-City Directory Image Report*

Year	Subject Property	Local Area
1938	The Subject Property is listed as Swift River Woolen Co Inc.	The local area appears to be primarily residential listings, with some commercial listings.
1941	The Subject Property is unchanged from the 1938 listing.	The local area appears to be primarily residential listings, with some commercial listings.
1945	The Subject Property is unchanged from the 1941 listing.	The local area appears to be primarily residential listings, with some commercial listings.
1950	The Subject Property is not listed.	The local area appears to be residential listings.
1960	The Subject Property is listed as the Westerly Woolen Co.	The local area appears to be primarily residential listings, with some commercial listings.
1963	The Subject Property is not listed.	The local area appears to be primarily residential listings, with some commercial listings.
1967	The Subject Property is not listed.	The local area appears to be primarily residential listings, with some commercial listings.
1971	The Subject Property is not listed.	The local area appears to be primarily residential listings, with some commercial listings.
1975	The Subject Property is not listed.	The local area appears to be primarily residential listings, with some commercial listings.
1980	The Subject Property is not listed.	The local area appears to be primarily residential listings, with some commercial listings.

Summary of *EDR-City Directory Image Report*

Year	Subject Property	Local Area
1984	The Subject Property is not listed.	The local area appears to be residential listings.
1988	The Subject Property is not listed.	The local area appears to be primarily residential listings, with some commercial listings. .
1992	The Subject Property is not listed.	The local area appears to be primarily residential listings, with some commercial listings.
1995	The Subject Property is not listed.	The local area appears to be primarily residential listings, with some commercial listings.
2000	The Subject Property is not listed.	The local area appears to be primarily residential listings, with some commercial listings.
2005	The Subject Property is not listed.	The local area appears to be primarily residential listings, with some commercial listings. .
2010	The Subject Property is not listed.	The local area appears to be primarily residential listings, with some commercial listings.
2014	The Subject Property is not listed.	The local area appears to be primarily residential listings, with some commercial listings.
2017	The Subject Property is not listed.	The local area appears to be primarily residential listings, with some commercial listings.
2020	The Subject Property is not listed.	The local area appears to be primarily residential listings, with some commercial listings.

6 Site Reconnaissance

6.1 Methodology and Limitations

The site reconnaissance methodology used by GES entailed the visual observation of the Subject Property, as well as the accessible surrounding exterior and interior areas. Photographs were collected from all areas to document the conditions at the time of the site reconnaissance. Limitations were encountered during the site reconnaissance completed on July 1, 2024. Due to the dilapidated condition of the remaining buildings at the Subject Property, including collapsed roofs and structurally unsafe floors, the interior spaces could not be assessed other than what was readily viewable from exterior access points. Additionally, dense vegetation covered much of the Subject Property, which made it difficult to transect, access, and observe the Subject Property in its entirety, due to obstructed views.

Photographs collected during the site reconnaissance completed on July 1, 2024, are included in **Appendix A**. The observations made during site reconnaissance on July 1, 2024 are included in **Appendix D**.

6.2 General Subject Property Observations

On July 1, 2024, a site reconnaissance survey was conducted by Hannah Pallein, Project Manager with GES to visually identify potential environmental conditions. Hannah Pallein was accompanied by Dale Faulkner of the Town of Westerly, RI, Rachel Simpson and Reilly Cusick of RIDEM, and Matthew Jusino and Jeremy Kardon of GES.

The Subject Property consists of an approximately 4.55 acre lot and is located at 198 Potter Hill Road, approximately 170 feet west of the intersection of Potter Hill Road and River Road in Westerly, RI. The sole entrance to the Subject Property from Potter Hill Road is via an approximate 80-foot-long asphalt driveway leading to a gated fence. Access to the Subject Property is gained via a locked fence. Once through the gate, a gravel-paved path travels in a northerly direction towards the location of several dilapidated brick, granite stone, and wooden former mill buildings. Several concrete pads are present under existing structures or presumed to be foundations of former structures in ruins. Much of the Subject Property is unsurfaced with heavily vegetated and wooded areas observed within the fenced area, and significant overgrowth covering much of the parcel and dilapidated buildings. Along the southeastern property boundary, portions of concrete raceway(s) were observed, which divert water from the Pawcatuck River Dam onto the Subject Property and back to the Pawcatuck River. The remains of the former mill buildings, including roofs, exterior walls and concrete slabs of many of the former buildings, coal fired boilers and chimney, abandoned textile machinery, water hydrants, debris piles, and the shell of a former automobile were observed on the Subject Property.

The Subject Property does not appear to be connected to any active utilities, although municipal water, electricity, telephone service and natural gas were available and observed in the right-of-way of Potter Hill Road. When the former mill was in operation, the Subject Property relied on an

on-site well for water, which was stored in a water storage tank. The water tank is reportedly no longer present on the Subject Property, and was utilized for a fire suppression system. One fire hydrant was observed in the overgrowth, in proximity of the granite stone mill. There were no municipal sewers identified during site reconnaissance on July 1, 2024; however, the field property record card obtained from the Town of Westerly, RI's tax assessment office indicated that the site utilizes septic. Evidence of a septic system was not observed during site reconnaissance, and historical interviews with past property owners suggest that wastewaters were historically discharged to the Pawcatuck River.

During site reconnaissance, no visual staining was noted. Much of the ground could not be fully observed due to heavy vegetative cover. Vegetation within the Subject Property was thriving and did not appear to be stressed.

The interior spaces of the remaining buildings could not be accessed due to safety concerns and severe state of dilapidation. Of the remaining structures, the roofs and partial roofs had all collapsed in on abandoned mill equipment, and the remains of the wooden floors were rotting. The granite mill building appeared to have an elevator shaft and electrical equipment, neither could not be accessed to evaluate for potential hazardous materials including hydraulic oil, PCBs and/or mercury. The former boilers and chimney were still present at the Subject Property, with visible coal in the chambers. A close-up evaluation of the boilers and the floor space surrounding the boilers could not be completed; however, boilers are typically suspect for containing asbestos materials. The exterior space to the immediate west of the boiler room appeared to be slightly mounded, and coal remnants were visible among the vegetation. The former engine room building to the north of the granite mill was gone, along with any former engine(s) utilized for powering the mill. The former oil house was in ruins to the west-north west of the granite mill building, and no evidence of hazardous material storage could be observed. Towards the northern extent of the Subject Property, coal and coal combustion residuals were observed covering the ground, and a pile of debris and possible car, largely obstructed by vegetation were observed. Five flush mounted groundwater monitoring wells could not be located, nor could one potable water wellhead or remnants of the former water tower. One dry hydrant was observed among rubble to the west of the granite mill building. Much of the western area of the Subject Property could not be accessed due to heavy vegetation. The eastern property boundary along the Pawcatuck River was not inspected due to heavy demolition debris and raceway(s) obstructed by vegetation. Discharge features from the former mill buildings are allegedly present along the banks of the Pawcatuck River.

6.2.1 Hazardous Substances

No hazardous chemical or waste storage containers were observed at the Subject Property during site reconnaissance.

The fire that destroyed the 2 ½-story wooden mill building in 1977 was extinguished utilizing water pumped from the Pawcatuck River. Therefore, firefighting foam, which may contain perfluorooctanoic acid (PFOA) and or perfluorooctane sulfonic acid (PFOS), was not believed to have been used at the Subject Property.

6.2.2 Petroleum Products

No petroleum storage containers were observed at the Subject Property during site reconnaissance. Petroleum products were likely present in the abandoned automobile, the former 125-horse power engine in the engine room, and the former oil house building. The suspected elevator in the granite mill building may have utilized hydraulics, though the presence or former presence of an operating elevator could not be confirmed.

6.2.3 Underground Storage Tanks

No USTs were observed at the Subject Property during site reconnaissance.

6.2.4 Aboveground Storage Tanks

No ASTs were observed at the Subject Property during site reconnaissance.

6.2.5 Other Suspect Containers

No other suspect containers were observed at the Subject Property during site reconnaissance.

6.2.6 Equipment Likely to Contain Polychlorinated Biphenyls

Electrical equipment was observed on the wall of the granite mill building, in a state of disrepair. No obvious signs of staining were observed, nor was any indication of if the equipment was free of PCBs.

6.2.7 Interior Staining/Corrosion

Much of the existing metal structures of the former buildings were heavily oxidized or corroded and painted surfaces were chipped and peeling. Due to the age of the Subject Property buildings, lead-based paint as well as ACM is suspect.

6.2.8 Discharge Features

No discharge features were observed at the Subject Property during site reconnaissance. The eastern property boundary along the Pawcatuck River was not inspected due to heavy demolition debris and raceway(s) obstructed by vegetation. The Town of Westerly, RI field card for the Subject Property indicates the site utilizes septic, though historical records suggest waste water was discharged directly to the Pawcatuck River. Discharge features from the former mill buildings are allegedly present along the banks of the Pawcatuck River.

6.2.9 Pits, Ponds and Lagoons

No pits, ponds or lagoons were observed at the Subject Property during site reconnaissance.

6.2.10 Solid Waste Dumping/Landfills

Though the Subject Property was heavily vegetated during site reconnaissance, and much of the ground surface was obstructed, at least one area of solid waste dumping was observed at the

Subject Property. The area is located towards the northern extent of the property and contained discarded metal, debris and a suspected former automobile.

An area of mounded coal was overserved to the west of the boiler room, along with an area of dispersed coal and coal combustion residuals along the northern extent of the property.

Demolition debris and/or piles of wooden buildings in ruins are located along the eastern extent of the property boundary, and among the vegetated/wooded areas to the west and northwest of the granite mill building.

6.2.11 Stained Soil/Stressed Vegetation

There was no evidence of stained soil or stressed vegetation within the Subject Property.

6.2.12 Wells

No wells were observed at the Subject Property during site reconnaissance; however, five flush mounted groundwater monitoring wells are believed to be present on the property, along with at least one potable water wellhead.

7 Interview

An interview was completed on June 20, 2024 with Dale Faulkner, Grant Administrator for the Town of Westerly, RI. Mr. Faulkner indicated that the Subject Property is currently a decommissioned textile mill and based on available files, the Subject Property had operated as a mill for more than 250 years. Previous site investigations completed at the site indicated soil samples containing arsenic and beryllium above regulatory criteria. A hazardous material release was reported to RIDEM on September 27, 2006. A copy of the interview questions and the answers is provided in **Appendix D**.

8 Evaluation – Findings, Opinions and Conclusions

8.1 Findings

Within the scope of this investigation, GES discovered evidence of the following RECs:

- RIDEM Remediation Case SR-38-1074
- Observed coal piles and/or suspect buried coal
- Discarded demolition and solid waste pile, including a deteriorating automobile and any other buried solid waste
- Elevator
- Electrical equipment possibly containing PCBs and/or mercury
- Painted surfaces possibly containing lead-based paint
- ACM in the building materials
- Boiler room
- Chimney

Within the scope of this investigation, GES discovered evidence of the following HRECs:

- Historical LUST case 1402-LS issued NFA, at an upgradient property located at 3 & Maxson Street in Hopkinton, RI.
- Historical LUST case 1412-LS issued NFA, at an upgradient property located at 24 and 8 Laurel Street, Hopkinton, RI.

Within the scope of this investigation, GES discovered evidence of the following CRECs:

- None identified.

Within the scope of this investigation, GES discovered evidence of the following environmental concerns, which are not considered to be RECs:

- Suspect septic system
- Historic “oil house”
- Historic “engine room”
- The Pawcatuck River, which bounds the Subject Property to the east and north, was identified with “tissue samples” collected in 2018 containing PFAS.

8.2 Opinion

Rationale for select REC determination is included below:

- Coal combustion residuals, also known as coal ash, are product from the burning of coal. Coal ash includes a number of by-products including, fly ash, bottom ash, boiler slag and flue gas

desulfurization material, which can contain contaminants such as mercury, cadmium and arsenic. Without proper management, these contaminants can pollute waterways, groundwater, drinking water, soil and the air. Two areas of coal and coal combustion residuals were observed at the Subject Property during site reconnaissance, including, an area of mounded coal to the west of the boiler room, and an area of dispersed coal and coal combustion residuals along the northern extent of the property. Additional areas of coal mounding and/or coal burial are suspected at the Subject Property due to its historical operations as a coal fired mill. The areas of coal and coal ash at the Subject Property are considered a REC.

- Improper disposal of demolition debris and dumping of solid waste was evident during site reconnaissance, with recorded violations against previous property owners. The improper disposal of demolition debris and solid waste is considered a REC.
- Historical records and site reconnaissance suggest a brick elevator shaft was retrofitted and utilized in the granite mill building. The presence or absence of an elevator and whether or not it utilized petroleum products could not be evaluated due to the poor condition of the granite mill building. The elevator is considered to be a REC.
- At least one area of electrical equipment was overserved within the entrance to the granite mill building in poor condition; however, no areas of staining or leaking fluids were observed. Due to the age of the building, PCBs and/or mercury may have been present in electrical equipment utilized at the Subject Property and is considered a REC.
- Painted surfaces were observed to be in poor condition and chipping. Due to the age of the Subject Property, painted surfaces may contain lead-based paint and are considered a REC.
- A demolition plan obtained from the Town of Westerly, RI indicated historical bulk sampling for suspect ACM was completed in 2013. Analytical results from the bulk sampling suggested that none of the suspect building materials were found to contain greater than 1% asbestos; therefore, the buildings associated with the sampling were considered to be free of asbestos. A copy of the asbestos sampling report from 2013 was not included with the record. Available files did not indicate which of the buildings were sampled, only that the ones that were sampled were free of asbestos. Due to the age of the property and deteriorating condition of the buildings, the potential for ACM in any unsampled buildings is considered to be a REC.
- During site reconnaissance, the boiler room was only viewable from exterior spaces and a thorough inspection of the boilers, and interior spaces surrounding the boilers, could not be completed due to safety concerns. Coal could be seen in the chambers of at least one boiler and dispersed across the ground. The boiler room floor was obstructed by vegetation and leaf litter and could not be assessed. RIDEM records indicate historical complaints from locals, suggest the boilers may contain ACM. The boiler room is considered a REC.
- The coal-fired boilers utilized a furnace (chimney) to vent gasses, which tend to incorporate fly ash. Different types of boilers/furnaces have different rates of re-capture of fly ash; however, the specific technologies utilized at the Subject Property over its operational history are not known. The boiler room chimney is considered a REC.

- The Town of Westerly, RI field card for the Subject Property indicates the site utilizes septic, though historical records suggest waste water was discharged directly to the Pawcatuck River. A definitive determination of the presence or absence of a septic system on the property has yet to be made. The possibility of a former septic system at the Subject Property is considered an environmental concern.
- The 1946 and 1964 Sanborn Maps depict an oil house to the west-northwest of the granite mill building, which may have been utilized for the storage of petroleum products when the mill was operational. During site reconnaissance, the approximate location of this building was in ruins, and no petroleum products or petroleum storage tanks were observed. The surface of the former oil house building was obstructed from view by debris and vegetation. Due to the likelihood of petroleum storage in this building, however lack of any evidence suggesting a release occurred, the historic oil house is considered an environmental concern.
- The 1946 and 1964 Sanborn Maps depict a 125-horse power engine room to the north of the granite mill building, that was utilized to power the former mills. The building and engine(s) utilized are no longer present at the Subject Property, though portions of a concrete slab were visible through the vegetation. Though the Subject Property is documented to have utilized coal to heat and power steam engines to operate the former mill, it is unknown of other supplemental engine(s) were retrofitted at the Subject Property. Engine(s) typically utilize petroleum products to lubricate moving parts, and/or as a fuel source. Without a definitive assessment of the former engine(s) utilized at the property, including and visible assessment of surrounding surfaces for evidence of releases, the historic engine room is considered an environmental concern.
- The Pawcatuck River, which bounds the Subject Property to the east and north, was identified with “tissue samples” collected in 2018 containing PFAS. The record of “tissue samples” containing PFAS in the Pawcatuck River, without a known contaminant source(s) or sample locations is considered an environmental concern.

8.2.1 Opinion Regarding Additional Appropriate Investigations

Based on the review of all available data for the Subject Property, including opinions and RECs discussed above, it is the opinion of GES that additional investigation is appropriate at this site, to include the following recommendations:

- Clear the property of over-vegetation, both for access to facilitate additional investigation, and to visually observe the Subject Property for additional coal piles, dumped solid waste, or suspect containers.
- Completion of a geophysical survey in order to attempt to locate a former septic system, underground storage tanks and other buried debris which would be considered an area of concern.
- Collection of shallow soil samples in areas of observed coal piles, or any other discovered areas of coal piles, for analysis of constituents of concern (COCs). Historic soil analytical may be utilized to supplement investigation. Based on results of shallow soil sampling, additional

horizontal and vertical delineation sampling would be needed to evaluate the degree and extent of contamination, if present.

- Collection of shallow soil samples in area of discarded demolition and solid waste pile, including a deteriorating automobile and any other buried solid waste, for analysis of COCs. Historic soil analytical may be utilized to supplement investigation. Based on results of shallow soil sampling, additional horizontal and vertical delineation sampling would be needed to evaluate the degree and extent of contamination, if present.
- Collection of shallow soil samples in the area of the historic “oil house,” and “engine room,” for analysis of COCs. Based on results of shallow soil sampling, additional horizontal and vertical delineation sampling would be needed to evaluate the degree and extent of contamination, if present.
- Collection of shallow soil samples within a selected radius of the chimney for analysis of COCs. Based on results of shallow soil sampling, additional horizontal and vertical delineation sampling would be needed to evaluate the degree and extent of contamination, if present.
- A minimum of three monitoring wells should be installed/utilized to evaluate the presence or absence of COCs in groundwater. Based on the findings of the site investigation, additional monitoring wells may be warranted. Five monitoring wells installed at the site, the historic drinking water well and any other wellheads on the Subject Property should be located and evaluated, if possible. If wells are not utilized, and will not be needed in the future, they should be property abandoned in accordance with RIDEM rules and regulations.
- A demolition survey should be completed for all dilapidated buildings and buildings in ruins that were not previously evaluated. The demolition survey should be completed at a time where the buildings can safely be accessed. Hazardous building materials (ACM, lead-based paint, PCBs/mercury equipment, and/or petroleum products) should be handled and disposed of in accordance with local, state and federal regulations.

8.3 Conclusions

GES has performed a Phase I ESA in conformance with the scope and limitations of ASTM Practice E1527-21 at 198 Potter Hill Road, in Westerly, RI (referenced throughout this report as the Subject Property). Any exceptions to, or deletions from, this practice are described in Section 2.1 through 2.6 this report.

9 Environmental Professional Statement and Qualifications

GES has completed a Phase I ESA for the Subject Property identified at 198 Potter Hill Road in Westerly (Washington County), Rhode Island (the Subject Property). This Phase I ESA was conducted using methods and procedures consistent with customary practices designed to conform to acceptable industry standards. The GES personnel that performed this Phase I ESA consisted of environmental professionals that have training and expertise in performing Phase I ESAs.

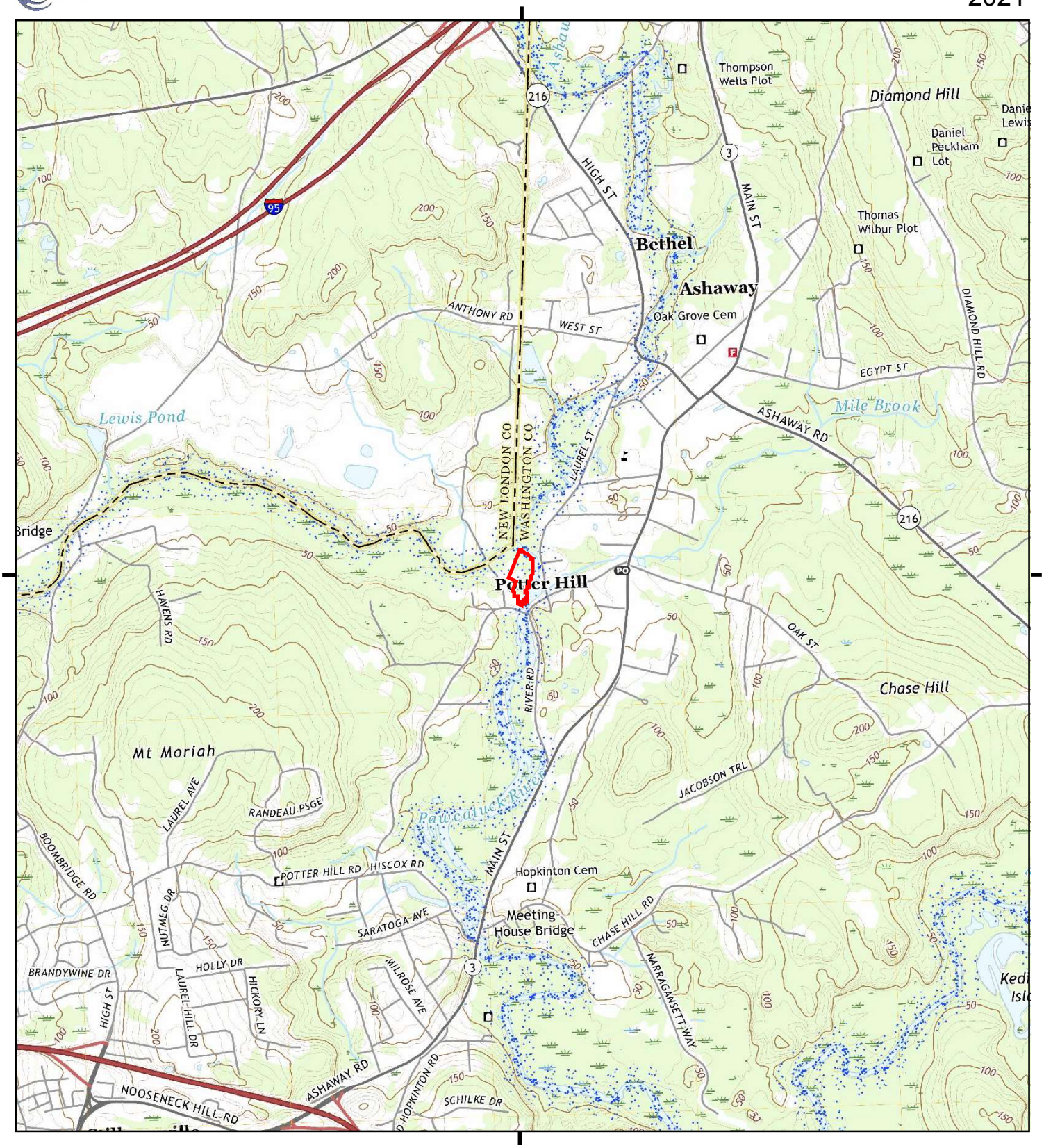
We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in §312.10 of this part. We have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

The qualifications of the GES professionals who participated in this Phase I ESA are provided in **Appendix E**.

Figures

Figure 1 - Site Location Map

2021



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Ashaway, 2021, 7.5-minute

SITE NAME: Potter Hill Mill
ADDRESS: 198 Potter Hill Road
Westerly, RI 02891
CLIENT: GES, Inc.

N

Figure 2
Aerial Site Map

198 Potter Hill Rd
Westerly, RI



Appendix A – Photographs



1: View of Subject Property from opposite side of Pawcatuck River



2: View of Pawcatuck River abutting the Subject Property to the East.



3: View of dam looking upstream



4: View of bridge and Pawcatuck River looking downstream



5: View of former location of wood mill across Pawcatuck River



6: View of Subject Property entrance from Potter Hill Road



7: View of adjacent property to the south



8: View of public land across Potter Hill Road to the south



9: View of natural gas main at entrance to Subject Property



10: View of natural gas main running along bridge over Pawcatuck River



11: View of water main at southern entrance to Subject Property



12: View of sluice way and foundation under former wooden mill destroyed by fire



13: View into collapsed weaving house, facing East



14: View into collapsed weaving house, facing Southeast



15: View into weaving house, facing East



16: View into weaving house, facing East



17: View of southern side of Weaving House, facing North



18: View of debris pile west of former Weaving House, potentially the former oil house



19: View of access driveway at Subject Property, overgrown with vegetation, facing North



20: View of elevator shaft exterior at Granite House, facing Northeast



21: View of Western exposure of Granite House, facing East



22: View of potential oil house remains facing west-northwest



23: View of former engine room foundation, facing east



24: View into collapsed picking and dyeing room, facing southeast



25: View of western exposure of Picking and Dyeing house, facing East



26: View into Boiler Room, facing East



27: View of north-facing wall in Boiler room, facing southeast



28: View of south-facing wall and chimney in Boiler House, facing northeast



29: View of potential dry well west of Weaving House



30: View into Granite House, facing East



31: View of electric boxes in entry of Granite House, corroded, facing northeast



32: View of chimney and northern exposure of Boiler Room, facing south



33: View into collapsed Dye House, facing northeast



34: View into collapsed Dye House, facing southeast



35: View into collapsed Dye House, facing East



36: View of collapsed Dye House, facing southeast



37: View across northeastern extent of Subject Property, facing north



38: View of remnants of automobile and debris pile, facing northwest



39: View of coal and coal combustion residuals at surface, facing east



40: View of collapsed structure at northeastern extent of property, facing north



41: View of rotting lumber in area of former Storage Building, facing southwest



42: View of discarded mill equipment in northwestern area of property, facing northwest



43: View of hydrant to the west of Granite House, facing west



44: View of access to the western area of the Subject Property, facing west



45: View of abutting property to the west,

194 Potter Hill Road, facing East



46: View of abutting property to the west,

23 Post Office Lane, facing northwest



47: View of abutting properties to the west,

15 & 17 Post Office Lane, facing northeast



48: View of abutting property to the north across

the Pawcatuck River, 72 Laurel Street, facing west

Appendix B – Historical Research

Potter Hill Mill
198 Potter Hill Road
Westerly, RI 02891

Inquiry Number: 7688305.2s
June 21, 2024

The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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GEOCHECK ADDENDUM

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E1527 - 21), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E2247 - 16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E1528 - 22) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

198 POTTER HILL ROAD
WESTERLY, RI 02891

COORDINATES

Latitude (North):	41.4153960 - 41° 24' 55.42''
Longitude (West):	71.7971560 - 71° 47' 49.76''
Universal Tranverse Mercator:	Zone 19
UTM X (Meters):	266219.9
UTM Y (Meters):	4588435.5
Elevation:	23 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	20121790 ASHAWAY, RI
Version Date:	2021

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20180930
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
198 POTTER HILL ROAD
WESTERLY, RI 02804

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	PAWCATUCK WOOLEN MIL	198 POTTER HILL ROAD	RI RGA HWS		TP
A2	PAWCATUCK WOOLEN MIL	198 POTTER HILL ROAD	RI RGA HWS		TP
A3	PAWCATUCK WOOLEN MIL	198 POTTER HILL ROAD	RI RGA HWS		TP
A4	PAWCATUCK WOOLEN MIL	198 POTTER HILL ROAD	RI SHWS		TP
5	PAWCATUCK RIVER		PFAS WQP	Higher	45, 0.009, NNW
6	ST. VINCENT DEPAUL C	7 CHURCH ST	RI UST	Higher	837, 0.159, NNE
7	KENYON'S VARIETY	RTE. 3 & MAXON ST	RI LUST, RI UST	Higher	1595, 0.302, East
8	ASHAWAY LINE & TWINE	24 LAUREL ST	UST FINDER, UST FINDER RELEASE	Higher	1806, 0.342, NNE

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 8 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
PAWCATUCK WOOLEN MIL 198 POTTER HILL ROAD WESTERLY, RI	RI RGA HWS	N/A
PAWCATUCK WOOLEN MIL 198 POTTER HILL ROAD WESTERLY, RI	RI RGA HWS	N/A
PAWCATUCK WOOLEN MIL 198 POTTER HILL ROAD WESTERLY, RI	RI RGA HWS	N/A
PAWCATUCK WOOLEN MIL 198 POTTER HILL ROAD WESTERLY, RI	RI SHWS Facility Status: Active Project Code: PAWM-HWM Siterem Site Number: SR-38-1074	N/A

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

NPL ---------- National Priority List
Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

Lists of Federal Delisted NPL sites

Delisted NPL ---------- National Priority List Deletions

Lists of Federal sites subject to CERCLA removals and CERCLA orders

FEDERAL FACILITY ---------- Federal Facility Site Information listing

SEMS ---------- Superfund Enterprise Management System

Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE ---------- Superfund Enterprise Management System Archive

Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS ---------- Corrective Action Report

Lists of Federal RCRA TSD facilities

RCRA-TSDF ---------- RCRA - Treatment, Storage and Disposal

Lists of Federal RCRA generators

RCRA-LQG ---------- RCRA - Large Quantity Generators
RCRA-SQG ---------- RCRA - Small Quantity Generators
RCRA-VSQG ---------- RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

Federal institutional controls / engineering controls registries

LUCIS ---------- Land Use Control Information System
US ENG CONTROLS ---------- Engineering Controls Sites List
US INST CONTROLS ---------- Institutional Controls Sites List

Federal ERNS list

ERNS ---------- Emergency Response Notification System

Lists of state- and tribal hazardous waste facilities

CT SHWS ---------- Inventory of Hazardous Disposal Sites

Lists of state and tribal landfills and solid waste disposal facilities

RI SWF/LF ---------- Solid Waste Management Facilities
CT SWF/LF ---------- List of Landfills/Transfer Stations
RI LCP ---------- Landfill Closure Program Sites in RI

Lists of state and tribal leaking storage tanks

CT LUST ---------- Leaking Underground Storage Tank List
INDIAN LUST ---------- Leaking Underground Storage Tanks on Indian Land

Lists of state and tribal registered storage tanks

FEMA UST ---------- Underground Storage Tank Listing
CT UST ---------- Underground Storage Tank Data
RI AST ---------- Aboveground Storage Tanks
CT AST ---------- Marine Terminals and Tank Information
INDIAN UST ---------- Underground Storage Tanks on Indian Land

State and tribal institutional control / engineering control registries

RI AUL ---------- Waste Management Sites with Environmental Land Use Restrictions

CT AUL ELUR Sites

Lists of state and tribal voluntary cleanup sites

INDIAN VCP Voluntary Cleanup Priority Listing

Lists of state and tribal brownfield sites

RI BROWNFIELDS Brownfields Site List
CT BROWNFIELDS Brownfields Inventory

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

INDIAN ODI Report on the Status of Open Dumps on Indian Lands
DEBRIS REGION 9 Torres Martinez Reservation Illegal Dump Site Locations
ODI Open Dump Inventory
IHS OPEN DUMPS Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL Delisted National Clandestine Laboratory Register
RI CDL Clandestine Drug Lab Information Listing
CT CDL Clandestine Drug Lab Listing
US CDL National Clandestine Laboratory Register

Local Land Records

LIENS 2 CERCLA Lien Information

Records of Emergency Release Reports

HMIRS Hazardous Materials Information Reporting System
RI SPILLS Oil & Hazardous Material Response Log/Spill Report
CT SPILLS Oil & Chemical Spill Database
RI SPILLS 90 SPILLS 90 data from FirstSearch
CT SPILLS 90 SPILLS 90 data from FirstSearch

Other Ascertainable Records

RCRA NonGen / NLR RCRA - Non Generators / No Longer Regulated
FUDS Formerly Used Defense Sites
DOD Department of Defense Sites
SCRD DRYCLEANERS State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR Financial Assurance Information
EPA WATCH LIST EPA WATCH LIST
2020 COR ACTION 2020 Corrective Action Program List
TSCA Toxic Substances Control Act
TRIS Toxic Chemical Release Inventory System

EXECUTIVE SUMMARY

SSTS	Section 7 Tracking Systems
ROD	Records Of Decision
RMP	Risk Management Plans
RAATS	RCRA Administrative Action Tracking System
PRP	Potentially Responsible Parties
PADS	PCB Activity Database System
ICIS	Integrated Compliance Information System
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS	Material Licensing Tracking System
COAL ASH DOE	Steam-Electric Plant Operation Data
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER	PCB Transformer Registration Database
RADINFO	Radiation Information Database
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS	Incident and Accident Data
CONSENT	Superfund (CERCLA) Consent Decrees
INDIAN RESERV	Indian Reservations
FUSRAP	Formerly Utilized Sites Remedial Action Program
UMTRA	Uranium Mill Tailings Sites
LEAD SMELTERS	Lead Smelter Sites
US AIRS	Aerometric Information Retrieval System Facility Subsystem
US MINES	Mines Master Index File
MINES MRDS	Mineral Resources Data System
ABANDONED MINES	Abandoned Mines
FINDS	Facility Index System/Facility Registry System
DOCKET HWC	Hazardous Waste Compliance Docket Listing
UXO	Unexploded Ordnance Sites
ECHO	Enforcement & Compliance History Information
FUELS PROGRAM	EPA Fuels Program Registered Listing
PFAS NPL	Superfund Sites with PFAS Detections Information
PFAS FEDERAL SITES	Federal Sites PFAS Information
PFAS TSCA	PFAS Manufacture and Imports Information
PFAS TRIS	List of PFAS Added to the TRI
PFAS RCRA MANIFEST	PFAS Transfers Identified In the RCRA Database Listing
PFAS ATSDR	PFAS Contamination Site Location Listing
PFAS NPDES	Clean Water Act Discharge Monitoring Information
PFAS ECHO	Facilities in Industries that May Be Handling PFAS Listing
PFAS ECHO FIRE TRAIN	Facilities in Industries that May Be Handling PFAS Listing
PFAS PT 139 AIRPORT	All Certified Part 139 Airports PFAS Information Listing
AQUEOUS FOAM NRC	Aqueous Foam Related Incidents Listing
BIOSOLIDS	ICIS-NPDES Biosolids Facility Data
RI AQUEOUS FOAM	Firefighting foam listed as the material released, as reported in Emergency Response Reports.
RI AIRS	Air Emissions Listing
CT AIRS	Permitted Air Sources Listing
RI ASBESTOS	ASBESTOS
CT ASBESTOS	Asbestos Notification Listing
RI DRYCLEANERS	Drycleaner Facility Listing
CT DRYCLEANERS	Drycleaner Facilities
RI Financial Assurance	Financial Assurance Information
CT Financial Assurance	Financial Assurance Information Listing
RI LEAD	Lead Inspections Database
CT LEAD	Lead Inspection Database
RI MANIFEST	Manifest information

EXECUTIVE SUMMARY

CT MANIFEST ---------- Hazardous Waste Manifest Data
RI NPDES ---------- Permit and Facility Data
CT NPDES ---------- Wastewater Permit Listing
PFAS PROJECT ---------- NORTHEASTERN UNIVERSITY PFAS PROJECT
E MANIFEST ---------- Hazardous Waste Electronic Manifest System

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP ---------- EDR Proprietary Manufactured Gas Plants
EDR Hist Auto ---------- EDR Exclusive Historical Auto Stations
EDR Hist Cleaner ---------- EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

CT RGA HWS ---------- Recovered Government Archive State Hazardous Waste Facilities List
RI RGA LF ---------- Recovered Government Archive Solid Waste Facilities List
CT RGA LF ---------- Recovered Government Archive Solid Waste Facilities List
RI RGA LUST ---------- Recovered Government Archive Leaking Underground Storage Tank
CT RGA LUST ---------- Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Lists of state and tribal leaking storage tanks

RI LUST: The LUST Case List is a summary of UST Facilities in RI with leaking USTs, which includes information on the date of release discovery and the status of the LUST Case (active, soil removal only, or inactive).

A review of the RI LUST list, as provided by EDR, and dated 12/06/2023 has revealed that there is 1 RI LUST site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
KENYON'S VARIETY	***RTE. 3 & MAXON ST***	***E 1/4 - 1/2 (0.302 mi.)***	***7***	***75***

Facility Status: Soil Removal Only; No Further Action Required
Facility Id: UST-15536
Project Number: 1402-LS

Lists of state and tribal registered storage tanks

RI UST: The UST Master List is a summary of registered UST Facilities in RI, which includes information on abandoned, in use, permanently closed and temporarily closed USTs.

A review of the RI UST list, as provided by EDR, and dated 12/06/2023 has revealed that there is 1 RI UST site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ST. VINCENT DEPAUL C Facility Id: UST-18692 Tank Status: Permanently Closed	7 CHURCH ST	NNE 1/8 - 1/4 (0.159 mi.)	6	74

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

PFAS WQP: The Water Quality Portal (WQP) is a part of a modernized repository storing ambient sampling data for all environmental media and tissue samples. A wide range of federal, state, tribal and local governments, academic and non-governmental organizations and individuals submit project details and sampling results to this public repository. The information is commonly used for research and assessments of environmental quality.

A review of the PFAS WQP list, as provided by EDR, and dated 12/28/2023 has revealed that there is 1 PFAS WQP site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PAWCATUCK RIVER		NNW 0 - 1/8 (0.009 mi.)	5	9

UST FINDER RELEASE: US EPA's UST Finder data is a national composite of leaking underground storage tanks. This data contains information about, and locations of, leaking underground storage tanks. Data was collected from state sources and standardized into a national profile by EPA's Office of Underground Storage Tanks, Office of Research and Development, and the Association of State and Territorial Solid Waste Management Officials.

A review of the UST FINDER RELEASE list, as provided by EDR, and dated 06/08/2023 has revealed that there is 1 UST FINDER RELEASE site within approximately 0.5 miles of the target property.

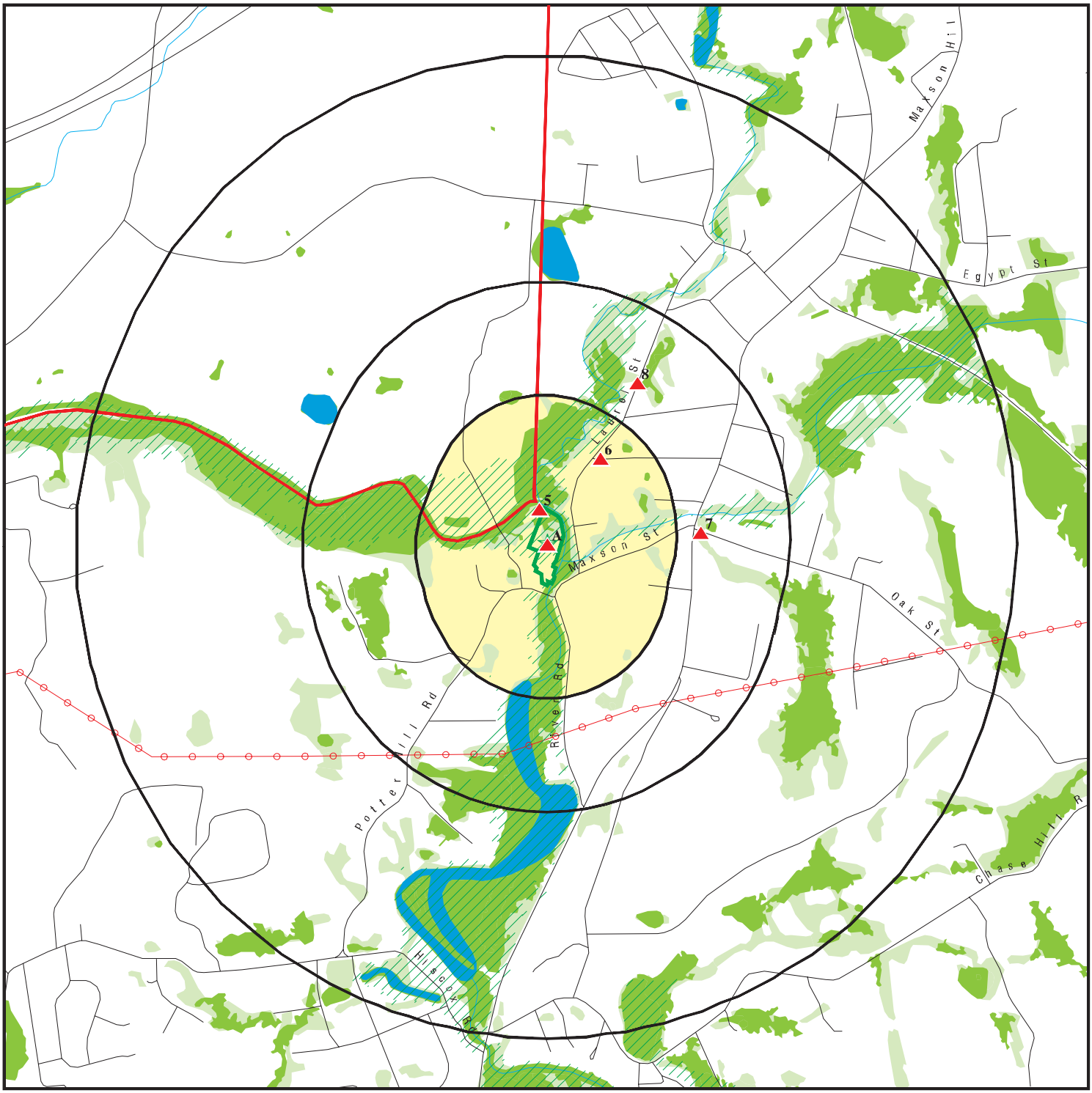
Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ASHAWAY LINE & TWINE	***24 LAUREL ST***	***NNE 1/4 - 1/2 (0.342 mi.)***	***8***	***76***

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 3 records.

Site Name	Database(s)
ASHAWAY LINE & TWINE MFG., CO.	RCRA-LQG, RI LUST, RI UST, ICIS, US AIRS, RI MANIFEST, E MANIFEST
PIERCE STREET PROPERTIES	RI SHWS, RI AUL
WESTERLY TOWN LANDFILL	RI SHWS

OVERVIEW MAP - 7688305.2S



0 1/4 1/2 1 Miles

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- County Boundary
- Power transmission lines
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- National Wetland Inventory
- State Wetlands

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Potter Hill Mill	CLIENT: GES, Inc.
ADDRESS: 198 Potter Hill Road Westerly RI 02891	CONTACT: Hannah Pallein
LAT/LONG: 41.415396 / 71.797156	INQUIRY #: 7688305.2s DATE: June 21, 2024 2:08 pm

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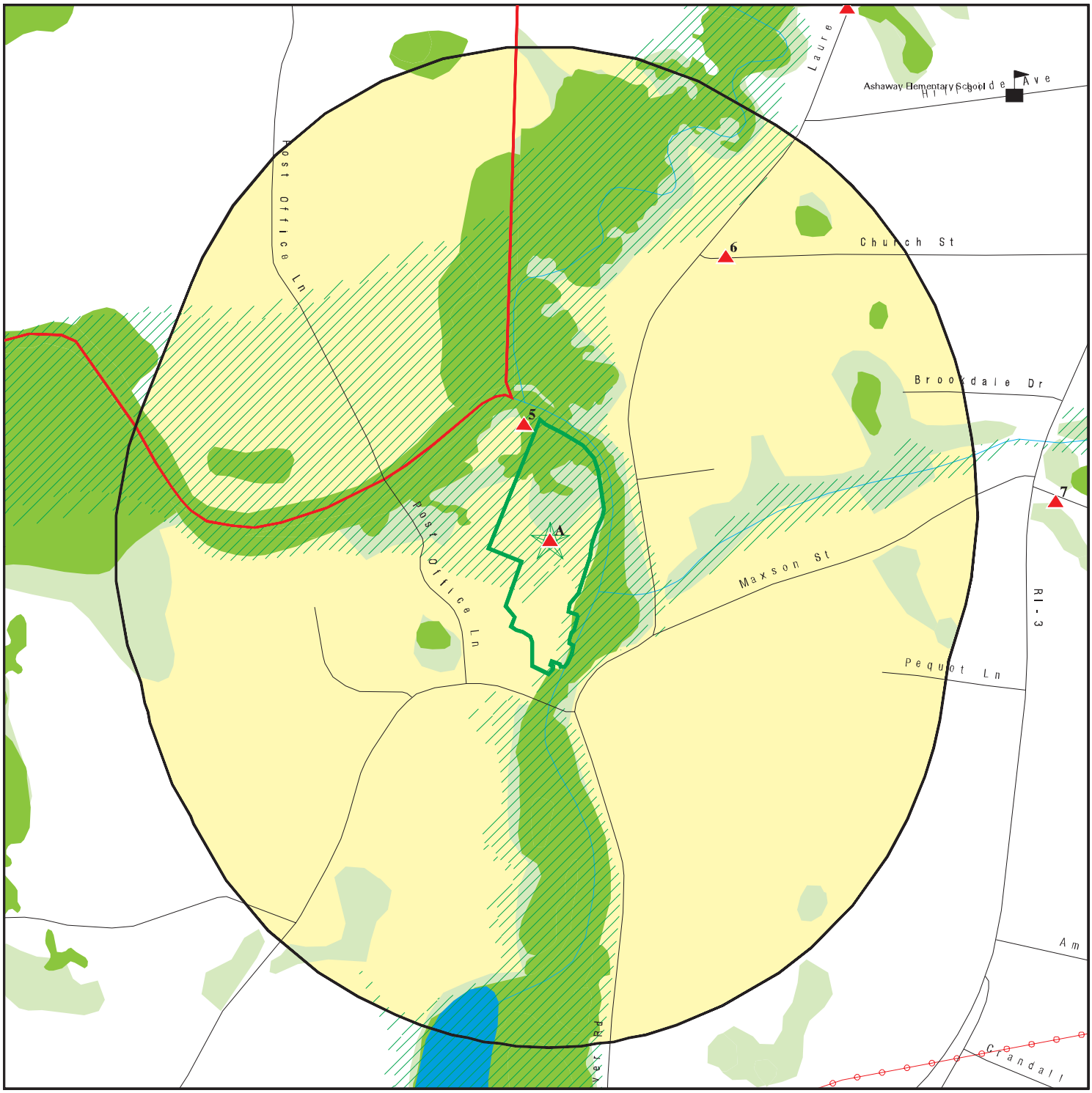
DETAIL MAP - 7688305.2S



0 1/16 1/8 1/4 Miles

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- County Boundary
- Power transmission lines
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- National Wetland Inventory
- State Wetlands

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Potter Hill Mill	CLIENT: GES, Inc.
ADDRESS: 198 Potter Hill Road Westerly RI 02891	CONTACT: Hannah Pallein
LAT/LONG: 41.415396 / 71.797156	INQUIRY #: 7688305.2s DATE: June 21, 2024 2:09 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Lists of Federal NPL (Superfund) sites								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
Lists of Federal Delisted NPL sites								
Delisted NPL	1.000		0	0	0	0	NR	0
Lists of Federal sites subject to CERCLA removals and CERCLA orders								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Lists of Federal CERCLA sites with NFRAP								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Lists of Federal RCRA facilities undergoing Corrective Action								
CORRACTS	1.000		0	0	0	0	NR	0
Lists of Federal RCRA TSD facilities								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Lists of Federal RCRA generators								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-VSQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROLS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	0.001		0	NR	NR	NR	NR	0
Lists of state- and tribal hazardous waste facilities								
RI SHWS	1.000	1	0	0	0	0	NR	1
CT SHWS	1.000		0	0	0	0	NR	0
Lists of state and tribal landfills and solid waste disposal facilities								
RI SWF/LF	0.500		0	0	0	NR	NR	0
CT SWF/LF	0.500		0	0	0	NR	NR	0
RI LCP	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
Lists of state and tribal leaking storage tanks								
RI LUST	0.500		0	0	1	NR	NR	1
CT LUST	0.500		0	0	0	NR	NR	0
INDIAN LUST	0.500		0	0	0	NR	NR	0
Lists of state and tribal registered storage tanks								
FEMA UST	0.250		0	0	NR	NR	NR	0
RI UST	0.250		0	1	NR	NR	NR	1
CT UST	0.250		0	0	NR	NR	NR	0
RI AST	0.250		0	0	NR	NR	NR	0
CT AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
RI AUL	0.500		0	0	0	NR	NR	0
CT AUL	0.500		0	0	0	NR	NR	0
Lists of state and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
Lists of state and tribal brownfield sites								
RI BROWNFIELDS	0.500		0	0	0	NR	NR	0
CT BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
RI CDL	0.001		0	NR	NR	NR	NR	0
CT CDL	0.001		0	NR	NR	NR	NR	0
US CDL	0.001		0	NR	NR	NR	NR	0
Local Land Records								
LIENS 2	0.001		0	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	0.001		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
RI SPILLS	0.001		0	NR	NR	NR	NR	0
CT SPILLS	0.001		0	NR	NR	NR	NR	0
RI SPILLS 90	0.001		0	NR	NR	NR	NR	0
CT SPILLS 90	0.001		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
MINES MRDS	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	0.001		0	NR	NR	NR	NR	0
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
ECHO	0.001		0	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
PFAS NPL	0.250		0	0	NR	NR	NR	0
PFAS FEDERAL SITES	0.250		0	0	NR	NR	NR	0
PFAS TSCA	0.250		0	0	NR	NR	NR	0
PFAS TRIS	0.250		0	0	NR	NR	NR	0
PFAS RCRA MANIFEST	0.250		0	0	NR	NR	NR	0
PFAS ATSDR	0.250		0	0	NR	NR	NR	0
PFAS WQP	0.250		1	0	NR	NR	NR	1

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
PFAS NPDES	0.250		0	0	NR	NR	NR	0
PFAS ECHO	0.250		0	0	NR	NR	NR	0
PFAS ECHO FIRE TRAIN	0.250		0	0	NR	NR	NR	0
PFAS PT 139 AIRPORT	0.250		0	0	NR	NR	NR	0
AQUEOUS FOAM NRC	0.250		0	0	NR	NR	NR	0
BIOSOLIDS	0.001		0	NR	NR	NR	NR	0
RI AQUEOUS FOAM	0.250		0	0	NR	NR	NR	0
RI AIRS	0.001		0	NR	NR	NR	NR	0
CT AIRS	0.001		0	NR	NR	NR	NR	0
RI ASBESTOS	0.001		0	NR	NR	NR	NR	0
CT ASBESTOS	0.001		0	NR	NR	NR	NR	0
RI DRYCLEANERS	0.250		0	0	NR	NR	NR	0
CT DRYCLEANERS	0.250		0	0	NR	NR	NR	0
RI Financial Assurance	0.001		0	NR	NR	NR	NR	0
CT Financial Assurance	0.001		0	NR	NR	NR	NR	0
RI LEAD	0.001		0	NR	NR	NR	NR	0
CT LEAD	0.001		0	NR	NR	NR	NR	0
RI MANIFEST	0.250		0	0	NR	NR	NR	0
CT MANIFEST	0.250		0	0	NR	NR	NR	0
RI NPDES	0.001		0	NR	NR	NR	NR	0
CT NPDES	0.001		0	NR	NR	NR	NR	0
PFAS PROJECT	0.500		0	0	0	NR	NR	0
UST FINDER	0.250		0	0	NR	NR	NR	0
UST FINDER RELEASE	0.500		0	0	1	NR	NR	1
E MANIFEST	0.250		0	0	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RI RGA HWS	0.001	3	0	NR	NR	NR	NR	3
CT RGA HWS	0.001		0	NR	NR	NR	NR	0
RI RGA LF	0.001		0	NR	NR	NR	NR	0
CT RGA LF	0.001		0	NR	NR	NR	NR	0
RI RGA LUST	0.001		0	NR	NR	NR	NR	0
CT RGA LUST	0.001		0	NR	NR	NR	NR	0
- Totals --		4	1	1	2	0	0	8

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1 **PAWCATUCK WOOLEN MILL (POTTER HILL MILL)** **RI RGA HWS** **S116410977**
Target Property **198 POTTER HILL ROAD** **N/A**
WESTERLY, RI

Site 1 of 4 in cluster A

Actual: 23 ft.

RGA HWS:

2012	PAWCATUCK WOOLEN MILL (POTTER HILL MILL)	198 POTTER HILL ROAD
2011	PAWCATUCK WOOLEN MILL (POTTER HILL MILL)	198 POTTER HILL ROAD
2010	PAWCATUCK WOOLEN MILL (POTTER HILL MILL)	198 POTTER HILL ROAD
2009	PAWCATUCK WOOLEN MILL (POTTER HILL MILL)	198 POTTER HILL ROAD

A2 **PAWCATUCK WOOLEN MILL (POTTER HILL MILL** **RI RGA HWS** **S116410978**
Target Property **198 POTTER HILL ROAD** **N/A**
WESTERLY, RI

Site 2 of 4 in cluster A

Actual: 23 ft.

RGA HWS:

2007	PAWCATUCK WOOLEN MILL (POTTER HILL MILL	198 POTTER HILL ROAD

A3 **PAWCATUCK WOOLEN MILL (POTTER HILL** **RI RGA HWS** **S116410979**
Target Property **198 POTTER HILL ROAD** **N/A**
WESTERLY, RI

Site 3 of 4 in cluster A

Actual: 23 ft.

RGA HWS:

2008	PAWCATUCK WOOLEN MILL (POTTER HILL	198 POTTER HILL ROAD

A4 **PAWCATUCK WOOLEN MILL (POTTER HILL MILL)** **RI SHWS** **S108289591**
Target Property **198 POTTER HILL ROAD** **N/A**
WESTERLY, RI

Site 4 of 4 in cluster A

Actual: 23 ft.

SHWS:

Name:	PAWCATUCK WOOLEN MILL (POTTER HILL MILL)
Address:	198 POTTER HILL ROAD
City,State,Zip:	WESTERLY, RI
Project Code:	PAWM-HWM
Siterem Site Number:	SR-38-1074
Facility Status:	**Active**
Project Code Desc:	PAWM-HWM
Project Date:	09/28/2006
Acres:	4.55

5
NNW
< 1/8
0.009 mi.
45 ft.

PAWCATUCK RIVER
, RI

PFAS WQP **1027744681**
N/A

Relative:
Higher

Actual:
23 ft.

PFAS WQP:

Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.4165200000
Longitude:	-71.7974900000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10020-109653
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10020
Result Detection:	PFAS Detected
PFAS Chemical Name:	Perfluorononanoic acid
Result Measure Value (ppt):	797
Result Measure Value:	0.797000
Result Unit of Measure:	ng/g
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.129
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.7974900000,%22y%22:41.4165200000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1

Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.4006500000
Longitude:	-71.7311000000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10009-105153
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-

PAWCATUCK RIVER (Continued) **1027744681**

Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10009
Result Detection:	PFAS Detected
PFAS Chemical Name:	Perfluorononanoic acid
Result Measure Value (ppt):	815
Result Measure Value:	0.815000
Result Unit of Measure:	ng/g
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.129
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.7311000000,%22y%22:41.4006500000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.4006500000
Longitude:	-71.7311000000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10009-105153
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10009
Result Detection:	PFAS Detected
PFAS Chemical Name:	Perfluorooctanesulfonamide
Result Measure Value (ppt):	826
Result Measure Value:	0.826000
Result Unit of Measure:	ng/g
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.152
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OS

PAWCATUCK RIVER (Continued) **1027744681**

	T_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.7311000000,%22y%22:41.4006500000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.3946900000
Longitude:	-71.8415200000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10006-104353
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10006
Result Detection:	PFAS Detected
PFAS Chemical Name:	Perfluorooctanesulfonamide
Result Measure Value (ppt):	1360
Result Measure Value:	1.360000
Result Unit of Measure:	ng/g
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.152
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.8415200000,%22y%22:41.3946900000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.3946900000
Longitude:	-71.8415200000

PAWCATUCK RIVER (Continued) **1027744681**

Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10006-104353
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10006
Result Detection:	PFAS Detected
PFAS Chemical Name:	Perfluorononanoic acid
Result Measure Value (ppt):	1440
Result Measure Value:	1.440000
Result Unit of Measure:	ng/g
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.129
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.8415200000,%22y%22:41.3946900000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.4165200000
Longitude:	-71.7974900000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10020-109653
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10020
Result Detection:	PFAS Detected
PFAS Chemical Name:	Perfluorooctanesulfonamide
Result Measure Value (ppt):	1660
Result Measure Value:	1.660000
Result Unit of Measure:	ng/g
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.152
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported

PAWCATUCK RIVER (Continued) **1027744681**

Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.7974900000,%22y%22:41.4165200000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.4165200000
Longitude:	-71.7974900000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10020-109653
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10020
Result Detection:	PFAS Detected
PFAS Chemical Name:	Perfluorotetradecanoic acid
Result Measure Value (ppt):	2030
Result Measure Value:	2.030000
Result Unit of Measure:	ng/g
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.309
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.7974900000,%22y%22:41.4165200000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1

PAWCATUCK RIVER (Continued) **1027744681**

Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.3946900000
Longitude:	-71.8415200000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10006-104353
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10006
Result Detection:	PFAS Detected
PFAS Chemical Name:	Perfluorotetradecanoic acid
Result Measure Value (ppt):	2540
Result Measure Value:	2.540000
Result Unit of Measure:	ng/g
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.309
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.8415200000,%22y%22:41.3946900000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1

Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.3946900000
Longitude:	-71.8415200000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10006-104353
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10006
Result Detection:	Not Detected
PFAS Chemical Name:	1-Decanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heneicosafluoro-

PAWCATUCK RIVER (Continued) **1027744681**

Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.207
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.8415200000,%22y%22:41.3946900000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.3946900000
Longitude:	-71.8415200000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10006-104353
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10006
Result Detection:	Not Detected
PFAS Chemical Name:	1-Heptanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,7-pentadecafluoro-
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.154
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection

PAWCATUCK RIVER (Continued) **1027744681**

HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.8415200000,%22y%22:41.3946900000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.3946900000
Longitude:	-71.8415200000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10006-104353
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10006
Result Detection:	Not Detected
PFAS Chemical Name:	1-Nonanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,9-nonadecafluoro-
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.155
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.8415200000,%22y%22:41.3946900000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.3946900000
Longitude:	-71.8415200000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue

PAWCATUCK RIVER (Continued) **1027744681**

Activity Identifier:	OST_SHPD-NRS18_RI_10006-104353
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10006
Result Detection:	Not Detected
PFAS Chemical Name:	1-Octanesulfonic acid, 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluoro-
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.404
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.8415200000,%22y%22:41.3946900000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.3946900000
Longitude:	-71.8415200000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10006-104353
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10006
Result Detection:	Not Detected
PFAS Chemical Name:	1-Pentanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,5-undecafluoro-
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.129
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported

PAWCATUCK RIVER (Continued) **1027744681**

Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.8415200000,%22y%22:41.3946900000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.3946900000
Longitude:	-71.8415200000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10006-104353
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10006
Result Detection:	Not Detected
PFAS Chemical Name:	2-(N-methylperfluoro-1-octanesulfonamido)-ethanol
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	3.36
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.8415200000,%22y%22:41.3946900000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported

PAWCATUCK RIVER (Continued) **1027744681**

City,State,Zip:	RI
Latitude:	41.3946900000
Longitude:	-71.8415200000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10006-104353
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10006
Result Detection:	Not Detected
PFAS Chemical Name:	4,8-Dioxa-3H-perfluorononanoic acid
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.884
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.8415200000,%22y%22:41.3946900000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1

Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.3946900000
Longitude:	-71.8415200000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10006-104353
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10006
Result Detection:	Not Detected
PFAS Chemical Name:	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level

PAWCATUCK RIVER (Continued) **1027744681**

Detection/Quantitation Measure Value:	0.889
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.8415200000,%22y%22:41.3946900000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.3946900000
Longitude:	-71.8415200000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10006-104353
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10006
Result Detection:	Not Detected
PFAS Chemical Name:	Fluorotelomer sulfonate 4:2
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.234
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.8415200000,%22y%22:41.3946900000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&d

PAWCATUCK RIVER (Continued) **1027744681**

istance=1
Count: 1

Year: 2018
Name: PAWCATUCK RIVER
Address: Not reported
City,State,Zip: RI
Latitude: 41.3946900000
Longitude: -71.8415200000
Organization: USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name: Tissue
Activity Identifier: OST_SHPD-NRS18_RI_10006-104353
Activity Type Code: Sample-Composite With Parents
Analysis Start Date: -
Project Identifier: NRSA1819
Monitoring Location Identifier: OST_SHPD-NRS18_RI_10006
Result Detection: Not Detected
PFAS Chemical Name: Fluorotelomer sulfonate 8:2
Result Measure Value (ppt): -
Result Measure Value: -
Result Unit of Measure: Not reported
Detection/Quantitation Limit Type: Method Detection Level
Detection/Quantitation Measure Value: 0.67
Detection/Quantitation Unit of Measure: ng/g
Laboratory Accreditation Indicator: Not reported
Fish Species: Not reported
Activity Comment: Not reported
Result Comment: Not reported
Provider: STORET
EPA Region: 01
Project File URL: https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name: Not reported
QAPP Approved: Yes
Analytical Method: Liquid chromatography with tandem mass spectrometric detection
HUC: 01090005
EJSCREEN Report: https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.8415200000,%22y%22:41.3946900000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count: 1

Year: 2018
Name: PAWCATUCK RIVER
Address: Not reported
City,State,Zip: RI
Latitude: 41.3946900000
Longitude: -71.8415200000
Organization: USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name: Tissue
Activity Identifier: OST_SHPD-NRS18_RI_10006-104353
Activity Type Code: Sample-Composite With Parents
Analysis Start Date: -
Project Identifier: NRSA1819
Monitoring Location Identifier: OST_SHPD-NRS18_RI_10006

PAWCATUCK RIVER (Continued) **1027744681**

Result Detection:	Not Detected
PFAS Chemical Name:	Glycine, N-ethyl-N-[(1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluorooctyl)sulfonyl]-
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.143
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.8415200000,%22y%22:41.3946900000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.3946900000
Longitude:	-71.8415200000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10006-104353
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10006
Result Detection:	Not Detected
PFAS Chemical Name:	Heptafluorobutyric acid
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.551
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OS

PAWCATUCK RIVER (Continued) **1027744681**

	T_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.8415200000,%22y%22:41.3946900000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.3946900000
Longitude:	-71.8415200000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10006-104353
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10006
Result Detection:	Not Detected
PFAS Chemical Name:	Hexafluoropropylene oxide dimer acid
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.46
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.8415200000,%22y%22:41.3946900000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.3946900000
Longitude:	-71.8415200000

PAWCATUCK RIVER (Continued) **1027744681**

Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10006-104353
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10006
Result Detection:	Not Detected
PFAS Chemical Name:	N-Ethyl-N-(2-hydroxyethyl)perfluorooctanesulfonamide
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	1.45
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.8415200000,%22y%22:41.3946900000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.3946900000
Longitude:	-71.8415200000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10006-104353
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10006
Result Detection:	Not Detected
PFAS Chemical Name:	N-methylperfluoro-1-octanesulfonamide
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.288
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported

PAWCATUCK RIVER (Continued) **1027744681**

Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.8415200000,%22y%22:41.3946900000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.3946900000
Longitude:	-71.8415200000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10006-104353
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10006
Result Detection:	Not Detected
PFAS Chemical Name:	Perfluorobutanesulfonic acid
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.097
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.8415200000,%22y%22:41.3946900000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1

PAWCATUCK RIVER (Continued) **1027744681**

Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.3946900000
Longitude:	-71.8415200000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10006-104353
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10006
Result Detection:	Not Detected
PFAS Chemical Name:	Perfluorododecanesulfonic acid
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.291
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.8415200000,%22y%22:41.3946900000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1

Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.3946900000
Longitude:	-71.8415200000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10006-104353
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10006
Result Detection:	Not Detected
PFAS Chemical Name:	Perfluoroheptanoic acid
Result Measure Value (ppt):	-

PAWCATUCK RIVER (Continued) **1027744681**

Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.170
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.8415200000,%22y%22:41.3946900000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.3946900000
Longitude:	-71.8415200000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10006-104353
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10006
Result Detection:	Not Detected
PFAS Chemical Name:	Perfluorohexanesulfonic acid
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.153
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005

PAWCATUCK RIVER (Continued) **1027744681**

EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.8415200000,%22y%22:41.3946900000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.3946900000
Longitude:	-71.8415200000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10006-104353
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10006
Result Detection:	Not Detected
PFAS Chemical Name:	Perfluorohexanoic acid
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.203
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.8415200000,%22y%22:41.3946900000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.3946900000
Longitude:	-71.8415200000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10006-104353
Activity Type Code:	Sample-Composite With Parents

PAWCATUCK RIVER (Continued) **1027744681**

Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10006
Result Detection:	Not Detected
PFAS Chemical Name:	Perfluorovaleric acid
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.192
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.8415200000,%22y%22:41.3946900000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1

Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.3946900000
Longitude:	-71.8415200000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10006-104353
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10006
Result Detection:	Not Detected
PFAS Chemical Name:	Potassium 9-chlorohexadecafluoro-3-oxanonane-1-sulfonate
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.708
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01

PAWCATUCK RIVER (Continued) **1027744681**

Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.8415200000,%22y%22:41.3946900000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.3946900000
Longitude:	-71.8415200000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10006-104353
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10006
Result Detection:	Not Detected
PFAS Chemical Name:	Sulfluramid
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.248
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.8415200000,%22y%22:41.3946900000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.4006500000

PAWCATUCK RIVER (Continued) **1027744681**

Longitude:	-71.7311000000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10009-105153
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10009
Result Detection:	Not Detected
PFAS Chemical Name:	1-Decanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heneicosafluoro-
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.207
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.7311000000,%22y%22:41.4006500000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.4006500000
Longitude:	-71.7311000000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10009-105153
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10009
Result Detection:	Not Detected
PFAS Chemical Name:	1-Heptanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,7-pentadecafluoro-
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.154

PAWCATUCK RIVER (Continued) **1027744681**

Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.7311000000,%22y%22:41.4006500000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.4006500000
Longitude:	-71.7311000000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10009-105153
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10009
Result Detection:	Not Detected
PFAS Chemical Name:	1-Nonanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,9-nonadecafluoro-
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.155
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.7311000000,%22y%22:41.4006500000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&d

PAWCATUCK RIVER (Continued) **1027744681**

	istance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.4006500000
Longitude:	-71.7311000000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10009-105153
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10009
Result Detection:	Not Detected
PFAS Chemical Name:	1-Octanesulfonic acid, 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluoro-
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.404
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.7311000000,%22y%22:41.4006500000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.4006500000
Longitude:	-71.7311000000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10009-105153
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10009

PAWCATUCK RIVER (Continued) **1027744681**

Result Detection:	Not Detected
PFAS Chemical Name:	1-Pentanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,5-undecafluoro-
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.129
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.7311000000,%22y%22:41.4006500000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.4006500000
Longitude:	-71.7311000000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10009-105153
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10009
Result Detection:	Not Detected
PFAS Chemical Name:	2-(N-methylperfluoro-1-octanesulfonamido)-ethanol
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	3.36
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported

PAWCATUCK RIVER (Continued) **1027744681**

QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.7311000000,%22y%22:41.4006500000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.4006500000
Longitude:	-71.7311000000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10009-105153
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10009
Result Detection:	Not Detected
PFAS Chemical Name:	4,8-Dioxa-3H-perfluorononanoic acid
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.884
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.7311000000,%22y%22:41.4006500000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.4006500000
Longitude:	-71.7311000000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division

PAWCATUCK RIVER (Continued) **1027744681**

Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10009-105153
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10009
Result Detection:	Not Detected
PFAS Chemical Name:	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.889
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.7311000000,%22y%22:41.4006500000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.4006500000
Longitude:	-71.7311000000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10009-105153
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10009
Result Detection:	Not Detected
PFAS Chemical Name:	Fluorotelomer sulfonate 4:2
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.234
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported

PAWCATUCK RIVER (Continued) **1027744681**

Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.7311000000,%22y%22:41.4006500000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.4006500000
Longitude:	-71.7311000000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10009-105153
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10009
Result Detection:	Not Detected
PFAS Chemical Name:	Fluorotelomer sulfonate 8:2
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.67
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.7311000000,%22y%22:41.4006500000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER

PAWCATUCK RIVER (Continued) **1027744681**

Address:	Not reported
City,State,Zip:	RI
Latitude:	41.4006500000
Longitude:	-71.7311000000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10009-105153
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10009
Result Detection:	Not Detected
PFAS Chemical Name:	Glycine, N-ethyl-N-[(1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluorooctyl)sulfonyl]-
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.143
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.7311000000,%22y%22:41.4006500000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.4006500000
Longitude:	-71.7311000000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10009-105153
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10009
Result Detection:	Not Detected
PFAS Chemical Name:	Heptafluorobutyric acid
Result Measure Value (ppt):	-

PAWCATUCK RIVER (Continued) **1027744681**

Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.551
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.7311000000,%22y%22:41.4006500000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.4006500000
Longitude:	-71.7311000000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10009-105153
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10009
Result Detection:	Not Detected
PFAS Chemical Name:	Hexafluoropropylene oxide dimer acid
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.46
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005

PAWCATUCK RIVER (Continued) **1027744681**

EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.7311000000,%22y%22:41.4006500000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.4006500000
Longitude:	-71.7311000000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10009-105153
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10009
Result Detection:	Not Detected
PFAS Chemical Name:	N-Ethyl-N-(2-hydroxyethyl)perfluorooctanesulfonamide
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	1.45
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.7311000000,%22y%22:41.4006500000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.4006500000
Longitude:	-71.7311000000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10009-105153
Activity Type Code:	Sample-Composite With Parents

PAWCATUCK RIVER (Continued) **1027744681**

Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10009
Result Detection:	Not Detected
PFAS Chemical Name:	N-methylperfluoro-1-octanesulfonamide
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.288
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.7311000000,%22y%22:41.4006500000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1

Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.4006500000
Longitude:	-71.7311000000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10009-105153
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10009
Result Detection:	Not Detected
PFAS Chemical Name:	Perfluorobutanesulfonic acid
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.097
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01

PAWCATUCK RIVER (Continued) **1027744681**

Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.7311000000,%22y%22:41.4006500000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.4006500000
Longitude:	-71.7311000000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10009-105153
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10009
Result Detection:	Not Detected
PFAS Chemical Name:	Perfluorododecanesulfonic acid
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.291
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.7311000000,%22y%22:41.4006500000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.4006500000

PAWCATUCK RIVER (Continued) **1027744681**

Longitude:	-71.7311000000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10009-105153
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10009
Result Detection:	Not Detected
PFAS Chemical Name:	Perfluoroheptanoic acid
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.170
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.7311000000,%22y%22:41.4006500000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.4006500000
Longitude:	-71.7311000000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10009-105153
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10009
Result Detection:	Not Detected
PFAS Chemical Name:	Perfluorohexanesulfonic acid
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.153
Detection/Quantitation Unit of Measure:	ng/g

PAWCATUCK RIVER (Continued) **1027744681**

Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.7311000000,%22y%22:41.4006500000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.4006500000
Longitude:	-71.7311000000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10009-105153
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10009
Result Detection:	Not Detected
PFAS Chemical Name:	Perfluorohexanoic acid
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.203
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.7311000000,%22y%22:41.4006500000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1

PAWCATUCK RIVER (Continued) **1027744681**

Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.4006500000
Longitude:	-71.7311000000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10009-105153
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10009
Result Detection:	Not Detected
PFAS Chemical Name:	Perfluorooctanoic acid
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.162
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.7311000000,%22y%22:41.4006500000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1

Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.4006500000
Longitude:	-71.7311000000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10009-105153
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10009
Result Detection:	Not Detected
PFAS Chemical Name:	Perfluorovaleric acid
Result Measure Value (ppt):	-

PAWCATUCK RIVER (Continued) **1027744681**

Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.192
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.7311000000,%22y%22:41.4006500000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.4006500000
Longitude:	-71.7311000000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10009-105153
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10009
Result Detection:	Not Detected
PFAS Chemical Name:	Potassium 9-chlorohexadecafluoro-3-oxanonane-1-sulfonate
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.708
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005

PAWCATUCK RIVER (Continued) **1027744681**

EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.7311000000,%22y%22:41.4006500000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.4006500000
Longitude:	-71.7311000000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10009-105153
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10009
Result Detection:	Not Detected
PFAS Chemical Name:	Sulfluramid
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.248
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.7311000000,%22y%22:41.4006500000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.4165200000
Longitude:	-71.7974900000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10020-109653
Activity Type Code:	Sample-Composite With Parents

PAWCATUCK RIVER (Continued) **1027744681**

Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10020
Result Detection:	Not Detected
PFAS Chemical Name:	1-Decanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heneicosafluoro-
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.207
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.7974900000,%22y%22:41.4165200000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.4165200000
Longitude:	-71.7974900000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10020-109653
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10020
Result Detection:	Not Detected
PFAS Chemical Name:	1-Heptanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,7-pentadecafluoro-
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.154
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET

PAWCATUCK RIVER (Continued) **1027744681**

EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.7974900000,%22y%22:41.4165200000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.4165200000
Longitude:	-71.7974900000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10020-109653
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10020
Result Detection:	Not Detected
PFAS Chemical Name:	1-Nonanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,9-nonadecafluoro-
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.155
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.7974900000,%22y%22:41.4165200000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported

PAWCATUCK RIVER (Continued) **1027744681**

City,State,Zip:	RI
Latitude:	41.4165200000
Longitude:	-71.7974900000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10020-109653
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10020
Result Detection:	Not Detected
PFAS Chemical Name:	1-Octanesulfonic acid, 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluoro-
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.404
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.7974900000,%22y%22:41.4165200000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.4165200000
Longitude:	-71.7974900000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10020-109653
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10020
Result Detection:	Not Detected
PFAS Chemical Name:	1-Pentanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,5-undecafluoro-
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level

PAWCATUCK RIVER (Continued) **1027744681**

Detection/Quantitation Measure Value:	0.129
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.7974900000,%22y%22:41.4165200000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.4165200000
Longitude:	-71.7974900000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10020-109653
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10020
Result Detection:	Not Detected
PFAS Chemical Name:	2-(N-methylperfluoro-1-octanesulfonamido)-ethanol
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	3.36
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.7974900000,%22y%22:41.4165200000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&d

PAWCATUCK RIVER (Continued) **1027744681**

	istance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.4165200000
Longitude:	-71.7974900000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10020-109653
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10020
Result Detection:	Not Detected
PFAS Chemical Name:	4,8-Dioxa-3H-perfluorononanoic acid
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.884
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.7974900000,%22y%22:41.4165200000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.4165200000
Longitude:	-71.7974900000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10020-109653
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10020

PAWCATUCK RIVER (Continued) **1027744681**

Result Detection:	Not Detected
PFAS Chemical Name:	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.889
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.7974900000,%22y%22:41.4165200000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.4165200000
Longitude:	-71.7974900000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10020-109653
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10020
Result Detection:	Not Detected
PFAS Chemical Name:	Fluorotelomer sulfonate 4:2
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.234
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported

PAWCATUCK RIVER (Continued) **1027744681**

QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.7974900000,%22y%22:41.4165200000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.4165200000
Longitude:	-71.7974900000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10020-109653
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10020
Result Detection:	Not Detected
PFAS Chemical Name:	Fluorotelomer sulfonate 8:2
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.67
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.7974900000,%22y%22:41.4165200000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.4165200000
Longitude:	-71.7974900000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division

PAWCATUCK RIVER (Continued) **1027744681**

Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10020-109653
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10020
Result Detection:	Not Detected
PFAS Chemical Name:	Heptafluorobutyric acid
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.551
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.7974900000,%22y%22:41.4165200000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.4165200000
Longitude:	-71.7974900000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10020-109653
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10020
Result Detection:	Not Detected
PFAS Chemical Name:	Hexafluoropropylene oxide dimer acid
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.46
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported

PAWCATUCK RIVER (Continued) **1027744681**

Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.7974900000,%22y%22:41.4165200000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.4165200000
Longitude:	-71.7974900000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10020-109653
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10020
Result Detection:	Not Detected
PFAS Chemical Name:	N-Ethyl-N-(2-hydroxyethyl)perfluorooctanesulfonamide
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	1.45
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.7974900000,%22y%22:41.4165200000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER

PAWCATUCK RIVER (Continued) **1027744681**

Address:	Not reported
City,State,Zip:	RI
Latitude:	41.4165200000
Longitude:	-71.7974900000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10020-109653
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10020
Result Detection:	Not Detected
PFAS Chemical Name:	N-methylperfluoro-1-octanesulfonamide
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.288
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.7974900000,%22y%22:41.4165200000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.4165200000
Longitude:	-71.7974900000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10020-109653
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10020
Result Detection:	Not Detected
PFAS Chemical Name:	Perfluorobutanesulfonic acid
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported

PAWCATUCK RIVER (Continued) **1027744681**

Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.097
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.7974900000,%22y%22:41.4165200000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.4165200000
Longitude:	-71.7974900000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10020-109653
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10020
Result Detection:	Not Detected
PFAS Chemical Name:	Perfluorododecanesulfonic acid
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.291
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.7974900000,%22y%22:41.4165200000,%22spatialReference%22:

PAWCATUCK RIVER (Continued) **1027744681**

	%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.4165200000
Longitude:	-71.7974900000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10020-109653
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10020
Result Detection:	Not Detected
PFAS Chemical Name:	Perfluoroheptanoic acid
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.170
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.7974900000,%22y%22:41.4165200000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.4165200000
Longitude:	-71.7974900000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10020-109653
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819

PAWCATUCK RIVER (Continued) **1027744681**

Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10020
Result Detection:	Not Detected
PFAS Chemical Name:	Perfluorohexanesulfonic acid
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.153
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.7974900000,%22y%22:41.4165200000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.4165200000
Longitude:	-71.7974900000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10020-109653
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10020
Result Detection:	Not Detected
PFAS Chemical Name:	Perfluorohexanoic acid
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.203
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files

PAWCATUCK RIVER (Continued) **1027744681**

QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.7974900000,%22y%22:41.4165200000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.4165200000
Longitude:	-71.7974900000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10020-109653
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10020
Result Detection:	Not Detected
PFAS Chemical Name:	Perfluorovaleric acid
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.192
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.7974900000,%22y%22:41.4165200000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.4165200000
Longitude:	-71.7974900000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards

PAWCATUCK RIVER (Continued) **1027744681**

	and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10020-109653
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10020
Result Detection:	Not Detected
PFAS Chemical Name:	Potassium 9-chlorohexadecafluoro-3-oxanonane-1-sulfonate
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.708
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.7974900000,%22y%22:41.4165200000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.4165200000
Longitude:	-71.7974900000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10020-109653
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10020
Result Detection:	Not Detected
PFAS Chemical Name:	Sulfluramid
Result Measure Value (ppt):	-
Result Measure Value:	-
Result Unit of Measure:	Not reported
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.248
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported

PAWCATUCK RIVER (Continued) **1027744681**

Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.7974900000,%22y%22:41.4165200000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.4165200000
Longitude:	-71.7974900000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10020-109653
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10020
Result Detection:	PFAS Detected
PFAS Chemical Name:	Perfluorooctanoic acid
Result Measure Value (ppt):	206
Result Measure Value:	0.206000
Result Unit of Measure:	ng/g
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.162
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.7974900000,%22y%22:41.4165200000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018

PAWCATUCK RIVER (Continued) **1027744681**

Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.4165200000
Longitude:	-71.7974900000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10020-109653
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10020
Result Detection:	PFAS Detected
PFAS Chemical Name:	Glycine, N-ethyl-N-[(1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluorooctyl)sulfonyl]-
Result Measure Value (ppt):	214
Result Measure Value:	0.214000
Result Unit of Measure:	ng/g
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.143
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.7974900000,%22y%22:41.4165200000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.3946900000
Longitude:	-71.8415200000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10006-104353
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10006
Result Detection:	PFAS Detected
PFAS Chemical Name:	Perfluorooctanoic acid

PAWCATUCK RIVER (Continued) **1027744681**

Result Measure Value (ppt):	267
Result Measure Value:	0.267000
Result Unit of Measure:	ng/g
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.162
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.8415200000,%22y%22:41.3946900000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.3946900000
Longitude:	-71.8415200000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10006-104353
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10006
Result Detection:	PFAS Detected
PFAS Chemical Name:	N-methyl perfluorooctanesulfonamidoacetic acid
Result Measure Value (ppt):	303
Result Measure Value:	0.303000
Result Unit of Measure:	ng/g
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.304
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection

PAWCATUCK RIVER (Continued) **1027744681**

HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.8415200000,%22y%22:41.3946900000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.4165200000
Longitude:	-71.7974900000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10020-109653
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10020
Result Detection:	PFAS Detected
PFAS Chemical Name:	N-methyl perfluorooctanesulfonamidoacetic acid
Result Measure Value (ppt):	494
Result Measure Value:	0.494000
Result Unit of Measure:	ng/g
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.304
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.7974900000,%22y%22:41.4165200000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.4006500000
Longitude:	-71.7311000000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10009-105153

PAWCATUCK RIVER (Continued) **1027744681**

Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10009
Result Detection:	PFAS Detected
PFAS Chemical Name:	N-methyl perfluorooctanesulfonamidoacetic acid
Result Measure Value (ppt):	524
Result Measure Value:	0.524000
Result Unit of Measure:	ng/g
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.304
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.7311000000,%22y%22:41.4006500000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.4165200000
Longitude:	-71.7974900000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10020-109653
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10020
Result Detection:	PFAS Detected
PFAS Chemical Name:	Perfluorooctane sulfonic acid
Result Measure Value (ppt):	4390
Result Measure Value:	4.390000
Result Unit of Measure:	ng/g
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.354
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET

PAWCATUCK RIVER (Continued) **1027744681**

EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.7974900000,%22y%22:41.4165200000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.4006500000
Longitude:	-71.7311000000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10009-105153
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10009
Result Detection:	PFAS Detected
PFAS Chemical Name:	Perfluorotetradecanoic acid
Result Measure Value (ppt):	4910
Result Measure Value:	4.910000
Result Unit of Measure:	ng/g
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.309
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.7311000000,%22y%22:41.4006500000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI

PAWCATUCK RIVER (Continued) **1027744681**

Latitude:	41.3946900000
Longitude:	-71.8415200000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10006-104353
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10006
Result Detection:	PFAS Detected
PFAS Chemical Name:	Perfluorooctane sulfonic acid
Result Measure Value (ppt):	5590
Result Measure Value:	5.590000
Result Unit of Measure:	ng/g
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.354
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.8415200000,%22y%22:41.3946900000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.4165200000
Longitude:	-71.7974900000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10020-109653
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10020
Result Detection:	PFAS Detected
PFAS Chemical Name:	Perfluorododecanoic acid
Result Measure Value (ppt):	5680
Result Measure Value:	5.680000
Result Unit of Measure:	ng/g
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.156

PAWCATUCK RIVER (Continued) **1027744681**

Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.7974900000,%22y%22:41.4165200000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.4006500000
Longitude:	-71.7311000000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10009-105153
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10009
Result Detection:	PFAS Detected
PFAS Chemical Name:	Perfluorooctane sulfonic acid
Result Measure Value (ppt):	5880
Result Measure Value:	5.880000
Result Unit of Measure:	ng/g
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.354
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.7311000000,%22y%22:41.4006500000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1

PAWCATUCK RIVER (Continued) **1027744681**

Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.3946900000
Longitude:	-71.8415200000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10006-104353
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10006
Result Detection:	PFAS Detected
PFAS Chemical Name:	Perfluorododecanoic acid
Result Measure Value (ppt):	6690
Result Measure Value:	6.690000
Result Unit of Measure:	ng/g
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.156
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.8415200000,%22y%22:41.3946900000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.4006500000
Longitude:	-71.7311000000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10009-105153
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10009
Result Detection:	PFAS Detected

PAWCATUCK RIVER (Continued) **1027744681**

PFAS Chemical Name:	Perfluorododecanoic acid
Result Measure Value (ppt):	8100
Result Measure Value:	8.100000
Result Unit of Measure:	ng/g
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.156
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.7311000000,%22y%22:41.4006500000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.4165200000
Longitude:	-71.7974900000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10020-109653
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10020
Result Detection:	PFAS Detected
PFAS Chemical Name:	Perfluorodecanoic acid
Result Measure Value (ppt):	8740
Result Measure Value:	8.740000
Result Unit of Measure:	ng/g
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.116
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes

PAWCATUCK RIVER (Continued) **1027744681**

Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.7974900000,%22y%22:41.4165200000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.3946900000
Longitude:	-71.8415200000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue
Activity Identifier:	OST_SHPD-NRS18_RI_10006-104353
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10006
Result Detection:	PFAS Detected
PFAS Chemical Name:	Perfluorodecanoic acid
Result Measure Value (ppt):	9590
Result Measure Value:	9.590000
Result Unit of Measure:	ng/g
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.116
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.8415200000,%22y%22:41.3946900000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1
Year:	2018
Name:	PAWCATUCK RIVER
Address:	Not reported
City,State,Zip:	RI
Latitude:	41.4006500000
Longitude:	-71.7311000000
Organization:	USEPA, Office of Water, Office of Science and Technology, Standards and Health Protection Division
Environmental Media Name:	Tissue

PAWCATUCK RIVER (Continued) **1027744681**

Activity Identifier:	OST_SHPD-NRS18_RI_10009-105153
Activity Type Code:	Sample-Composite With Parents
Analysis Start Date:	-
Project Identifier:	NRSA1819
Monitoring Location Identifier:	OST_SHPD-NRS18_RI_10009
Result Detection:	PFAS Detected
PFAS Chemical Name:	Perfluorodecanoic acid
Result Measure Value (ppt):	10500
Result Measure Value:	10.500000
Result Unit of Measure:	ng/g
Detection/Quantitation Limit Type:	Method Detection Level
Detection/Quantitation Measure Value:	0.116
Detection/Quantitation Unit of Measure:	ng/g
Laboratory Accreditation Indicator:	Not reported
Fish Species:	Not reported
Activity Comment:	Not reported
Result Comment:	Not reported
Provider:	STORET
EPA Region:	01
Project File URL:	https://www.waterqualitydata.us/data/providers/STORET/organizations/OST_SHPD/projects/NRSA1819/files
QAPP Approval Agency Name:	Not reported
QAPP Approved:	Yes
Analytical Method:	Liquid chromatography with tandem mass spectrometric detection
HUC:	01090005
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.7311000000,%22y%22:41.4006500000,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Count:	1

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6 **ST. VINCENT DEPAUL CHURCH** **RI UST** **U003715447**
NNE **7 CHURCH ST** **N/A**
1/8-1/4 **WESTERLY, RI**
0.159 mi.
837 ft.

Relative:
Higher

Actual:
29 ft.

UST:

Name:	ST. VINCENT DEPAUL CHURCH
Address:	7 CHURCH ST
City:	WESTERLY
Facility ID:	UST-18692
Facility Class:	Other
Tank ID:	1
Tank Status:	**Permanently Closed**
Tank Capacity:	1000
Tank Substance:	Heating Oil No.2
Date Installed:	10/09/1984
Pipe Installed Date:	Not reported

7
East
1/4-1/2
0.302 mi.
1595 ft.

KENYON'S VARIETY
RTE. 3 & MAXON ST
HOPKINTON, RI

RI LUST **U001213761**
RI UST **N/A**

Relative:
Higher

Actual:
33 ft.

LUST:
Name: KENYON'S VARIETY
Address: RTE. 3 & MAXON ST
City,State,Zip: HOPKINTON, RI
Project Number: 1402-LS
Project Date: 06/07/1988
Facility Id: UST-15536
Fstatus Decode: Soil Removal Only; No Further Action Required
NFA Date: Not reported
Facility Status: Soil Removal Only; No Further Action Required

UST:
Name: KENYON'S VARIETY
Address: RTE. 3 & MAXON ST
City: HOPKINTON
Facility ID: UST-15536
Facility Class: Commercials

Tank ID: 1
Tank Status: Permanently Closed
Tank Capacity: 1000
Tank Substance: Gasoline
Date Installed: 06/28/1997
Pipe Installed Date: Not reported

Tank ID: 2
Tank Status: Permanently Closed
Tank Capacity: 1000
Tank Substance: Gasoline
Date Installed: 06/01/1958
Pipe Installed Date: Not reported

Tank ID: 3
Tank Status: Permanently Closed
Tank Capacity: 1000
Tank Substance: Gasoline
Date Installed: 06/01/1958
Pipe Installed Date: Not reported

Tank ID: 4
Tank Status: Permanently Closed
Tank Capacity: 8000
Tank Substance: Gasoline
Date Installed: 06/01/1968
Pipe Installed Date: Not reported

Tank ID: 5
Tank Status: Permanently Closed
Tank Capacity: 350

KENYON'S VARIETY (Continued) **U001213761**

Tank Substance: Kerosene
Date Installed: 06/01/1968
Pipe Installed Date: Not reported

8
NNE
1/4-1/2
0.342 mi.
1806 ft.

ASHAWAY LINE & TWINE MFG. CO.
24 LAUREL ST
HOPKINTON, RI

UST FINDER **1028687079**
UST FINDER RELEASE **N/A**

Relative:
Higher

Actual:
29 ft.

UST FINDER:

Object ID:	386997
Facility ID:	RIUST-982
Name:	ASHAWAY LINE & TWINE MFG. CO.
Address:	24 LAUREL ST
City,State,Zip:	HOPKINTON, RI
Address Match Type:	PointAddress
Open USTs:	0
Closed USTs:	1
TOS USTs:	0
Population 1500ft:	240
Private Wells 1500ft:	93
Within 100yr Floodplain:	No
Land Use:	Non-Developed
Within SPA:	No
SPA PWS Facility ID:	Not reported
SPA Water Type:	Not reported
SPA Facility Type:	Not reported
SPA HUC12:	Not reported
Within WHPA:	Yes
WHPA PWS Facility ID:	RI2980195_1031
WHPA Water Type:	GW - Ground water
WHPA Facility Type:	WL - Well
WHPA HUC12:	010900050301
Facility Status:	Closed UST(s)
Date of Last Inspection:	Not reported
EPA Region:	1
Tribe:	Not reported
Coordinate Source:	Geocode
X Coord:	-71.7933342599999
Y Coord:	41.4205545200001
Latitude:	41.42055452
Longitude:	-71.79333426

UST FINDER:

Object ID:	1677582
Facility ID:	RIUST-982
Tank ID:	RIUST-982_3
Tank Status:	Closed
Installation Date:	1965/04/01 16:00:01+00
Removal Date:	Not reported
Tank Capacity:	2500
Substances:	Hazardous Substance
Tank Wall Type:	Not reported

UST FINDER RELEASE:

Object ID:	357430

ASHAWAY LINE & TWINE MFG. CO. (Continued) **1028687079**

Facility ID:	RIUST-982
Lust ID:	RI1412-LS
Name:	ASHAWAY LINE AND TWINE
Address:	8 LAUREL STREET
City,State,Zip:	HOPKINTON, RI 0
Address Match Type:	PointAddress
Reported Date:	1997/09/17 15:59:59+00
Status:	No Further Action
Substance:	Not reported
Population within 1500ft:	246
Domestic Wells within 1500ft:	99
Land Use:	Developed, Medium Intensity
Within SPA:	No
SPA PWS Facility ID:	Not reported
SPA Water Type:	Not reported
SPA Facility Type:	Not reported
SPA HUC12:	Not reported
Within WHPA:	Yes
WHPA PWS Facility ID:	RI2980195_1031
WHPA Water Type:	GW - Ground water
WHPA Facility Type:	WL - Well
WHPA HUC12:	010900050301
Within 100yr Floodplain:	No
Tribe:	Not reported
EPA Region:	1
NFA Letter 1:	Not reported
NFA Letter 2:	Not reported
NFA Letter 3:	Not reported
NFA Letter 4:	Not reported
Closed With Residual Contaminate:	Not reported
Coordinate Source:	Geocode
X Coord:	-71.7911
Y Coord:	41.4242600000001
Latitude:	41.4242599999999
Longitude:	-71.7911

Count: 3 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
ASHAWAY	1000435605	ASHAWAY LINE & TWINE MFG., CO.	9 & 24 LAUREL STREET	02804	RCRA-LQG, RI LUST, RI UST, ICIS, US AIRS, RI MANIFEST, E MANIFEST
WESTERLY	S118422158	PIERCE STREET PROPERTIES	87 & 89 PIERCE STREET		RI SHWS, RI AUL
WESTERLY	S109823871	WESTERLY TOWN LANDFILL	OAK STREET		RI SHWS

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 02/29/2024
Date Data Arrived at EDR: 03/01/2024
Date Made Active in Reports: 03/27/2024
Number of Days to Update: 26

Source: EPA
Telephone: N/A
Last EDR Contact: 06/03/2024
Next Scheduled EDR Contact: 07/08/2024
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 3
Telephone 215-814-5418

EPA Region 4
Telephone 404-562-8033

EPA Region 5
Telephone 312-886-6686

EPA Region 10
Telephone 206-553-8665

EPA Region 6
Telephone: 214-655-6659

EPA Region 7
Telephone: 913-551-7247

EPA Region 8
Telephone: 303-312-6774

EPA Region 9
Telephone: 415-947-4246

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 02/29/2024
Date Data Arrived at EDR: 03/01/2024
Date Made Active in Reports: 03/27/2024
Number of Days to Update: 26

Source: EPA
Telephone: N/A
Last EDR Contact: 06/03/2024
Next Scheduled EDR Contact: 07/08/2024
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Lists of Federal Delisted NPL sites

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 02/29/2024
Date Data Arrived at EDR: 03/01/2024
Date Made Active in Reports: 03/27/2024
Number of Days to Update: 26

Source: EPA
Telephone: N/A
Last EDR Contact: 06/03/2024
Next Scheduled EDR Contact: 07/08/2024
Data Release Frequency: Quarterly

Lists of Federal sites subject to CERCLA removals and CERCLA orders

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 12/20/2023
Date Data Arrived at EDR: 12/20/2023
Date Made Active in Reports: 01/24/2024
Number of Days to Update: 35

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 03/26/2024
Next Scheduled EDR Contact: 07/08/2024
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 04/22/2024
Date Data Arrived at EDR: 05/01/2024
Date Made Active in Reports: 05/24/2024
Number of Days to Update: 23

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 06/03/2024
Next Scheduled EDR Contact: 07/22/2024
Data Release Frequency: Quarterly

Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 04/22/2024
Date Data Arrived at EDR: 05/01/2024
Date Made Active in Reports: 05/24/2024
Number of Days to Update: 23

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 06/03/2024
Next Scheduled EDR Contact: 07/22/2024
Data Release Frequency: Quarterly

Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 06/03/2024
Date Data Arrived at EDR: 06/07/2024
Date Made Active in Reports: 06/20/2024
Number of Days to Update: 13

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 06/07/2024
Next Scheduled EDR Contact: 09/30/2024
Data Release Frequency: Quarterly

Lists of Federal RCRA TSD facilities

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 06/03/2024
Date Data Arrived at EDR: 06/07/2024
Date Made Active in Reports: 06/20/2024
Number of Days to Update: 13

Source: Environmental Protection Agency
Telephone: (888) 372-7341
Last EDR Contact: 06/07/2024
Next Scheduled EDR Contact: 09/30/2024
Data Release Frequency: Quarterly

Lists of Federal RCRA generators

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/03/2024
Date Data Arrived at EDR: 06/07/2024
Date Made Active in Reports: 06/20/2024
Number of Days to Update: 13

Source: Environmental Protection Agency
Telephone: (888) 372-7341
Last EDR Contact: 06/07/2024
Next Scheduled EDR Contact: 09/30/2024
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 06/03/2024
Date Data Arrived at EDR: 06/07/2024
Date Made Active in Reports: 06/20/2024
Number of Days to Update: 13

Source: Environmental Protection Agency
Telephone: (888) 372-7341
Last EDR Contact: 06/07/2024
Next Scheduled EDR Contact: 09/30/2024
Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/03/2024
Date Data Arrived at EDR: 06/07/2024
Date Made Active in Reports: 06/20/2024
Number of Days to Update: 13

Source: Environmental Protection Agency
Telephone: (888) 372-7341
Last EDR Contact: 06/07/2024
Next Scheduled EDR Contact: 09/30/2024
Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 02/14/2024
Date Data Arrived at EDR: 02/16/2024
Date Made Active in Reports: 04/04/2024
Number of Days to Update: 48

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 05/17/2024
Next Scheduled EDR Contact: 08/19/2024
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 02/13/2024
Date Data Arrived at EDR: 02/21/2024
Date Made Active in Reports: 04/04/2024
Number of Days to Update: 43

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 05/21/2024
Next Scheduled EDR Contact: 09/02/2024
Data Release Frequency: Varies

US INST CONTROLS: Institutional Controls Sites List

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 02/13/2024
Date Data Arrived at EDR: 02/21/2024
Date Made Active in Reports: 04/04/2024
Number of Days to Update: 43

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 05/21/2024
Next Scheduled EDR Contact: 09/02/2024
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 03/13/2024
Date Data Arrived at EDR: 03/19/2024
Date Made Active in Reports: 06/17/2024
Number of Days to Update: 90

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 06/17/2024
Next Scheduled EDR Contact: 09/30/2024
Data Release Frequency: Quarterly

Lists of state- and tribal hazardous waste facilities

RI SHWS: List of CERCLIS and State Sites in RI

This list includes sites that have been investigated under the Federal CERCLIS program (SFA sites) as well as sites that have notified under the state program or have been investigated for hazardous substances (HWM sites).

Date of Government Version: 12/01/2023
Date Data Arrived at EDR: 01/04/2024
Date Made Active in Reports: 03/25/2024
Number of Days to Update: 81

Source: Department of Environmental Management
Telephone: 401-222-3872
Last EDR Contact: 04/05/2024
Next Scheduled EDR Contact: 07/15/2024
Data Release Frequency: Semi-Annually

CT SHWS: Inventory of Hazardous Disposal Sites

State Hazardous Waste Sites. State hazardous waste site records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. Available information varies by state.

Date of Government Version: 04/23/2010
Date Data Arrived at EDR: 04/23/2010
Date Made Active in Reports: 05/25/2010
Number of Days to Update: 32

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3705
Last EDR Contact: 06/20/2024
Next Scheduled EDR Contact: 10/07/2024
Data Release Frequency: No Update Planned

Lists of state and tribal landfills and solid waste disposal facilities

RI SWF/LF: Solid Waste Management Facilities

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 12/01/2023
Date Data Arrived at EDR: 01/04/2024
Date Made Active in Reports: 03/25/2024
Number of Days to Update: 81

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 04/05/2024
Next Scheduled EDR Contact: 07/15/2024
Data Release Frequency: Semi-Annually

CT SWF/LF: List of Landfills/Transfer Stations

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 08/01/2023
Date Data Arrived at EDR: 10/17/2023
Date Made Active in Reports: 01/09/2024
Number of Days to Update: 84

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3366
Last EDR Contact: 04/18/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Annually

RI LCP: Landfill Closure Program Sites in RI

This inventory contains both formerly permitted landfills that are closed as well as dumps that were never licensed by the Department. This list does not include Superfund Sites and current or former Federal Facilities. This list includes lat/long data that has not been field verified.

Date of Government Version: 12/01/2023
Date Data Arrived at EDR: 01/04/2024
Date Made Active in Reports: 03/25/2024
Number of Days to Update: 81

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 04/05/2024
Next Scheduled EDR Contact: 07/15/2024
Data Release Frequency: Semi-Annually

Lists of state and tribal leaking storage tanks

RI LUST: LUST Case List

The LUST Case List is a summary of UST Facilities in RI with leaking USTs, which includes information on the date of release discovery and the status of the LUST Case (active, soil removal only, or inactive).

Date of Government Version: 12/06/2023
Date Data Arrived at EDR: 01/04/2024
Date Made Active in Reports: 03/25/2024
Number of Days to Update: 81

Source: Department of Environmental Management
Telephone: 401-222-3872
Last EDR Contact: 04/05/2024
Next Scheduled EDR Contact: 07/15/2024
Data Release Frequency: Quarterly

CT LUST: Leaking Underground Storage Tank List

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 03/21/2024
Date Data Arrived at EDR: 03/26/2024
Date Made Active in Reports: 06/17/2024
Number of Days to Update: 83

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3376
Last EDR Contact: 03/26/2024
Next Scheduled EDR Contact: 07/08/2024
Data Release Frequency: Semi-Annually

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 10/25/2023
Date Data Arrived at EDR: 01/17/2024
Date Made Active in Reports: 03/13/2024
Number of Days to Update: 56

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 05/30/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land

Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 10/04/2023
Date Data Arrived at EDR: 01/17/2024
Date Made Active in Reports: 03/13/2024
Number of Days to Update: 56

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 05/30/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 10/25/2023
Date Data Arrived at EDR: 01/17/2024
Date Made Active in Reports: 03/13/2024
Number of Days to Update: 56

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 05/30/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 10/25/2023
Date Data Arrived at EDR: 01/17/2024
Date Made Active in Reports: 03/13/2024
Number of Days to Update: 56

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 05/30/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 10/25/2023
Date Data Arrived at EDR: 01/17/2024
Date Made Active in Reports: 03/13/2024
Number of Days to Update: 56

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 05/30/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 10/25/2023
Date Data Arrived at EDR: 01/17/2024
Date Made Active in Reports: 03/13/2024
Number of Days to Update: 56

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 05/30/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 10/25/2023
Date Data Arrived at EDR: 01/17/2024
Date Made Active in Reports: 03/13/2024
Number of Days to Update: 56

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 05/30/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 10/25/2023
Date Data Arrived at EDR: 01/17/2024
Date Made Active in Reports: 03/13/2024
Number of Days to Update: 56

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 05/30/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Varies

Lists of state and tribal registered storage tanks

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 03/15/2024
Date Data Arrived at EDR: 03/19/2024
Date Made Active in Reports: 06/17/2024
Number of Days to Update: 90

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 03/19/2024
Next Scheduled EDR Contact: 07/15/2024
Data Release Frequency: Varies

RI UST: UST Master List
The UST Master List is a summary of registered UST Facilities in RI, which includes information on abandoned, in use, permanently closed and temporarily closed USTs.

Date of Government Version: 12/06/2023
Date Data Arrived at EDR: 01/04/2024
Date Made Active in Reports: 03/25/2024
Number of Days to Update: 81

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 04/05/2024
Next Scheduled EDR Contact: 07/15/2024
Data Release Frequency: Quarterly

CT UST: Underground Storage Tank Data

Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 02/20/2024
Date Data Arrived at EDR: 02/21/2024
Date Made Active in Reports: 05/09/2024
Number of Days to Update: 78

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3376
Last EDR Contact: 05/22/2024
Next Scheduled EDR Contact: 09/02/2024
Data Release Frequency: Semi-Annually

RI AST: Aboveground Storage Tanks

Registered Aboveground Storage Tanks.

Date of Government Version: 07/08/2022
Date Data Arrived at EDR: 08/02/2022
Date Made Active in Reports: 10/20/2022
Number of Days to Update: 79

Source: Department of Environmental Management
Telephone: 401-222-3872
Last EDR Contact: 05/02/2024
Next Scheduled EDR Contact: 08/12/2024
Data Release Frequency: Semi-Annually

CT AST: Marine Terminals and Tank Information

A listing of bulk petroleum facilities that receive petroleum by a vessel.

Date of Government Version: 06/30/2023
Date Data Arrived at EDR: 08/07/2023
Date Made Active in Reports: 10/24/2023
Number of Days to Update: 78

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3233
Last EDR Contact: 04/26/2024
Next Scheduled EDR Contact: 08/12/2024
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 10/24/2023
Date Data Arrived at EDR: 01/17/2024
Date Made Active in Reports: 03/13/2024
Number of Days to Update: 56

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 04/17/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 10/24/2023
Date Data Arrived at EDR: 01/17/2024
Date Made Active in Reports: 03/13/2024
Number of Days to Update: 56

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 05/30/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 10/24/2023
Date Data Arrived at EDR: 01/17/2024
Date Made Active in Reports: 03/13/2024
Number of Days to Update: 56

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 05/30/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 10/24/2023
Date Data Arrived at EDR: 01/17/2024
Date Made Active in Reports: 03/13/2024
Number of Days to Update: 56

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 05/30/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 10/17/2023
Date Data Arrived at EDR: 01/17/2024
Date Made Active in Reports: 03/13/2024
Number of Days to Update: 56

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 04/17/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 10/24/2023
Date Data Arrived at EDR: 01/17/2024
Date Made Active in Reports: 03/13/2024
Number of Days to Update: 56

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 05/30/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 10/24/2023
Date Data Arrived at EDR: 01/17/2024
Date Made Active in Reports: 03/13/2024
Number of Days to Update: 56

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 05/30/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 10/24/2023
Date Data Arrived at EDR: 01/17/2024
Date Made Active in Reports: 03/13/2024
Number of Days to Update: 56

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 05/30/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Varies

State and tribal institutional control / engineering control registries

RI AUL: Waste Management Sites with Environmental Land Use Restrictions

This list was developed by RIDEM for use as a general reference and are not meant to be legally authoritative source for the location of hazardous materials, nor for the status, condition or permissible use of a site.

Date of Government Version: 12/01/2023
Date Data Arrived at EDR: 01/04/2024
Date Made Active in Reports: 03/25/2024
Number of Days to Update: 81

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 04/04/2024
Next Scheduled EDR Contact: 07/15/2024
Data Release Frequency: Semi-Annually

CT AUL: ELUR Sites

Environmental Land Use Restriction sites.

Date of Government Version: 10/05/2023
Date Data Arrived at EDR: 10/16/2023
Date Made Active in Reports: 01/05/2024
Number of Days to Update: 81

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3912
Last EDR Contact: 04/24/2024
Next Scheduled EDR Contact: 08/12/2024
Data Release Frequency: Varies

Lists of state and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 06/14/2024
Next Scheduled EDR Contact: 09/30/2024
Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 07/08/2021
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

Lists of state and tribal brownfield sites

RI BROWNFIELDS: Brownfields Site List

Brownfields are real properties where the expansion, redevelopment or reuse may be complicated by the actual or potential presence of a hazardous substance, pollutant, or contaminat.

Date of Government Version: 12/01/2023
Date Data Arrived at EDR: 01/04/2024
Date Made Active in Reports: 03/25/2024
Number of Days to Update: 81

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 04/05/2024
Next Scheduled EDR Contact: 07/15/2024
Data Release Frequency: Semi-Annually

CT BROWNFIELDS 2: Brownfields Inventory

A brownfield site is generally defined as "real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant or contaminanta?|"

Date of Government Version: 10/06/2023
Date Data Arrived at EDR: 12/07/2023
Date Made Active in Reports: 02/26/2024
Number of Days to Update: 81

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3705
Last EDR Contact: 06/13/2024
Next Scheduled EDR Contact: 09/23/2024
Data Release Frequency: Varies

CT BROWNFIELDS: Brownfields Inventory

CBRA has identified over 200 brownfield sites eligible for redevelopment. In most cases these are prime properties for commercial or industrial use. CBRA's grants, assistance and financing lower the financial risks and eliminate the legal, regulatory and environmental risks of redevelopment.

Date of Government Version: 12/15/2023
Date Data Arrived at EDR: 03/12/2024
Date Made Active in Reports: 06/04/2024
Number of Days to Update: 84

Source: Connecticut Brownfields Redevelopment Authority
Telephone: 860-258-7833
Last EDR Contact: 06/13/2024
Next Scheduled EDR Contact: 09/23/2024
Data Release Frequency: No Update Planned

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 03/11/2024
Date Data Arrived at EDR: 03/12/2024
Date Made Active in Reports: 05/10/2024
Number of Days to Update: 59

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 06/11/2024
Next Scheduled EDR Contact: 09/23/2024
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 04/22/2024
Next Scheduled EDR Contact: 08/05/2024
Data Release Frequency: Varies

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 04/15/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: No Update Planned

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land
A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176
Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 04/19/2024
Next Scheduled EDR Contact: 08/04/2024
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register
A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 12/31/2023
Date Data Arrived at EDR: 02/21/2024
Date Made Active in Reports: 04/04/2024
Number of Days to Update: 43
Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/21/2024
Next Scheduled EDR Contact: 09/02/2024
Data Release Frequency: No Update Planned

RI CDL: Clandestine Drug Lab Information Listing
A listing of clandestine drug lab site locations.

Date of Government Version: 10/03/2006
Date Data Arrived at EDR: 12/04/2006
Date Made Active in Reports: 12/18/2006
Number of Days to Update: 14
Source: Dept of Environmental Management
Telephone: 401-274-4400
Last EDR Contact: 05/23/2024
Next Scheduled EDR Contact: 09/09/2024
Data Release Frequency: Varies

CT CDL: Clandestine Drug Lab Listing
A listing of clandestine drug lab locations included in the Spills database.

Date of Government Version: 03/01/2024
Date Data Arrived at EDR: 03/26/2024
Date Made Active in Reports: 06/17/2024
Number of Days to Update: 83
Source: Department of Energy & Environmental Protection
Telephone: 860-424-3361
Last EDR Contact: 03/26/2024
Next Scheduled EDR Contact: 07/08/2024
Data Release Frequency: Quarterly

US CDL: Clandestine Drug Labs
A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 12/31/2023
Date Data Arrived at EDR: 02/21/2024
Date Made Active in Reports: 04/04/2024
Number of Days to Update: 43
Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/21/2024
Next Scheduled EDR Contact: 09/02/2024
Data Release Frequency: Quarterly

Local Land Records

LIENS 2: CERCLA Lien Information
A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/29/2024
Date Data Arrived at EDR: 03/01/2024
Date Made Active in Reports: 03/27/2024
Number of Days to Update: 26

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 06/03/2024
Next Scheduled EDR Contact: 07/08/2024
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System
Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/12/2023
Date Data Arrived at EDR: 12/13/2023
Date Made Active in Reports: 02/28/2024
Number of Days to Update: 77

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 06/17/2024
Next Scheduled EDR Contact: 09/30/2024
Data Release Frequency: Quarterly

RI SPILLS: Oil & Hazardous Material Response Log/Spill Report
Spills reported to the Office of Emergency Response.

Date of Government Version: 11/15/2004
Date Data Arrived at EDR: 02/04/2005
Date Made Active in Reports: 03/24/2005
Number of Days to Update: 48

Source: Dept. of Environmental Management
Telephone: 401-222-3872
Last EDR Contact: 06/14/2024
Next Scheduled EDR Contact: 09/30/2024
Data Release Frequency: Varies

CT SPILLS: Oil & Chemical Spill Database
Oil and Chemical Spill Data.

Date of Government Version: 03/01/2024
Date Data Arrived at EDR: 03/26/2024
Date Made Active in Reports: 06/17/2024
Number of Days to Update: 83

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3024
Last EDR Contact: 03/26/2024
Next Scheduled EDR Contact: 07/08/2024
Data Release Frequency: Semi-Annually

RI SPILLS 90: SPILLS90 data from FirstSearch
Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 01/04/2001
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/27/2013
Number of Days to Update: 55

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CT SPILLS 90: SPILLS90 data from FirstSearch
Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 10/15/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/11/2013
Number of Days to Update: 39

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 06/03/2024
Date Data Arrived at EDR: 06/07/2024
Date Made Active in Reports: 06/20/2024
Number of Days to Update: 13

Source: Environmental Protection Agency
Telephone: (888) 372-7341
Last EDR Contact: 06/07/2024
Next Scheduled EDR Contact: 09/30/2024
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/30/2024
Date Data Arrived at EDR: 02/13/2024
Date Made Active in Reports: 04/04/2024
Number of Days to Update: 51

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 05/14/2024
Next Scheduled EDR Contact: 08/26/2024
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 06/07/2021
Date Data Arrived at EDR: 07/13/2021
Date Made Active in Reports: 03/09/2022
Number of Days to Update: 239

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 04/11/2024
Next Scheduled EDR Contact: 07/22/2024
Data Release Frequency: Varies

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/11/2018
Date Made Active in Reports: 11/06/2019
Number of Days to Update: 574

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 04/04/2024
Next Scheduled EDR Contact: 07/15/2024
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 07/30/2021
Date Data Arrived at EDR: 02/03/2023
Date Made Active in Reports: 02/10/2023
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 05/09/2024
Next Scheduled EDR Contact: 08/19/2024
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 03/18/2024
Date Data Arrived at EDR: 03/19/2024
Date Made Active in Reports: 06/20/2024
Number of Days to Update: 93
Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 06/17/2024
Next Scheduled EDR Contact: 09/30/2024
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA Watch List

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88
Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 04/29/2024
Next Scheduled EDR Contact: 08/12/2024
Data Release Frequency: No Update Planned

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 05/08/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 73
Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 05/02/2024
Next Scheduled EDR Contact: 08/12/2024
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 06/14/2022
Date Made Active in Reports: 03/24/2023
Number of Days to Update: 283
Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 06/13/2024
Next Scheduled EDR Contact: 09/23/2024
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2022
Date Data Arrived at EDR: 11/13/2023
Date Made Active in Reports: 02/07/2024
Number of Days to Update: 86
Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 05/16/2024
Next Scheduled EDR Contact: 08/26/2024
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 01/16/2024
Date Data Arrived at EDR: 01/17/2024
Date Made Active in Reports: 03/27/2024
Number of Days to Update: 70

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 04/17/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 02/29/2024
Date Data Arrived at EDR: 03/01/2024
Date Made Active in Reports: 03/27/2024
Number of Days to Update: 26

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 06/03/2024
Next Scheduled EDR Contact: 09/09/2024
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 02/01/2024
Date Data Arrived at EDR: 02/08/2024
Date Made Active in Reports: 04/04/2024
Number of Days to Update: 56

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 04/15/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 09/19/2023
Date Data Arrived at EDR: 10/03/2023
Date Made Active in Reports: 10/19/2023
Number of Days to Update: 16

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 06/03/2024
Next Scheduled EDR Contact: 08/12/2024
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 03/20/2023
Date Data Arrived at EDR: 04/04/2023
Date Made Active in Reports: 06/09/2023
Number of Days to Update: 66

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 04/04/2024
Next Scheduled EDR Contact: 07/15/2024
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 03/28/2024
Next Scheduled EDR Contact: 07/15/2024
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 01/02/2024
Date Data Arrived at EDR: 01/16/2024
Date Made Active in Reports: 03/13/2024
Number of Days to Update: 57

Source: Nuclear Regulatory Commission
Telephone: 301-415-0717
Last EDR Contact: 04/15/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2022
Date Data Arrived at EDR: 11/27/2023
Date Made Active in Reports: 02/22/2024
Number of Days to Update: 87

Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 05/28/2024
Next Scheduled EDR Contact: 09/09/2024
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 01/12/2017
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 11/11/2019
Number of Days to Update: 251
Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 05/28/2024
Next Scheduled EDR Contact: 09/09/2024
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 09/13/2019
Date Data Arrived at EDR: 11/06/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 96
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 05/02/2024
Next Scheduled EDR Contact: 08/12/2024
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/01/2019
Date Data Arrived at EDR: 07/01/2019
Date Made Active in Reports: 09/23/2019
Number of Days to Update: 84
Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 03/25/2024
Next Scheduled EDR Contact: 07/08/2024
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data
Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 01/02/2020
Date Data Arrived at EDR: 01/28/2020
Date Made Active in Reports: 04/17/2020
Number of Days to Update: 80
Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 04/23/2024
Next Scheduled EDR Contact: 08/05/2024
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/31/2023
Date Data Arrived at EDR: 01/11/2024
Date Made Active in Reports: 01/16/2024
Number of Days to Update: 5

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 03/28/2024
Next Scheduled EDR Contact: 07/15/2024
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 03/20/2023
Number of Days to Update: 11

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 06/07/2024
Next Scheduled EDR Contact: 09/30/2024
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 04/04/2024
Next Scheduled EDR Contact: 07/15/2024
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 03/03/2023
Date Data Arrived at EDR: 03/03/2023
Date Made Active in Reports: 06/09/2023
Number of Days to Update: 98

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 04/26/2024
Next Scheduled EDR Contact: 08/12/2024
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 08/30/2019
Date Data Arrived at EDR: 11/15/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 74

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 05/16/2024
Next Scheduled EDR Contact: 08/26/2024
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 02/29/2024
Date Data Arrived at EDR: 03/01/2024
Date Made Active in Reports: 03/27/2024
Number of Days to Update: 26

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 06/03/2024
Next Scheduled EDR Contact: 07/08/2024
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

MINES VIOLATIONS: MSHA Violation Assessment Data

Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 01/02/2024
Date Data Arrived at EDR: 01/03/2024
Date Made Active in Reports: 01/04/2024
Number of Days to Update: 1

Source: DOL, Mine Safety & Health Admi
Telephone: 202-693-9424
Last EDR Contact: 04/04/2024
Next Scheduled EDR Contact: 09/02/2024
Data Release Frequency: Quarterly

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 02/05/2024
Date Data Arrived at EDR: 02/21/2024
Date Made Active in Reports: 04/04/2024
Number of Days to Update: 43

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 05/21/2024
Next Scheduled EDR Contact: 09/02/2024
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 01/07/2022
Date Data Arrived at EDR: 02/24/2023
Date Made Active in Reports: 05/17/2023
Number of Days to Update: 82

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 05/22/2024
Next Scheduled EDR Contact: 09/02/2024
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 05/23/2024
Next Scheduled EDR Contact: 09/02/2024
Data Release Frequency: Varies

MINES MRDS: Mineral Resources Data System

Mineral Resources Data System

Date of Government Version: 08/23/2022
Date Data Arrived at EDR: 11/22/2022
Date Made Active in Reports: 02/28/2023
Number of Days to Update: 98

Source: USGS
Telephone: 703-648-6533
Last EDR Contact: 05/22/2024
Next Scheduled EDR Contact: 09/02/2024
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 03/18/2024
Date Data Arrived at EDR: 03/19/2024
Date Made Active in Reports: 06/06/2024
Number of Days to Update: 79

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 06/13/2024
Next Scheduled EDR Contact: 09/16/2024
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 02/09/2024
Date Data Arrived at EDR: 02/27/2024
Date Made Active in Reports: 05/24/2024
Number of Days to Update: 87

Source: EPA
Telephone: (617) 918-1111
Last EDR Contact: 05/29/2024
Next Scheduled EDR Contact: 09/09/2024
Data Release Frequency: Quarterly

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 12/17/2023
Date Data Arrived at EDR: 12/28/2023
Date Made Active in Reports: 03/04/2024
Number of Days to Update: 67

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 04/04/2024
Next Scheduled EDR Contact: 07/15/2024
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 09/06/2023
Date Data Arrived at EDR: 09/13/2023
Date Made Active in Reports: 12/11/2023
Number of Days to Update: 89

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 04/08/2024
Next Scheduled EDR Contact: 07/22/2024
Data Release Frequency: Varies

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/06/2021
Date Data Arrived at EDR: 05/21/2021
Date Made Active in Reports: 08/11/2021
Number of Days to Update: 82

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 05/17/2024
Next Scheduled EDR Contact: 09/02/2024
Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 02/12/2024
Date Data Arrived at EDR: 02/13/2024
Date Made Active in Reports: 04/04/2024
Number of Days to Update: 51

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 05/14/2024
Next Scheduled EDR Contact: 08/26/2024
Data Release Frequency: Quarterly

PFAS NPL: Superfund Sites with PFAS Detections Information

EPA's Office of Land and Emergency Management and EPA Regional Offices maintain data describing what is known about site investigations, contamination, and remedial actions under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) where PFAS is present in the environment.

Date of Government Version: 12/28/2023
Date Data Arrived at EDR: 12/28/2023
Date Made Active in Reports: 03/04/2024
Number of Days to Update: 67

Source: Environmental Protection Agency
Telephone: 703-603-8895
Last EDR Contact: 04/05/2024
Next Scheduled EDR Contact: 07/15/2024
Data Release Frequency: Varies

PFAS FEDERAL SITES: Federal Sites PFAS Information

Several federal entities, such as the federal Superfund program, Department of Defense, National Aeronautics and Space Administration, Department of Transportation, and Department of Energy provided information for sites with known or suspected detections at federal facilities.

Date of Government Version: 12/28/2023
Date Data Arrived at EDR: 12/28/2023
Date Made Active in Reports: 03/04/2024
Number of Days to Update: 67

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 04/05/2024
Next Scheduled EDR Contact: 07/15/2024
Data Release Frequency: Varies

PFAS TRIS: List of PFAS Added to the TRI

Section 7321 of the National Defense Authorization Act for Fiscal Year 2020 (NDAA) immediately added certain per- and polyfluoroalkyl substances (PFAS) to the list of chemicals covered by the Toxics Release Inventory (TRI) under Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) and provided a framework for additional PFAS to be added to TRI on an annual basis.

Date of Government Version: 12/28/2023
Date Data Arrived at EDR: 12/28/2023
Date Made Active in Reports: 01/04/2024
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 202-566-0250
Last EDR Contact: 04/05/2024
Next Scheduled EDR Contact: 07/15/2024
Data Release Frequency: Varies

PFAS TSCA: PFAS Manufacture and Imports Information

EPA issued the Chemical Data Reporting (CDR) Rule under the Toxic Substances Control Act (TSCA) and requires chemical manufacturers and facilities that manufacture or import chemical substances to report data to EPA. EPA publishes non-confidential business information (non-CBI) and includes descriptive information about each site, corporate parent, production volume, other manufacturing information, and processing and use information.

Date of Government Version: 12/28/2023
Date Data Arrived at EDR: 12/28/2023
Date Made Active in Reports: 01/04/2024
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 04/05/2024
Next Scheduled EDR Contact: 07/15/2024
Data Release Frequency: Varies

PFAS RCRA MANIFEST: PFAS Transfers Identified In the RCRA Database Listing

To work around the lack of PFAS waste codes in the RCRA database, EPA developed the PFAS Transfers dataset by mining e-Manifest records containing at least one of these common PFAS keywords: PFAS, PFOA, PFOS, PERFL, AFFF, GENX, GEN-X (plus the VT waste codes). These keywords were searched for in the following text fields: Manifest handling instructions (MANIFEST_HANDLING_INSTR), Non-hazardous waste description (NON_HAZ_WASTE_DESCRIPTION), DOT printed information (DOT_PRINTED_INFORMATION), Waste line handling instructions (WASTE_LINE_HANDLING_INSTR), Waste residue comments (WASTE_RESIDUE_COMMENTS).

Date of Government Version: 12/28/2023
Date Data Arrived at EDR: 12/28/2023
Date Made Active in Reports: 01/04/2024
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 04/05/2024
Next Scheduled EDR Contact: 07/15/2024
Data Release Frequency: Varies

PFAS ATSDR: PFAS Contamination Site Location Listing

PFAS contamination site locations from the Department of Health & Human Services, Center for Disease Control & Prevention. ATSDR is involved at a number of PFAS-related sites, either directly or through assisting state and federal partners. As of now, most sites are related to drinking water contamination connected with PFAS production facilities or fire training areas where aqueous film-forming firefighting foam (AFFF) was regularly used.

Date of Government Version: 06/24/2020
Date Data Arrived at EDR: 03/17/2021
Date Made Active in Reports: 11/08/2022
Number of Days to Update: 601

Source: Department of Health & Human Services
Telephone: 202-741-5770
Last EDR Contact: 04/22/2024
Next Scheduled EDR Contact: 08/05/2024
Data Release Frequency: Varies

PFAS WQP: Ambient Environmental Sampling for PFAS

The Water Quality Portal (WQP) is a part of a modernized repository storing ambient sampling data for all environmental media and tissue samples. A wide range of federal, state, tribal and local governments, academic and non-governmental organizations and individuals submit project details and sampling results to this public repository. The information is commonly used for research and assessments of environmental quality.

Date of Government Version: 12/28/2023
Date Data Arrived at EDR: 12/28/2023
Date Made Active in Reports: 03/04/2024
Number of Days to Update: 67

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 04/05/2024
Next Scheduled EDR Contact: 07/15/2024
Data Release Frequency: Varies

PFAS NPDES: Clean Water Act Discharge Monitoring Information

Any discharger of pollutants to waters of the United States from a point source must have a National Pollutant Discharge Elimination System (NPDES) permit. The process for obtaining limits involves the regulated entity (permittee) disclosing releases in a NPDES permit application and the permitting authority (typically the state but sometimes EPA) deciding whether to require monitoring or monitoring with limits. Caveats and Limitations: Less than half of states have required PFAS monitoring for at least one of their permittees and fewer states have established PFAS effluent limits for permittees. New rulemakings have been initiated that may increase the number of facilities monitoring for PFAS in the future.

Date of Government Version: 12/28/2023
Date Data Arrived at EDR: 12/28/2023
Date Made Active in Reports: 03/04/2024
Number of Days to Update: 67

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 04/05/2024
Next Scheduled EDR Contact: 07/15/2024
Data Release Frequency: Varies

PFAS ECHO: Facilities in Industries that May Be Handling PFAS Listing

Regulators and the public have expressed interest in knowing which regulated entities may be using PFAS. EPA has developed a dataset from various sources that show which industries may be handling PFAS. Approximately 120,000 facilities subject to federal environmental programs have operated or currently operate in industry sectors with processes that may involve handling and/or release of PFAS.

Date of Government Version: 12/28/2023
Date Data Arrived at EDR: 12/28/2023
Date Made Active in Reports: 03/04/2024
Number of Days to Update: 67

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 04/05/2024
Next Scheduled EDR Contact: 07/15/2024
Data Release Frequency: Varies

PFAS ECHO FIRE TRAIN: Facilities in Industries that May Be Handling PFAS Listing

A list of fire training sites was added to the Industry Sectors dataset using a keyword search on the permitted facilitys name to identify sites where fire-fighting foam may have been used in training exercises. Additionally, you may view an example spreadsheet of the subset of fire training facility data, as well as the keywords used in selecting or deselecting a facility for the subset. as well as the keywords used in selecting or deselecting a facility for the subset. These keywords were tested to maximize accuracy in selecting facilities that may use fire-fighting foam in training exercises, however, due to the lack of a required reporting field in the data systems for designating fire training sites, this methodology may not identify all fire training sites or may potentially misidentify them.

Date of Government Version: 12/28/2023
Date Data Arrived at EDR: 12/28/2023
Date Made Active in Reports: 03/04/2024
Number of Days to Update: 67

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 04/05/2024
Next Scheduled EDR Contact: 07/15/2024
Data Release Frequency: Varies

PFAS PT 139 AIRPORT: All Certified Part 139 Airports PFAS Information Listing

Since July 1, 2006, all certified part 139 airports are required to have fire-fighting foam onsite that meet military specifications (MIL-F-24385) (14 CFR 139.317). To date, these military specification fire-fighting foams are fluorinated and have been historically used for training and extinguishing. The 2018 FAA Reauthorization Act has a provision stating that no later than October 2021, FAA shall not require the use of fluorinated AFFF. This provision does not prohibit the use of fluorinated AFFF at Part 139 civilian airports; it only prohibits FAA from mandating its use. The Federal Aviation Administration?s document AC 150/5210-6D - Aircraft Fire Extinguishing Agents provides guidance on Aircraft Fire Extinguishing Agents, which includes Aqueous Film Forming Foam (AFFF).

Date of Government Version: 12/28/2023
Date Data Arrived at EDR: 12/28/2023
Date Made Active in Reports: 03/04/2024
Number of Days to Update: 67

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 04/05/2024
Next Scheduled EDR Contact: 07/15/2024
Data Release Frequency: Varies

AQUEOUS FOAM NRC: Aqueous Foam Related Incidents Listing

The National Response Center (NRC) serves as an emergency call center that fields initial reports for pollution and railroad incidents and forwards that information to appropriate federal/state agencies for response. The spreadsheets posted to the NRC website contain initial incident data that has not been validated or investigated by a federal/state response agency. Response center calls from 1990 to the most recent complete calendar year where there was indication of Aqueous Film Forming Foam (AFFF) usage are included in this dataset. NRC calls may reference AFFF usage in the ?Material Involved? or ?Incident Description? fields.

Date of Government Version: 12/28/2023
Date Data Arrived at EDR: 12/28/2023
Date Made Active in Reports: 03/04/2024
Number of Days to Update: 67

Source: Environmental Protection Agency
Telephone: 202-267-2675
Last EDR Contact: 04/05/2024
Next Scheduled EDR Contact: 07/15/2024
Data Release Frequency: Varies

PCS: Permit Compliance System

PCS is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

Date of Government Version: 12/16/2016
Date Data Arrived at EDR: 01/06/2017
Date Made Active in Reports: 03/10/2017
Number of Days to Update: 63

Source: EPA, Office of Water
Telephone: 202-564-2496
Last EDR Contact: 03/29/2024
Next Scheduled EDR Contact: 07/15/2024
Data Release Frequency: No Update Planned

PCS ENF: Enforcement data

No description is available for this data

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 02/05/2015
Date Made Active in Reports: 03/06/2015
Number of Days to Update: 29

Source: EPA
Telephone: 202-564-2497
Last EDR Contact: 03/29/2024
Next Scheduled EDR Contact: 07/15/2024
Data Release Frequency: Varies

BIOSOLIDS: ICIS-NPDES Biosolids Facility Data

The data reflects compliance information about facilities in the biosolids program.

Date of Government Version: 12/31/2023
Date Data Arrived at EDR: 01/03/2024
Date Made Active in Reports: 01/16/2024
Number of Days to Update: 13

Source: Environmental Protection Agency
Telephone: 202-564-4700
Last EDR Contact: 04/16/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Varies

RI PFAS: Sites With Known PFAS Contamination

Per- and Polyfluoroalkyl Substances (PFAS) have been widely used in numerous industrial and residential applications since the 1950a??s. Their stability and unique chemical properties produce waterproof, stain resistant, and nonstick qualities in products. They are found in some firefighting foams and a wide range of consumer products such as carpet treatments, non-stick cookware, water-resistant fabrics, food packaging materials, and personal care products.

Date of Government Version: 07/28/2023
Date Data Arrived at EDR: 08/02/2023
Date Made Active in Reports: 10/23/2023
Number of Days to Update: 82

Source: Department of Health
Telephone: 401-222-5960
Last EDR Contact: 05/03/2024
Next Scheduled EDR Contact: 08/05/2024
Data Release Frequency: Varies

CT PFAS: PFAS Contamination Site Listing

A listing of spills reported to the department between 1996 and the present that have substance released, such as ?foam? or other materials associated with PFAS.

Date of Government Version: 03/01/2024
Date Data Arrived at EDR: 03/26/2024
Date Made Active in Reports: 06/17/2024
Number of Days to Update: 83

Source: Department of Energy and Environmental Protection
Telephone: 860-424-3705
Last EDR Contact: 03/26/2024
Next Scheduled EDR Contact: 07/08/2024
Data Release Frequency: Quarterly

RI AQUEOUS FOAM: Firefighting foam listed as the material released, as reported in Emergency Response Reports.

Firefighting foam listed as the material released, as reported in Emergency Response Reports.

Date of Government Version: 10/31/2022
Date Data Arrived at EDR: 01/31/2023
Date Made Active in Reports: 04/21/2023
Number of Days to Update: 80

Source: Department of Environmental Management
Telephone: 401-222-4700
Last EDR Contact: 04/22/2024
Next Scheduled EDR Contact: 08/05/2024
Data Release Frequency: Varies

RI AIRS: Air Emissions Listing
A listing of facilities with air emissions.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 07/14/2022
Date Made Active in Reports: 10/06/2022
Number of Days to Update: 84

Source: Department of Environmental Management
Telephone: 401-222-2808
Last EDR Contact: 04/15/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Annually

CT AIRS: Permitted Air Sources Listing
A listing of permitted air sources in Connecticut.

Date of Government Version: 02/05/2024
Date Data Arrived at EDR: 02/29/2024
Date Made Active in Reports: 05/16/2024
Number of Days to Update: 77

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3026
Last EDR Contact: 04/26/2024
Next Scheduled EDR Contact: 08/12/2024
Data Release Frequency: Varies

RI ASBESTOS: Asbestos Notification Listing
Asbestos notification sites

Date of Government Version: 01/23/2024
Date Data Arrived at EDR: 01/24/2024
Date Made Active in Reports: 02/01/2024
Number of Days to Update: 8

Source: Department of Health
Telephone: 401-222-7756
Last EDR Contact: 04/15/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Varies

CT ASBESTOS: Asbestos Notification Listing
A listing of asbestos notification site locations.

Date of Government Version: 10/25/2023
Date Data Arrived at EDR: 11/15/2023
Date Made Active in Reports: 02/09/2024
Number of Days to Update: 86

Source: Department of Public Health
Telephone: 860-509-7371
Last EDR Contact: 04/26/2024
Next Scheduled EDR Contact: 08/12/2024
Data Release Frequency: Varies

CT COI: Completion of Investigation
The COI must be signed and submitted by the Certifying Party to document that the investigation of the parcel has been completed in accordance with CGS Section 22a-134a(g)(1).

Date of Government Version: 01/24/2024
Date Data Arrived at EDR: 03/13/2024
Date Made Active in Reports: 06/04/2024
Number of Days to Update: 83

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3000
Last EDR Contact: 06/13/2024
Next Scheduled EDR Contact: 09/30/2024
Data Release Frequency: Varies

RI DRYCLEANERS: Drycleaner Facility Listing
A listing of drycleaner locations.

Date of Government Version: 12/13/2022
Date Data Arrived at EDR: 05/11/2023
Date Made Active in Reports: 08/07/2023
Number of Days to Update: 88

Source: Department of Environmental Management
Telephone: 401-222-2808
Last EDR Contact: 04/15/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Annually

CT DRYCLEANERS: Drycleaner Facilities
A listing of drycleaner facility locations.

Date of Government Version: 07/18/2008
Date Data Arrived at EDR: 08/08/2008
Date Made Active in Reports: 08/27/2008
Number of Days to Update: 19

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3026
Last EDR Contact: 05/22/2024
Next Scheduled EDR Contact: 09/09/2024
Data Release Frequency: Varies

CT DRYCLEANERS 2: Dry Cleaning Remediation Fund Listing

The Dry Cleaning Establishment Remediation Fund provides grants to eligible dry cleaning business operators and landlords for the assessment, cleanup, containment or mitigation of pollution resulting from releases of chemicals used in dry cleaning. The grants may also be used for measures undertaken to prevent such pollution, and for providing potable drinking water when necessary. Grant funds may work as a reimbursement program as well.

Date of Government Version: 02/02/2024
Date Data Arrived at EDR: 03/05/2024
Date Made Active in Reports: 05/24/2024
Number of Days to Update: 80

Source: Department of Energy and Environmental Protection
Telephone: 860-500-2455
Last EDR Contact: 06/05/2024
Next Scheduled EDR Contact: 09/15/2024
Data Release Frequency: Varies

RI FIN ASSURANCE: Financial Assurance Information

Financial assurance information for hazardous waste facilities.

Date of Government Version: 05/19/2014
Date Data Arrived at EDR: 05/20/2014
Date Made Active in Reports: 06/24/2014
Number of Days to Update: 35

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 04/22/2024
Next Scheduled EDR Contact: 08/05/2024
Data Release Frequency: Varies

CT FIN ASSURANCE 1: Financial Assurance Information Listing

A listing containing RCRA financial assurance information submitted on behalf of the CT DEP's Program Analysis Group of the Waste Engineering and Enforcement Division.

Date of Government Version: 03/25/2024
Date Data Arrived at EDR: 03/28/2024
Date Made Active in Reports: 04/15/2024
Number of Days to Update: 18

Source: Department of Energy & Environmental Protection
Telephone: 860-418-5930
Last EDR Contact: 06/06/2024
Next Scheduled EDR Contact: 09/23/2024
Data Release Frequency: Varies

CT FIN ASSURANCE 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 03/13/2023
Date Data Arrived at EDR: 03/15/2023
Date Made Active in Reports: 04/18/2023
Number of Days to Update: 34

Source: Department of Energy & Environmental Protection
Telephone: 860-418-5930
Last EDR Contact: 06/06/2024
Next Scheduled EDR Contact: 09/23/2024
Data Release Frequency: Varies

RI LEAD: Lead Inspections Database

The listing includes Highest Risk Premises which are properties declared unsafe for habitation by children under age six (6), and Properties with Multiple Poisonings, which are properties that have been the source of multiple lead poisonings and are not currently lead safe.

Date of Government Version: 12/11/2023
Date Data Arrived at EDR: 12/19/2023
Date Made Active in Reports: 03/11/2024
Number of Days to Update: 83

Source: Department of Health, Environmental Lead Program
Telephone: 401-222-5960
Last EDR Contact: 06/06/2024
Next Scheduled EDR Contact: 09/23/2024
Data Release Frequency: Quarterly

CT LEAD: Lead Inspection Database

The Lead Poisoning Prevention and Control Program lead inspection database.

Date of Government Version: 03/26/2014
Date Data Arrived at EDR: 03/27/2014
Date Made Active in Reports: 05/08/2014
Number of Days to Update: 42

Source: Department of Public Health
Telephone: 860-509-7299
Last EDR Contact: 05/22/2024
Next Scheduled EDR Contact: 09/09/2024
Data Release Frequency: Varies

RI LEAD CERT: Lead Safe Housing Registry
Properties with Active "Lead Free", "Lead Safe", "Acceptable Dust" and "Annual Re-inspection" certificates.

Date of Government Version: 03/13/2024
Date Data Arrived at EDR: 03/19/2024
Date Made Active in Reports: 06/11/2024
Number of Days to Update: 84
Source: Department of Health
Telephone: 401-222-7791
Last EDR Contact: 06/06/2024
Next Scheduled EDR Contact: 09/09/2024
Data Release Frequency: Semi-Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/18/2022
Number of Days to Update: 80
Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 05/13/2024
Next Scheduled EDR Contact: 08/26/2024
Data Release Frequency: Annually

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 02/05/2024
Date Data Arrived at EDR: 02/06/2024
Date Made Active in Reports: 04/25/2024
Number of Days to Update: 79
Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 05/07/2024
Next Scheduled EDR Contact: 08/19/2024
Data Release Frequency: No Update Planned

RI NPDES: Permit and Facility Data
A listing of permitted wastewater facilities

Date of Government Version: 02/15/2024
Date Data Arrived at EDR: 02/16/2024
Date Made Active in Reports: 02/21/2024
Number of Days to Update: 5
Source: Department of Environmental Management
Telephone: 401-222-4700
Last EDR Contact: 05/03/2024
Next Scheduled EDR Contact: 07/20/2024
Data Release Frequency: Semi-Annually

CT NPDES: Wastewater Permit Listing
A listing of permits issued by the DEP.

Date of Government Version: 06/06/2023
Date Data Arrived at EDR: 06/08/2023
Date Made Active in Reports: 08/30/2023
Number of Days to Update: 83
Source: Department of Energy & Environmental Protection
Telephone: 860-424-3832
Last EDR Contact: 06/13/2024
Next Scheduled EDR Contact: 09/30/2024
Data Release Frequency: Varies

E MANIFEST: Hazardous Waste Electronic Manifest System
EPA established a national system for tracking hazardous waste shipments electronically. This system, known as ?e-Manifest,? will modernize the nation?s cradle-to-grave hazardous waste tracking process while saving valuable time, resources, and dollars for industry and states.

Date of Government Version: 07/24/2023
Date Data Arrived at EDR: 04/18/2024
Date Made Active in Reports: 06/06/2024
Number of Days to Update: 49
Source: Environmental Protection Agency
Telephone: 833-501-6826
Last EDR Contact: 06/07/2024
Next Scheduled EDR Contact: 09/30/2024
Data Release Frequency: Varies

PFAS PROJECT: NORTHEASTERN UNIVERSITY PFAS PROJECT
The PFAS Contamination Site Tracker records qualitative and quantitative data from each site in a chart, specifically examining discovery, contamination levels, government response, litigation, health impacts, media coverage, and community characteristics. All data presented in the chart were extracted from government websites, such as state health departments or the Environmental Protection Agency, and news articles.

Date of Government Version: 05/19/2023
Date Data Arrived at EDR: 04/05/2024
Date Made Active in Reports: 06/06/2024
Number of Days to Update: 62

Source: Social Science Environmental Health Research Institute
Telephone: N/A
Last EDR Contact: 06/04/2024
Next Scheduled EDR Contact: 09/16/2024
Data Release Frequency: Varies

UST FINDER: UST Finder Database

EPA developed UST Finder, a web map application containing a comprehensive, state-sourced national map of underground storage tank (UST) and leaking UST (LUST) data. It provides the attributes and locations of active and closed USTs, UST facilities, and LUST sites from states and from Tribal lands and US territories . UST Finder contains information about proximity of UST facilities and LUST sites to: surface and groundwater public drinking water protection areas; estimated number of private domestic wells and number of people living nearby; and flooding and wildfires.

Date of Government Version: 06/08/2023
Date Data Arrived at EDR: 10/04/2023
Date Made Active in Reports: 01/18/2024
Number of Days to Update: 106

Source: Environmental Protection Agency
Telephone: 202-564-0394
Last EDR Contact: 05/08/2024
Next Scheduled EDR Contact: 08/19/2024
Data Release Frequency: Varies

UST FINDER RELEASE: UST Finder Releases Database

US EPA's UST Finder data is a national composite of leaking underground storage tanks. This data contains information about, and locations of, leaking underground storage tanks. Data was collected from state sources and standardized into a national profile by EPA's Office of Underground Storage Tanks, Office of Research and Development, and the Association of State and Territorial Solid Waste Management Officials.

Date of Government Version: 06/08/2023
Date Data Arrived at EDR: 10/31/2023
Date Made Active in Reports: 01/18/2024
Number of Days to Update: 79

Source: Environmental Protecton Agency
Telephone: 202-564-0394
Last EDR Contact: 05/08/2024
Next Scheduled EDR Contact: 08/19/2024
Data Release Frequency: Semi-Annually

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RI RGA HWS: Recovered Government Archive State Hazardous Waste Facilities List

The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Management in Rhode Island.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/08/2014
Number of Days to Update: 191

Source: Department of Environmental Management
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

CT RGA HWS: Recovered Government Archive State Hazardous Waste Facilities List

The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Energy & Environmental Protection formerly know as the DEP which changes in July 2011 in Connecticut.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/02/2014
Number of Days to Update: 185

Source: Department of Energy & Environmental Protection
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RI RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Management in Rhode Island.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/17/2014
Number of Days to Update: 200

Source: Department of Environmental Management
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

CT RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Energy & Environmental Protection formerly know as the DEP which changes in July 2011 in Connecticut.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/15/2014
Number of Days to Update: 198

Source: Department of Energy & Environmental Protection
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RI RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Management in Rhode Island.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/03/2014
Number of Days to Update: 186

Source: Department of Environmental Management
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

CT RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Energy & Environmental Protection formerly know as the DEP which changes in July 2011 in Connecticut.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/02/2014
Number of Days to Update: 185

Source: Department of Energy & Environmental Protection
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 02/05/2024
Date Data Arrived at EDR: 02/06/2024
Date Made Active in Reports: 04/25/2024
Number of Days to Update: 79

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 05/07/2024
Next Scheduled EDR Contact: 08/19/2024
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 04/10/2019
Date Made Active in Reports: 05/16/2019
Number of Days to Update: 36

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 03/29/2024
Next Scheduled EDR Contact: 07/15/2024
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 11/30/2023
Date Made Active in Reports: 12/01/2023
Number of Days to Update: 1

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 04/25/2024
Next Scheduled EDR Contact: 08/05/2024
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 06/30/2018
Date Data Arrived at EDR: 07/19/2019
Date Made Active in Reports: 09/10/2019
Number of Days to Update: 53

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 04/08/2024
Next Scheduled EDR Contact: 07/22/2024
Data Release Frequency: Annually

VT MANIFEST: Hazardous Waste Manifest Data

Hazardous waste manifest information.

Date of Government Version: 10/28/2019
Date Data Arrived at EDR: 10/29/2019
Date Made Active in Reports: 01/09/2020
Number of Days to Update: 72

Source: Department of Environmental Conservation
Telephone: 802-241-3443
Last EDR Contact: 07/08/2024
Next Scheduled EDR Contact: 07/22/2024
Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 76

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 06/03/2024
Next Scheduled EDR Contact: 09/16/2024
Data Release Frequency: Annually

Oil/Gas Pipelines

Source: Endeavor Business Media

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Electric Power Transmission Line Data

Source: Endeavor Business Media

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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:

Source: American Hospital Association, Inc.
Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Day Care Provider Listing
Source: Department of Children, Youth & Families
Telephone: 401-528-3624

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005, 2010 and 2015 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: US Fish & Wildlife Service
Telephone: 703-358-2171

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

POTTER HILL MILL
198 POTTER HILL ROAD
WESTERLY, RI 02891

TARGET PROPERTY COORDINATES

Latitude (North):	41.415396 - 41° 24' 55.43''
Longitude (West):	71.797156 - 71° 47' 49.76''
Universal Tranverse Mercator:	Zone 19
UTM X (Meters):	266219.9
UTM Y (Meters):	4588435.5
Elevation:	23 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	20121790 ASHAWAY, RI
Version Date:	2021

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

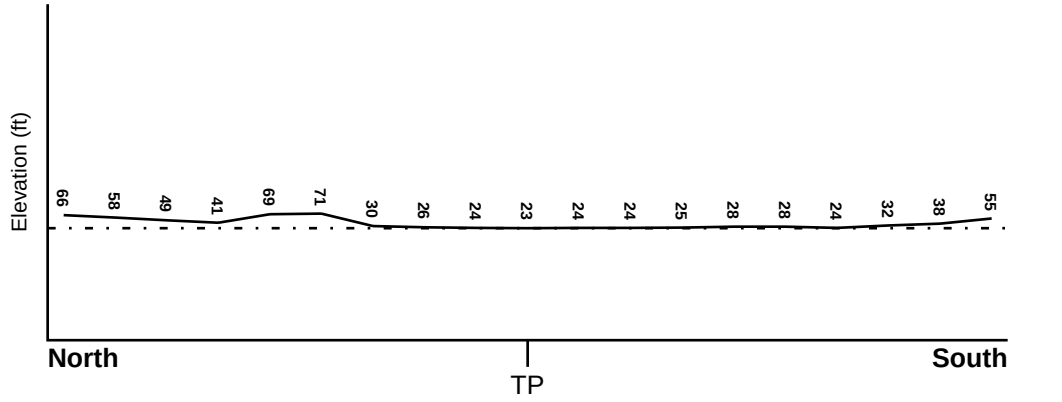
TOPOGRAPHIC INFORMATION

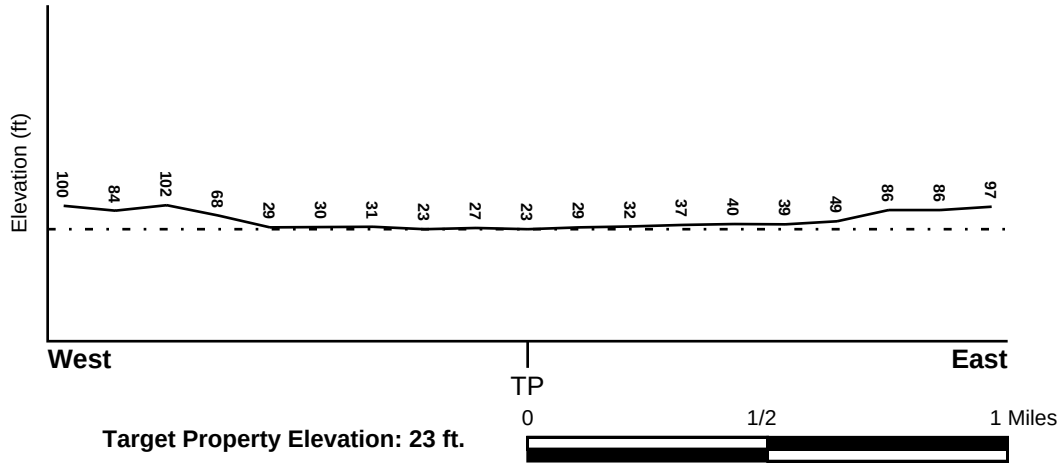
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General ENE

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Target Property Elevation: 23 ft.

0 1/2 1 Miles

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

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HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
44009C0141H	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
44009C0137H	FEMA FIRM Flood data
44009C0142H	FEMA FIRM Flood data
44009C0143H	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
ASHAWAY	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

EPA DESIGNATED SOLE SOURCE AQUIFER

PAWCATUCK

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

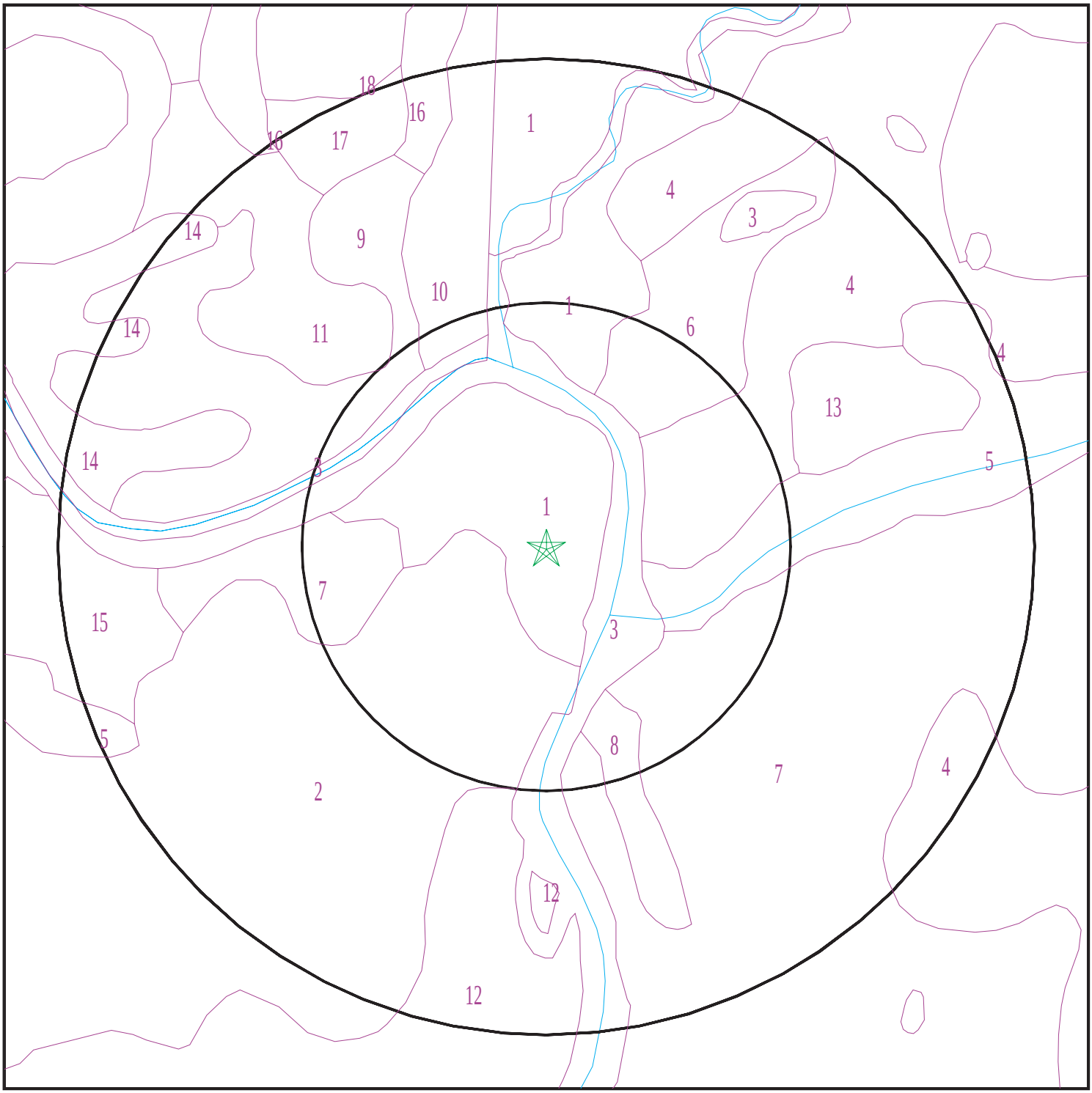
Era:	Paleozoic
System:	Cambrian
Series:	Cambrian
Code:	Ce *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Eugeosynclinal Deposits

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 7688305.2s



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME:	Potter Hill Mill	CLIENT:	GES, Inc.
ADDRESS:	198 Potter Hill Road Westerly RI 02891	CONTACT:	Hannah Pallein
LAT/LONG:	41.415396 / 71.797156	INQUIRY #:	7688305.2s
		DATE:	June 21, 2024 2:10 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Rippowam

Soil Surface Texture:
Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Poorly drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 23 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	5 inches		Not reported	Not reported	Max: 141.14 Min: 42.34	Max: 7.3 Min: 4.5
2	5 inches	22 inches		Not reported	Not reported	Max: 141.14 Min: 42.34	Max: 7.3 Min: 4.5
3	22 inches	64 inches		Not reported	Not reported	Max: 141.14 Min: 42.34	Max: 7.3 Min: 4.5

Soil Map ID: 2

Soil Component Name: Canton

Soil Surface Texture:
Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	3 inches		Not reported	Not reported	Max: 141.14 Min: 42.34	Max: 6 Min: 3.6
2	3 inches	22 inches		Not reported	Not reported	Max: 141.14 Min: 42.34	Max: 6 Min: 3.6
3	22 inches	59 inches		Not reported	Not reported	Max: 141.14 Min: 42.34	Max: 6 Min: 3.6

Soil Map ID: 3

Soil Component Name: Water

Soil Surface Texture:
Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class:
Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

No Layer Information available.

Soil Map ID: 4

Soil Component Name: Merrimac

Soil Surface Texture:
Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Somewhat excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	11 inches		Not reported	Not reported	Max: 141.14 Min: 42.34	Max: 6 Min: 3.6
2	11 inches	25 inches		Not reported	Not reported	Max: 141.14 Min: 42.34	Max: 6 Min: 3.6
3	25 inches	59 inches		Not reported	Not reported	Max: 141.14 Min: 42.34	Max: 6 Min: 3.6

Soil Map ID: 5

Soil Component Name: Walpole

Soil Surface Texture:

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Poorly drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 15 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	7 inches		Not reported	Not reported	Max: 141.14 Min: 42.34	Max: 7.3 Min: 4.5
2	7 inches	18 inches		Not reported	Not reported	Max: 141.14 Min: 42.34	Max: 7.3 Min: 4.5

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
3	18 inches	64 inches		Not reported	Not reported	Max: 141.14 Min: 42.34	Max: 7.3 Min: 4.5

Soil Map ID: 6

Soil Component Name: Pootatuck

Soil Surface Texture:
Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 61 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	11 inches		Not reported	Not reported	Max: 141.14 Min: 42.34	Max: 6.5 Min: 4.5
2	11 inches	37 inches		Not reported	Not reported	Max: 141.14 Min: 42.34	Max: 6.5 Min: 4.5
3	37 inches	64 inches		Not reported	Not reported	Max: 141.14 Min: 42.34	Max: 6.5 Min: 4.5

Soil Map ID: 7

Soil Component Name: Merrimac

Soil Surface Texture:
Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Somewhat excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	11 inches		Not reported	Not reported	Max: 141.14 Min: 42.34	Max: 6 Min: 3.6
2	11 inches	25 inches		Not reported	Not reported	Max: 141.14 Min: 42.34	Max: 6 Min: 3.6
3	25 inches	59 inches		Not reported	Not reported	Max: 141.14 Min: 42.34	Max: 6 Min: 3.6

Soil Map ID: 8

Soil Component Name: Rock outcrop

Soil Surface Texture:
Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class:
Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 5 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	0 inches		Not reported	Not reported	Max: 0.01 Min: 0	Max: Min:

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Map ID: 9

Soil Component Name: Pootatuck

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 61 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	3 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 703 Min: 42	Max: 6.5 Min: 4.5
2	3 inches	16 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 703 Min: 42	Max: 6.5 Min: 4.5
3	16 inches	20 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 703 Min: 42	Max: 6.5 Min: 4.5

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
4	20 inches	29 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 703 Min: 42	Max: 6.5 Min: 4.5
5	29 inches	35 inches	stratified very gravelly coarse sand to loamy fine sand	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 703 Min: 42	Max: 6.5 Min: 4.5
6	35 inches	40 inches	stratified very gravelly coarse sand to loamy fine sand	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 703 Min: 42	Max: 6.5 Min: 4.5
7	40 inches	64 inches	stratified very gravelly coarse sand to loamy fine sand	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 703 Min: 42	Max: 6.5 Min: 4.5

Soil Map ID: 10

Soil Component Name: Scarboro

Soil Surface Texture: muck

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Very poorly drained

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 10 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	11 inches	muck	A-8	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 703 Min: 42	Max: 7.3 Min: 4.5
2	11 inches	16 inches	loamy sand	A-8	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 703 Min: 42	Max: 7.3 Min: 4.5
3	16 inches	31 inches	stratified sand to loamy fine sand	A-8	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 703 Min: 42	Max: 7.3 Min: 4.5
4	31 inches	72 inches	stratified very gravelly coarse sand to loamy fine sand	A-8	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 703 Min: 42	Max: 7.3 Min: 4.5

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Map ID: 11

Soil Component Name: Agawam

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	7 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 703 Min: 141	Max: 6.5 Min: 4.5
2	7 inches	14 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 703 Min: 141	Max: 6.5 Min: 4.5
3	14 inches	24 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 703 Min: 141	Max: 6.5 Min: 4.5

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
4	24 inches	59 inches	stratified very gravelly coarse sand to fine sand	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 703 Min: 141	Max: 6.5 Min: 4.5

Soil Map ID: 12

Soil Component Name: Windsor

Soil Surface Texture:

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	1 inches		Not reported	Not reported	Max: 141.14 Min: 42.34	Max: 6.5 Min: 4.5
2	1 inches	27 inches		Not reported	Not reported	Max: 141.14 Min: 42.34	Max: 6.5 Min: 4.5
3	27 inches	64 inches		Not reported	Not reported	Max: 141.14 Min: 42.34	Max: 6.5 Min: 4.5

Soil Map ID: 13

Soil Component Name: Udorthents

Soil Surface Texture:
Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class:
Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	11 inches		Not reported	Not reported	Max: 141.14 Min: 42.34	Max: 6 Min: 3.6
2	11 inches	25 inches		Not reported	Not reported	Max: 141.14 Min: 42.34	Max: 6 Min: 3.6
3	25 inches	59 inches		Not reported	Not reported	Max: 141.14 Min: 42.34	Max: 6 Min: 3.6

Soil Map ID: 14

Soil Component Name: Rippowam

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Poorly drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 23 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	5 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 703 Min: 42	Max: 7.3 Min: 5.6
2	5 inches	11 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 703 Min: 42	Max: 7.3 Min: 5.6
3	11 inches	18 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 703 Min: 42	Max: 7.3 Min: 5.6
4	18 inches	24 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 703 Min: 42	Max: 7.3 Min: 5.6
5	24 inches	27 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 703 Min: 42	Max: 7.3 Min: 5.6
6	27 inches	31 inches	loamy sand	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 703 Min: 42	Max: 7.3 Min: 5.6

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
7	31 inches	64 inches	stratified very gravelly coarse sand to loamy fine sand	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 703 Min: 42	Max: 7.3 Min: 5.6

Soil Map ID: 15

Soil Component Name: Sudbury

Soil Surface Texture:

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 69 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	5 inches		Not reported	Not reported	Max: 141.14 Min: 42.34	Max: 6 Min: 3.6
2	5 inches	20 inches		Not reported	Not reported	Max: 141.14 Min: 42.34	Max: 6 Min: 3.6
3	20 inches	27 inches		Not reported	Not reported	Max: 141.14 Min: 42.34	Max: 6 Min: 3.6
4	27 inches	59 inches		Not reported	Not reported	Max: 141.14 Min: 42.34	Max: 6 Min: 3.6

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Map ID: 16

Soil Component Name: Hinckley

Soil Surface Texture: gravelly sandy loam

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Excessively drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	7 inches	gravelly sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Silty Gravel	Max: 703 Min: 141	Max: 6 Min: 3.5
2	7 inches	20 inches	very gravelly loamy sand	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Silty Gravel	Max: 703 Min: 141	Max: 6 Min: 3.5
3	20 inches	27 inches	very gravelly sand	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Silty Gravel	Max: 703 Min: 141	Max: 6 Min: 3.5
4	27 inches	42 inches	stratified cobbly coarse sand to extremely gravelly sand	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Silty Gravel	Max: 703 Min: 141	Max: 6 Min: 3.5
5	42 inches	59 inches	stratified cobbly coarse sand to extremely gravelly sand	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Silty Gravel	Max: 703 Min: 141	Max: 6 Min: 3.5

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Map ID: 17

Soil Component Name: Merrimac

Soil Surface Texture: sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Somewhat excessively drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 703 Min: 42	Max: 6 Min: 5.1
2	9 inches	16 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 703 Min: 42	Max: 6 Min: 5.1
3	16 inches	24 inches	gravelly sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 703 Min: 42	Max: 6 Min: 5.1

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
4	24 inches	59 inches	stratified very gravelly coarse sand to gravelly sand	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 703 Min: 42	Max: 6 Min: 5.1

Soil Map ID: 18

Soil Component Name: Haven

Soil Surface Texture: silt loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	7 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Clean Sands, Well-graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 703 Min: 141	Max: 6 Min: 4.5

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
2	7 inches	14 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Clean Sands, Well-graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 703 Min: 141	Max: 6 Min: 4.5
3	14 inches	20 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Clean Sands, Well-graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 703 Min: 141	Max: 6 Min: 4.5
4	20 inches	24 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Clean Sands, Well-graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 703 Min: 141	Max: 6 Min: 4.5
5	24 inches	59 inches	stratified very gravelly sand to gravelly fine sand	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Clean Sands, Well-graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 703 Min: 141	Max: 6 Min: 4.5

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	USGS40001047471	1/8 - 1/4 Mile ENE
2	USGS40001047468	1/8 - 1/4 Mile East
3	USGS40001047464	1/4 - 1/2 Mile ESE
5	USGS40001047474	1/4 - 1/2 Mile ENE
13	USGS40000225774	1/2 - 1 Mile NNW
B14	USGS40001047484	1/2 - 1 Mile NNE
B15	USGS40001047483	1/2 - 1 Mile NNE
18	USGS40001047476	1/2 - 1 Mile NE

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

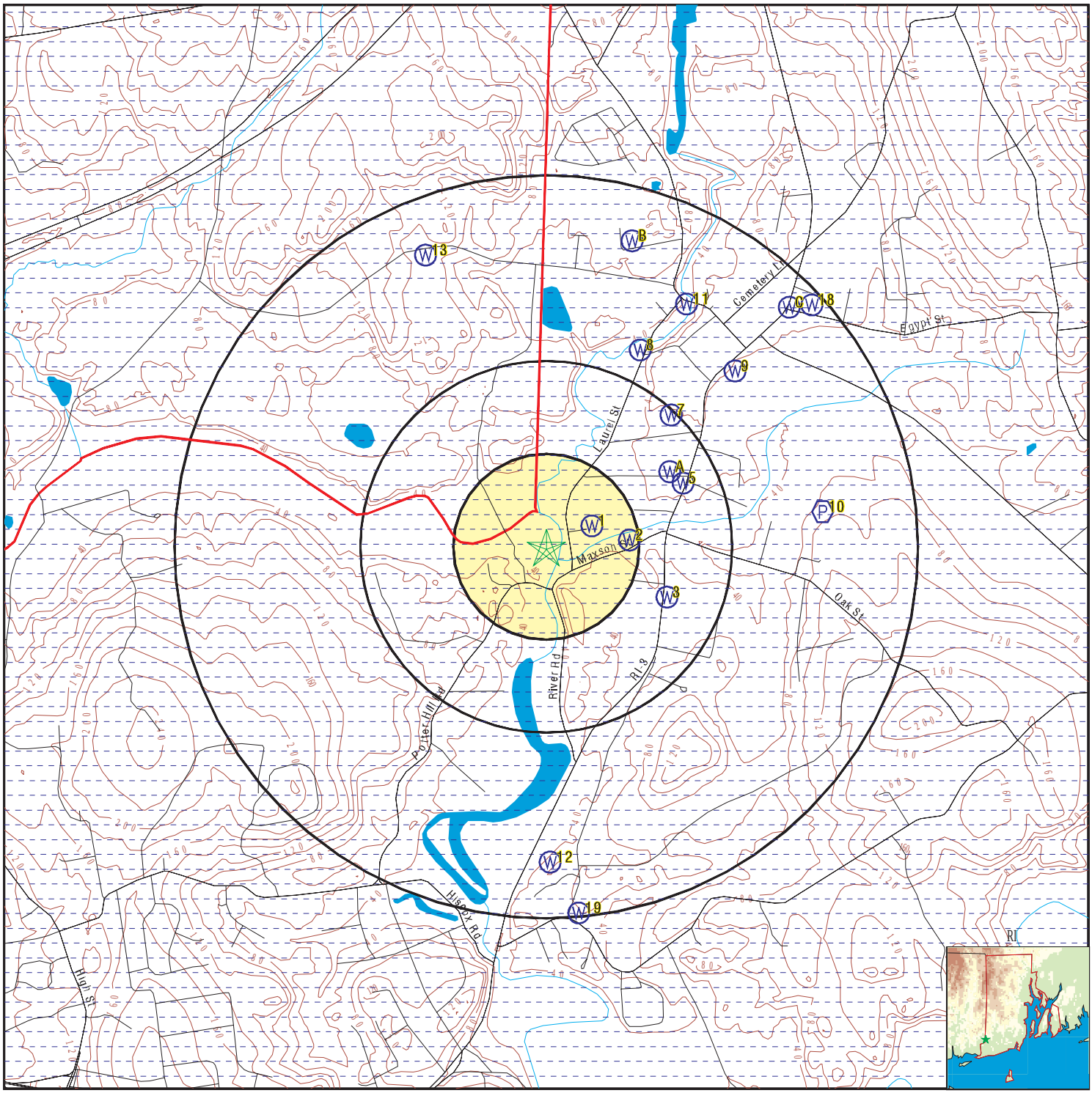
MAP ID	WELL ID	LOCATION FROM TP
10	RI1858417	1/2 - 1 Mile East

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A4	RI7000000000394	1/4 - 1/2 Mile ENE
A6	RI7000000000393	1/4 - 1/2 Mile ENE
7	RI7000000000423	1/4 - 1/2 Mile NE
8	RI7000000000424	1/2 - 1 Mile NNE
9	RI7000000000425	1/2 - 1 Mile NE
11	RI7000000000387	1/2 - 1 Mile NNE
12	RI7000000000406	1/2 - 1 Mile South
C16	RI7000000000389	1/2 - 1 Mile NE
C17	RI7000000000386	1/2 - 1 Mile NE
19	RI7000000000409	1/2 - 1 Mile South

PHYSICAL SETTING SOURCE MAP - 7688305.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons

- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- EPA Designated Sole Src. Aq.

SITE NAME:	Potter Hill Mill	CLIENT:	GES, Inc.
ADDRESS:	198 Potter Hill Road Westerly RI 02891	CONTACT:	Hannah Pallein
LAT/LONG:	41.415396 / 71.797156	INQUIRY #:	7688305.2s
		DATE:	June 21, 2024 2:10 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

1
ENE **FED USGS** **USGS40001047471**
1/8 - 1/4 Mile
Higher

Organization ID:	USGS-MA		
Organization Name:	USGS Massachusetts Water Science Center		
Monitor Location:	RI-HOW 391	Type:	Well
Description:	Not Reported	HUC:	01090005
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Sand and gravel aquifers (glaciated regions)		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	1950	Well Depth:	40
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

2
East **FED USGS** **USGS40001047468**
1/8 - 1/4 Mile
Higher

Organization ID:	USGS-MA		
Organization Name:	USGS Massachusetts Water Science Center		
Monitor Location:	RI-HOW 392	Type:	Well
Description:	Not Reported	HUC:	01090005
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Sand and gravel aquifers (glaciated regions)		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	1957	Well Depth:	138
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

3
ESE **FED USGS** **USGS40001047464**
1/4 - 1/2 Mile
Higher

Organization ID:	USGS-MA		
Organization Name:	USGS Massachusetts Water Science Center		
Monitor Location:	RI-HOW 328	Type:	Well
Description:	Not Reported	HUC:	01090005
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Sand and gravel aquifers (glaciated regions)		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	1938	Well Depth:	48
Well Depth Units:	ft	Well Hole Depth:	148
Well Hole Depth Units:	ft		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

A4
ENE
1/4 - 1/2 Mile
Higher

RI WELLS **RI7000000000394**

WELLS:

Facility ID:	WL003	Facility Name:	DRIVEN WELL (DP)
PWS Type:	Non Community Transient		
PWS Name:	FIRST 7TH DAY BAPTIST CHURCH OF HOPKINTO		
Public Water System #:	RI2980113	Water System Status:	Active
Water System Facility:	Inactive	City Served:	HOPKINTON
Population:	30		
Description:	Inner Protective Radius	Measurement:	400
Units:	FT		
Description:	Well Head Protection Area Diameter		
Measurement:	1750	Units:	FT
Flow Rate Type:	Not Reported	Flow Rate Amount:	Not Reported
Flow Rate Units:	Not Reported		
Pump Description:	Not Reported		

5
ENE
1/4 - 1/2 Mile
Higher

FED USGS **USGS40001047474**

Organization ID:	USGS-MA		
Organization Name:	USGS Massachusetts Water Science Center		
Monitor Location:	RI-HOW 388	Type:	Well
Description:	Not Reported	HUC:	01090005
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Sand and gravel aquifers (glaciated regions)		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19470301	Well Depth:	71
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

A6
ENE
1/4 - 1/2 Mile
Higher

RI WELLS **RI7000000000393**

WELLS:

Facility ID:	WL004	Facility Name:	DRILLED WELL #4 (BR)
PWS Type:	Non Community Transient		
PWS Name:	FIRST 7TH DAY BAPTIST CHURCH OF HOPKINTO		
Public Water System #:	RI2980113	Water System Status:	Active
Water System Facility:	Active	City Served:	HOPKINTON

Population:	30		
Description:	Bottom of casing	Measurement:	90
Units:	BGS		
Description:	Depth to bedrock	Measurement:	85
Units:	BGS		
Description:	Depth at completion	Measurement:	260
Units:	BGS		
Description:	Inner Protective Radius	Measurement:	200
Units:	FT		
Description:	Well Diameter	Measurement:	6
Units:	IN		
Description:	Well Head Protection Area Diameter		
Measurement:	1750	Units:	FT
Flow Rate Type:	PUMP	Flow Rate Amount:	10
Flow Rate Units:	GPM		
Pump Description:	Not Reported		
Flow Rate Type:	RATE	Flow Rate Amount:	10
Flow Rate Units:	GPM		
Pump Description:	Not Reported		

7
NE
1/4 - 1/2 Mile
Higher

RI WELLS **RI7000000000423**

WELLS:

Facility ID:	WL001	Facility Name:	DRILLED ROCK WELL (BR)
PWS Type:	Non Transient Non Community		
PWS Name:	ASHAWAY ELEMENTARY SCHOOL	Public Water System #:	RI1858417
Water System Status:	Active	Water System Facility:	Active
City Served:	HOPKINTON	Population:	300
Description:	Depth to bedrock	Measurement:	22
Units:	BGS		
Description:	Depth at completion	Measurement:	220
Units:	BGS		
Description:	Inner Protective Radius	Measurement:	200
Units:	FT		
Description:	Grout Depth	Measurement:	220
Units:	FT		
Description:	Well Diameter	Measurement:	6
Units:	IN		

Description:	Well Head Protection Area Diameter		
Measurement:	2008	Units:	FT
Flow Rate Type:	PUMP	Flow Rate Amount:	15
Flow Rate Units:	GPM		
Pump Description:	Not Reported		
Flow Rate Type:	RATE	Flow Rate Amount:	15
Flow Rate Units:	GPM		
Pump Description:	Not Reported		

8
NNE
1/2 - 1 Mile
Higher

RI WELLS **RI7000000000424**

WELLS:

Facility ID:	WL001	Facility Name:	DRILLED ROCK WELL
PWS Type:	Non Transient Non Community		
PWS Name:	ASHAWAY LINE & TWINE MFG. CO.-LOWER MILL		
Public Water System #:	RI1858415	Water System Status:	Active
Water System Facility:	Active	City Served:	HOPKINTON
Population:	50		
Description:	Depth at completion	Measurement:	150
Units:	BGS		
Description:	Inner Protective Radius	Measurement:	200
Units:	FT		
Description:	Grout Depth	Measurement:	150
Units:	FT		
Description:	Well Diameter	Measurement:	6
Units:	IN		
Description:	Well Head Protection Area Diameter		
Measurement:	1750	Units:	FT

Description:

Flow Rate Type:	PUMP	Flow Rate Amount:	9
Flow Rate Units:	GPM		
Pump Description:	Not Reported		
Flow Rate Type:	RATE	Flow Rate Amount:	10
Flow Rate Units:	GPM		
Pump Description:	Not Reported		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

9
NE
1/2 - 1 Mile
Higher | **RI WELLS** | **RI7000000000425**

WELLS:

Facility ID:	WL001	Facility Name:	DRILLED WELL #1 (BR)
PWS Type:	Non Transient Non Community		
PWS Name:	CRANDALL HOUSE-SR. CITIZENS		
Public Water System #:	RI2000145	Water System Status:	Active
Water System Facility:	Active	City Served:	HOPKINTON
Population:	30		

Description:	Depth at completion	Measurement:	102
Units:	BGS		
Description:	Inner Protective Radius	Measurement:	200
Units:	FT		
Description:	Grout Depth	Measurement:	102
Units:	FT		
Description:	Well Diameter	Measurement:	6
Units:	IN		
Description:	Well Head Protection Area Diameter		
Measurement:	1750	Units:	FT

Description:

Flow Rate Type:	PUMP	Flow Rate Amount:	10
Flow Rate Units:	GPM		
Pump Description:	Not Reported		
Flow Rate Type:	RATE	Flow Rate Amount:	10
Flow Rate Units:	GPM		
Pump Description:	Not Reported		

10
East
1/2 - 1 Mile
Higher | **FRDS PWS** | **RI1858417**

Epa region:	01	State:	RI
Pwsid:	RI1858417	Pwsname:	ASHAWAY ELEMENTARY SCHOOL
Cityserved:	Not Reported	Stateserved:	RI
Zipserved:	Not Reported	Fipscounty:	44009
Status:	Active	Retpopsrvd:	300
Pwssvcconn:	3	Psource longname:	Groundwater
Pwstype:	NTNCWS	Owner:	Local_Govt
Contact:	STANLEY, BRIAN	Contactorgname:	STANLEY, BRIAN
Contactphone:	401-364-3260	Contactaddress1:	455A SWITCH ROAD
Contactaddress2:	Not Reported	Contactcity:	WOOD RIVER JUNCTION
Contactstate:	RI	Contactzip:	02894
Pwsactivitycode:	A		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Pwsid:	RI1858417	Facid:	81
Facname:	TREATMENT PLANT WELL	Factype:	Treatment_plant
Facactivitycode:	A	Trtobjective:	corrosion control
Trtprocess:	ph adjustment	Factypecode:	TP
PWS ID:	RI1858417	PWS type:	Not Reported
PWS name:	Not Reported	PWS address:	Not Reported
PWS city:	Not Reported	PWS state:	Not Reported
PWS zip:	Not Reported	PWS name:	ASHAWAY ELEMENTARY SCHOOL
PWS type code:	NTNC	Retail population served:	300
Contact:	STANLEY, BRIAN	Contact address:	455A SWITCH ROAD
Contact address:	WOOD RIVER JUNCTION	Contact city:	RI
Contact state:	02	Contact zip:	401-364-32
Contact telephone:	Not Reported		
PWS ID:	RI1858417	Activity status:	Active
Date system activated:	7505	Date system deactivated:	Not Reported
Retail population:	00000335	System name:	ASHAWAY ELEMENTARY SCHOOL
System address:	12 A	System address:	HILLSIDE AVENUE
System city:	ASHAWAY	System state:	RI
System zip:	02804		
Population served:	101 - 500 Persons	Treatment:	Untreated
Latitude:	412500	Longitude:	0714700
Violation id:	1109902	Orig code:	S
State:	RI	Violation Year:	2002
Contamination code:	3100	Contamination Name:	Coliform (TCR)
Violation code:	22	Violation name:	MCL, Monthly (TCR)
Rule code:	110	Rule name:	TCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	07/01/2002
Cmp edt:	09/30/2002		
Violation id:	1110005	Orig code:	S
State:	RI	Violation Year:	2005
Contamination code:	3100	Contamination Name:	Coliform (TCR)
Violation code:	22	Violation name:	MCL, Monthly (TCR)
Rule code:	110	Rule name:	TCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	07/01/2005
Cmp edt:	09/30/2005		
Violation id:	1110106	Orig code:	S
State:	RI	Violation Year:	2006
Contamination code:	5000	Contamination Name:	Lead and Copper Rule
Violation code:	52	Violation name:	Follow-up Or Routine LCR Tap M/R
Rule code:	350	Rule name:	LCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/2006
Cmp edt:	Not Reported		
Violation ID:	1109902	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	09/20/2002
Enforcement Detail:	St Tech Assistance Visit	Enforcement Category:	Informal
Violation ID:	1109902	Orig Code:	S
Enforcemnt FY:	2003	Enforcement Action:	11/06/2002
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	1109902	Orig Code:	S

Enforcemnt FY: 2002
Enforcement Detail: St Formal NOV issued
Enforcement Action: 07/18/2002
Enforcement Category: Informal

Violation ID: 1109902
Enforcemnt FY: 2002
Enforcement Detail: St Public Notif requested
Orig Code: S
Enforcement Action: 07/18/2002
Enforcement Category: Informal

Violation ID: 1109902
Enforcemnt FY: 2002
Enforcement Detail: St Public Notif received
Orig Code: S
Enforcement Action: 07/30/2002
Enforcement Category: Informal

Violation ID: 1109902
Enforcemnt FY: 2002
Enforcement Detail: St Violation/Reminder Notice
Enforcement Category: Informal
Orig Code: S
Enforcement Action: 07/18/2002

Violation ID: 1110005
Enforcemnt FY: 2005
Enforcement Detail: St Compliance achieved
Orig Code: S
Enforcement Action: 08/26/2005
Enforcement Category: Resolving

Violation ID: 1110005
Enforcemnt FY: 2005
Enforcement Detail: St Formal NOV issued
Orig Code: S
Enforcement Action: 08/24/2005
Enforcement Category: Informal

Violation ID: 1110005
Enforcemnt FY: 2005
Enforcement Detail: St Violation/Reminder Notice
Enforcement Category: Informal
Orig Code: S
Enforcement Action: 08/24/2005

Violation ID: 1110005
Enforcemnt FY: 2005
Enforcement Detail: St Public Notif requested
Orig Code: S
Enforcement Action: 08/24/2005
Enforcement Category: Informal

Violation ID: 1110005
Enforcemnt FY: 2005
Enforcement Detail: St Public Notif received
Orig Code: S
Enforcement Action: 08/26/2005
Enforcement Category: Informal

Violation ID: 1110005
Enforcemnt FY: 2005
Enforcement Detail: St Boil Water Order
Orig Code: S
Enforcement Action: 08/24/2005
Enforcement Category: Informal

Violation ID: 1110106
Enforcemnt FY: 2007
Enforcement Detail: St Public Notif received
Orig Code: S
Enforcement Action: 07/11/2007
Enforcement Category: Informal

Violation ID: 1110106
Enforcemnt FY: 2007
Enforcement Detail: St Compliance achieved
Orig Code: S
Enforcement Action: 07/11/2007
Enforcement Category: Resolving

Violation ID: 1110106
Enforcemnt FY: 2006
Enforcement Detail: St Formal NOV issued
Orig Code: S
Enforcement Action: 06/23/2006
Enforcement Category: Informal

Violation ID: 1110106
Enforcemnt FY: 2006
Enforcement Detail: St Public Notif requested
Orig Code: S
Enforcement Action: 06/23/2006
Enforcement Category: Informal

Violation ID: 1110106
Enforcemnt FY: 2006
Enforcement Detail: St Violation/Reminder Notice
Enforcement Category: Informal
Orig Code: S
Enforcement Action: 06/23/2006

PWS name:	ASHAWAY ELEMENTARY SCHOOL	Population served:	300
PWS type code:	NTNC	Violation ID:	1109902
Contaminant:	COLIFORM (TCR)		
Violation type:	Max Contaminant Level, Monthly (TCR)		
Compliance start date:	7/1/2002 0:00:00	Compliance end date:	9/30/2002 0:00:00
Enforcement date:	11/6/2002 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	ASHAWAY ELEMENTARY SCHOOL	Population served:	300
PWS type code:	NTNC	Violation ID:	1109902
Contaminant:	COLIFORM (TCR)		
Violation type:	Max Contaminant Level, Monthly (TCR)		
Compliance start date:	7/1/2002 0:00:00	Compliance end date:	9/30/2002 0:00:00
Enforcement date:	7/18/2002 0:00:00	Enforcement action:	State Formal NOV Issued
Violation measurement:	Not Reported		

PWS name:	ASHAWAY ELEMENTARY SCHOOL	Population served:	300
PWS type code:	NTNC	Violation ID:	1109902
Contaminant:	COLIFORM (TCR)		
Violation type:	Max Contaminant Level, Monthly (TCR)		
Compliance start date:	7/1/2002 0:00:00	Compliance end date:	9/30/2002 0:00:00
Enforcement date:	7/18/2002 0:00:00	Enforcement action:	State Violation/Reminder Notice
Violation measurement:	Not Reported		

PWS name:	ASHAWAY ELEMENTARY SCHOOL	Population served:	300
PWS type code:	NTNC	Violation ID:	1109902
Contaminant:	COLIFORM (TCR)		
Violation type:	Max Contaminant Level, Monthly (TCR)		
Compliance start date:	7/1/2002 0:00:00	Compliance end date:	9/30/2002 0:00:00
Enforcement date:	7/18/2002 0:00:00	Enforcement action:	State Public Notif Requested
Violation measurement:	Not Reported		

PWS name:	ASHAWAY ELEMENTARY SCHOOL	Population served:	300
PWS type code:	NTNC	Violation ID:	1109902
Contaminant:	COLIFORM (TCR)		
Violation type:	Max Contaminant Level, Monthly (TCR)		
Compliance start date:	7/1/2002 0:00:00	Compliance end date:	9/30/2002 0:00:00
Enforcement date:	7/30/2002 0:00:00	Enforcement action:	State Public Notif Received
Violation measurement:	Not Reported		

PWS name:	ASHAWAY ELEMENTARY SCHOOL	Population served:	300
PWS type code:	NTNC	Violation ID:	1109902
Contaminant:	COLIFORM (TCR)		
Violation type:	Max Contaminant Level, Monthly (TCR)		
Compliance start date:	7/1/2002 0:00:00	Compliance end date:	9/30/2002 0:00:00
Enforcement date:	9/20/2002 0:00:00	Enforcement action:	State Tech Assistance Visit
Violation measurement:	Not Reported		

PWS name:	ASHAWAY ELEMENTARY SCHOOL	Population served:	300
PWS type code:	NTNC	Violation ID:	1110005
Contaminant:	COLIFORM (TCR)		
Violation type:	Max Contaminant Level, Monthly (TCR)		
Compliance start date:	7/1/2005 0:00:00	Compliance end date:	9/30/2005 0:00:00
Enforcement date:	8/24/2005 0:00:00	Enforcement action:	State Boil Water Order
Violation measurement:	Not Reported		

PWS name:	ASHAWAY ELEMENTARY SCHOOL	Population served:	300
PWS type code:	NTNC	Violation ID:	1110005
Contaminant:	COLIFORM (TCR)		
Violation type:	Max Contaminant Level, Monthly (TCR)		
Compliance start date:	7/1/2005 0:00:00	Compliance end date:	9/30/2005 0:00:00
Enforcement date:	8/24/2005 0:00:00	Enforcement action:	State Formal NOV Issued

Violation measurement:	Not Reported		
PWS name:	ASHAWAY ELEMENTARY SCHOOL	Population served:	300
PWS type code:	NTNC	Violation ID:	1110005
Contaminant:	COLIFORM (TCR)		
Violation type:	Max Contaminant Level, Monthly (TCR)		
Compliance start date:	7/1/2005 0:00:00	Compliance end date:	9/30/2005 0:00:00
Enforcement date:	8/24/2005 0:00:00	Enforcement action:	State Violation/Reminder Notice
Violation measurement:	Not Reported		
PWS name:	ASHAWAY ELEMENTARY SCHOOL	Population served:	300
PWS type code:	NTNC	Violation ID:	1110005
Contaminant:	COLIFORM (TCR)		
Violation type:	Max Contaminant Level, Monthly (TCR)		
Compliance start date:	7/1/2005 0:00:00	Compliance end date:	9/30/2005 0:00:00
Enforcement date:	8/24/2005 0:00:00	Enforcement action:	State Public Notif Requested
Violation measurement:	Not Reported		
PWS name:	ASHAWAY ELEMENTARY SCHOOL	Population served:	300
PWS type code:	NTNC	Violation ID:	1110005
Contaminant:	COLIFORM (TCR)		
Violation type:	Max Contaminant Level, Monthly (TCR)		
Compliance start date:	7/1/2005 0:00:00	Compliance end date:	9/30/2005 0:00:00
Enforcement date:	8/26/2005 0:00:00	Enforcement action:	State Public Notif Received
Violation measurement:	Not Reported		
PWS name:	ASHAWAY ELEMENTARY SCHOOL	Population served:	300
PWS type code:	NTNC	Violation ID:	1110005
Contaminant:	COLIFORM (TCR)		
Violation type:	Max Contaminant Level, Monthly (TCR)		
Compliance start date:	7/1/2005 0:00:00	Compliance end date:	9/30/2005 0:00:00
Enforcement date:	8/26/2005 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		
PWS name:	ASHAWAY ELEMENTARY SCHOOL	Population served:	300
PWS type code:	NTNC	Violation ID:	1110106
Contaminant:	LEAD & COPPER RULE	Violation type:	Follow-up and Routine Tap Sampling
Compliance start date:	1/1/2006 0:00:00	Compliance end date:	7/11/2007 0:00:00
Enforcement date:	6/23/2006 0:00:00	Enforcement action:	State Formal NOV Issued
Violation measurement:	Not Reported		
PWS name:	ASHAWAY ELEMENTARY SCHOOL	Population served:	300
PWS type code:	NTNC	Violation ID:	1110106
Contaminant:	LEAD & COPPER RULE	Violation type:	Follow-up and Routine Tap Sampling
Compliance start date:	1/1/2006 0:00:00	Compliance end date:	7/11/2007 0:00:00
Enforcement date:	6/23/2006 0:00:00	Enforcement action:	State Violation/Reminder Notice
Violation measurement:	Not Reported		
PWS name:	ASHAWAY ELEMENTARY SCHOOL	Population served:	300
PWS type code:	NTNC	Violation ID:	1110106
Contaminant:	LEAD & COPPER RULE	Violation type:	Follow-up and Routine Tap Sampling
Compliance start date:	1/1/2006 0:00:00	Compliance end date:	7/11/2007 0:00:00
Enforcement date:	6/23/2006 0:00:00	Enforcement action:	State Public Notif Requested
Violation measurement:	Not Reported		
PWS name:	ASHAWAY ELEMENTARY SCHOOL	Population served:	300
PWS type code:	NTNC	Violation ID:	1110106
Contaminant:	LEAD & COPPER RULE	Violation type:	Follow-up and Routine Tap Sampling
Compliance start date:	1/1/2006 0:00:00	Compliance end date:	7/11/2007 0:00:00
Enforcement date:	7/11/2007 0:00:00	Enforcement action:	State Public Notif Received
Violation measurement:	Not Reported		

PWS name:	ASHAWAY ELEMENTARY SCHOOL	Population served:	300
PWS type code:	NTNC	Violation ID:	1110106
Contaminant:	LEAD & COPPER RULE	Violation type:	Follow-up and Routine Tap Sampling
Compliance start date:	1/1/2006 0:00:00	Compliance end date:	7/11/2007 0:00:00
Enforcement date:	7/11/2007 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

11
NNE
1/2 - 1 Mile
Higher

RI WELLS **RI7000000000387**

WELLS:

Facility ID:	WL001	Facility Name:	DRILLED WELL (BR)
PWS Type:	Non Community Transient		
PWS Name:	ASHAWAY LINE & TWINE MFG. CO.-UPPER MILL		
Public Water System #:	RI1000044	Water System Status:	Active
Water System Facility:	Active	City Served:	HOPKINTON
Population:	25		

Description:	Grout Depth	Measurement:	240
Units:	FT		

Description:	Inner Protective Radius	Measurement:	200
Units:	FT		

Description:	Well Diameter	Measurement:	6
Units:	IN		

Description:	Well Head Protection Area Diameter		
Measurement:	1750	Units:	FT

Factype:

Flow Rate Type:	PUMP	Flow Rate Amount:	5
Flow Rate Units:	GPM		
Pump Description:	Not Reported		

Flow Rate Type:	RATE	Flow Rate Amount:	10
Flow Rate Units:	GPM		
Pump Description:	Not Reported		

12
South
1/2 - 1 Mile
Higher

RI WELLS **RI7000000000406**

WELLS:

Facility ID:	WL001	Facility Name:	DRILLED WELL #1 (BR)
PWS Type:	Non Community Transient	PWS Name:	LUCKY HOUSE LLC
Public Water System #:	RI2000129	Water System Status:	Active
Water System Facility:	Active	City Served:	HOPKINTON
Population:	80		

Description:	Bottom of casing	Measurement:	40

Units:	BGS		
Description:	Depth to bedrock	Measurement:	35
Units:	BGS		
Description:	Depth at Completion	Measurement:	165
Units:	FT		
Description:	Depth at completion	Measurement:	165
Units:	BGS		
Description:	Inner Protective Radius	Measurement:	200
Units:	FT		
Description:	Grout Depth	Measurement:	165
Units:	FT		
Description:	Static Water Level	Measurement:	19
Units:	FT		
Description:	Pump Depth	Measurement:	135
Units:	BGS		
Description:	Well Diameter	Measurement:	6
Units:	IN		
Description:	Well Head Protection Area Diameter		
Measurement:	1750	Units:	FT

PWS ID:

Flow Rate Type:	PUMP	Flow Rate Amount:	8
Flow Rate Units:	GPM		
Pump Description:	Not Reported		
Flow Rate Type:	RATE	Flow Rate Amount:	10
Flow Rate Units:	GPM		
Pump Description:	Not Reported		

13
NNW
1/2 - 1 Mile
Higher

FED USGS **USGS40000225774**

Organization ID:	USGS-CT		
Organization Name:	USGS Connecticut Water Science Center		
Monitor Location:	CT-NSN 76	Type:	Well
Description:	82 ANTHONY RD	HUC:	01090005
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	New England crystalline-rock aquifers		
Formation Type:	Non-Carbonate Crystalline Bedrock		
Aquifer Type:	Not Reported	Construction Date:	19730608
Well Depth:	104	Well Depth Units:	ft
Well Hole Depth:	104	Well Hole Depth Units:	ft
Ground water levels,Number of Measurements:	1	Level reading date:	1973-06-08
Feet below surface:	5	Feet to sea level:	Not Reported
Note:	Not Reported		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

B14
NNE
1/2 - 1 Mile
Higher

FED USGS **USGS40001047484**

Organization ID:	USGS-MA		
Organization Name:	USGS Massachusetts Water Science Center		
Monitor Location:	RI-HOW 387	Type:	Well
Description:	Not Reported	HUC:	01090005
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Sand and gravel aquifers (glaciated regions)		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	1959	Well Depth:	103
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

B15
NNE
1/2 - 1 Mile
Higher

FED USGS **USGS40001047483**

Organization ID:	USGS-MA		
Organization Name:	USGS Massachusetts Water Science Center		
Monitor Location:	RI-HOW 416	Type:	Well
Description:	Not Reported	HUC:	01090005
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	195309
Well Depth:	100	Well Depth Units:	ft
Well Hole Depth:	125	Well Hole Depth Units:	ft

C16
NE
1/2 - 1 Mile
Higher

RI WELLS **RI7000000000389**

WELLS:

Facility ID:	WL001	Facility Name:	DRILLED WELL #1 (BR)
PWS Type:	Non Community Transient	PWS Name:	BRICK OVEN RESTAURANT AN0
Public Water System #:	RI2980009	Water System Status:	Active
Water System Facility:	Active	City Served:	HOPKINTON
Population:	212		

Description:	Bottom of casing	Measurement:	36
Units:	BGS		
Description:	Depth to bedrock	Measurement:	30
Units:	BGS		
Description:	Depth at completion	Measurement:	147
Units:	BGS		

Description:	Inner Protective Radius	Measurement:	200
Units:	FT		
Description:	Grout Depth	Measurement:	140
Units:	FT		
Description:	Pump Depth	Measurement:	127
Units:	FT		
Description:	Well Diameter	Measurement:	6
Units:	IN		
Description:	Well Head Protection Area Diameter		
Measurement:	1750	Units:	FT

Description:

Flow Rate Type:	PUMP	Flow Rate Amount:	8
Flow Rate Units:	GPM		
Pump Description:	Not Reported		
Flow Rate Type:	RATE	Flow Rate Amount:	10
Flow Rate Units:	GPM		
Pump Description:	Not Reported		

C17
NE
1/2 - 1 Mile
Higher

RI WELLS **RI7000000000386**

WELLS:

Facility ID:	WL001	Facility Name:	WELL (DP)
PWS Type:	Non Community Transient	PWS Name:	216 MAIN STREET LLC AN0
Public Water System #:	RI2980348	Water System Status:	Active
Water System Facility:	Active	City Served:	HOPKINTON
Population:	25		
Description:	Depth at completion	Measurement:	20
Units:	BGS		
Description:	Inner Protective Radius	Measurement:	400
Units:	FT		
Description:	Well Diameter	Measurement:	2
Units:	IN		
Description:	Well Head Protection Area Diameter		
Measurement:	1750	Units:	FT

Description:

Flow Rate Type:	PUMP	Flow Rate Amount:	10
Flow Rate Units:	GPM		
Pump Description:	Not Reported		
Flow Rate Type:	RATE	Flow Rate Amount:	10
Flow Rate Units:	GPM		
Pump Description:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

18
NE
1/2 - 1 Mile
Higher

FED USGS **USGS40001047476**

Organization ID:	USGS-MA		
Organization Name:	USGS Massachusetts Water Science Center		
Monitor Location:	RI-HOW 350	Type:	Well
Description:	Not Reported	HUC:	01090005
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Sand and gravel aquifers (glaciated regions)		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	1957	Well Depth:	98
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

19
South
1/2 - 1 Mile
Higher

RI WELLS **RI7000000000409**

WELLS:

Facility ID:	WL001	Facility Name:	WELL #1 (BR)
PWS Type:	Non Community Transient	PWS Name:	THE PILGRIMS BAPTIST CHURCH
Public Water System #:	RI2980302	Water System Status:	Active
Water System Facility:	Active	City Served:	HOPKINTON
Population:	125		

Description:	Bottom of casing	Measurement:	20
Units:	BGS		
Description:	Depth to bedrock	Measurement:	18
Units:	BGS		
Description:	Depth at completion	Measurement:	175
Units:	BGS		
Description:	Grout Depth	Measurement:	175
Units:	FT		
Description:	Inner Protective Radius	Measurement:	200
Units:	FT		
Description:	Well Diameter	Measurement:	6
Units:	IN		
Description:	Well Head Protection Area Diameter		
Measurement:	1872	Units:	FT

Description:

Flow Rate Type:	PUMP	Flow Rate Amount:	12
Flow Rate Units:	GPM		
Pump Description:	Not Reported		

Flow Rate Type:	RATE	Flow Rate Amount:	12
Flow Rate Units:	GPM		
Pump Description:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: RI Radon

Radon Test Results

Zipcode	Num Tests	# < 4 pCi/L	4 to 20	# > 20 pCi/L	Maximum
02804	73	41	31	1	60.2

Federal EPA Radon Zone for WASHINGTON County: 1

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 02804

Number of sites tested: 3

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	Not Reported	Not Reported	Not Reported	Not Reported
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	2.167 pCi/L	100%	0%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005, 2010 and 2015 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: US Fish & Wildlife Service
Telephone: 703-358-2171

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Community and Non-Community Wells
Source: Department of Environmental Management
Telephone: 401-277-2234
Includes Community, Non-Transient Non-Community and Transient Non-Community wells.

EPA-Approved Sole Source Aquifers in Rhode Island
Source: EPA
Telephone:
Sole source aquifers are defined as an aquifer designated as the sole or principal source of drinking water for a given aquifer service area; that is, an aquifer which is needed to supply 50% or more of the drinking water for the area and for which there are no reasonable alternative sources should the aquifer become contaminated.

OTHER STATE DATABASE INFORMATION

RADON

State Database: RI Radon
Source: Department of Health
Telephone: 401-222-2438
Radon Test Results

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

PHYSICAL SETTING SOURCE RECORDS SEARCHED

STREET AND ADDRESS INFORMATION

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Potter Hill Mill

198 Potter Hill Road

Westerly, RI 02891

Inquiry Number: 7688305.3

June 22, 2024

Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

06/22/24

Site Name:

Potter Hill Mill
198 Potter Hill Road
Westerly, RI 02891
EDR Inquiry # 7688305.3

Client Name:

GES, Inc.
100 Sebethe Drive, Unit A8
CROMWELL, CT 06416
Contact: Hannah Pallein

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Certified Sanborn Results:

Certification # B491-43FA-80BF

PO # 1524007/12/109

Project Potter Hill Mill

Maps Provided:

1964
1946

Sanborn® Library search results

Certification #: B491-43FA-80BF

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- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

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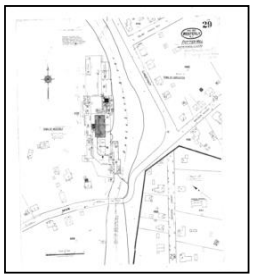
Sanborn Sheet Key

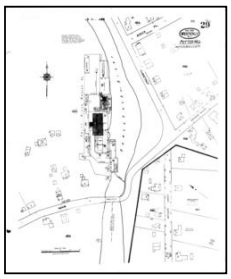
This Certified Sanborn Map Report is based upon the following Sanborn Fire Insurance map sheets.

1964 Source Sheets



Volume 1, Sheet 29
1964

1946 Source Sheets



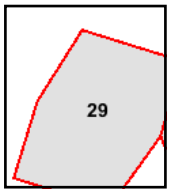
Volume 1, Sheet 29
1946



Site Name: Potter Hill Mill
Address: 198 Potter Hill Road
City, ST, ZIP: Westerly, RI 02891
Client: GES, Inc.
EDR Inquiry: 7688305.3
Order Date: 06/22/2024
Certification #: B491-43FA-80BF
Copyright: 1964

This Certified Sanborn Map combines the following sheets.
Outlined areas indicate map sheets within the collection.

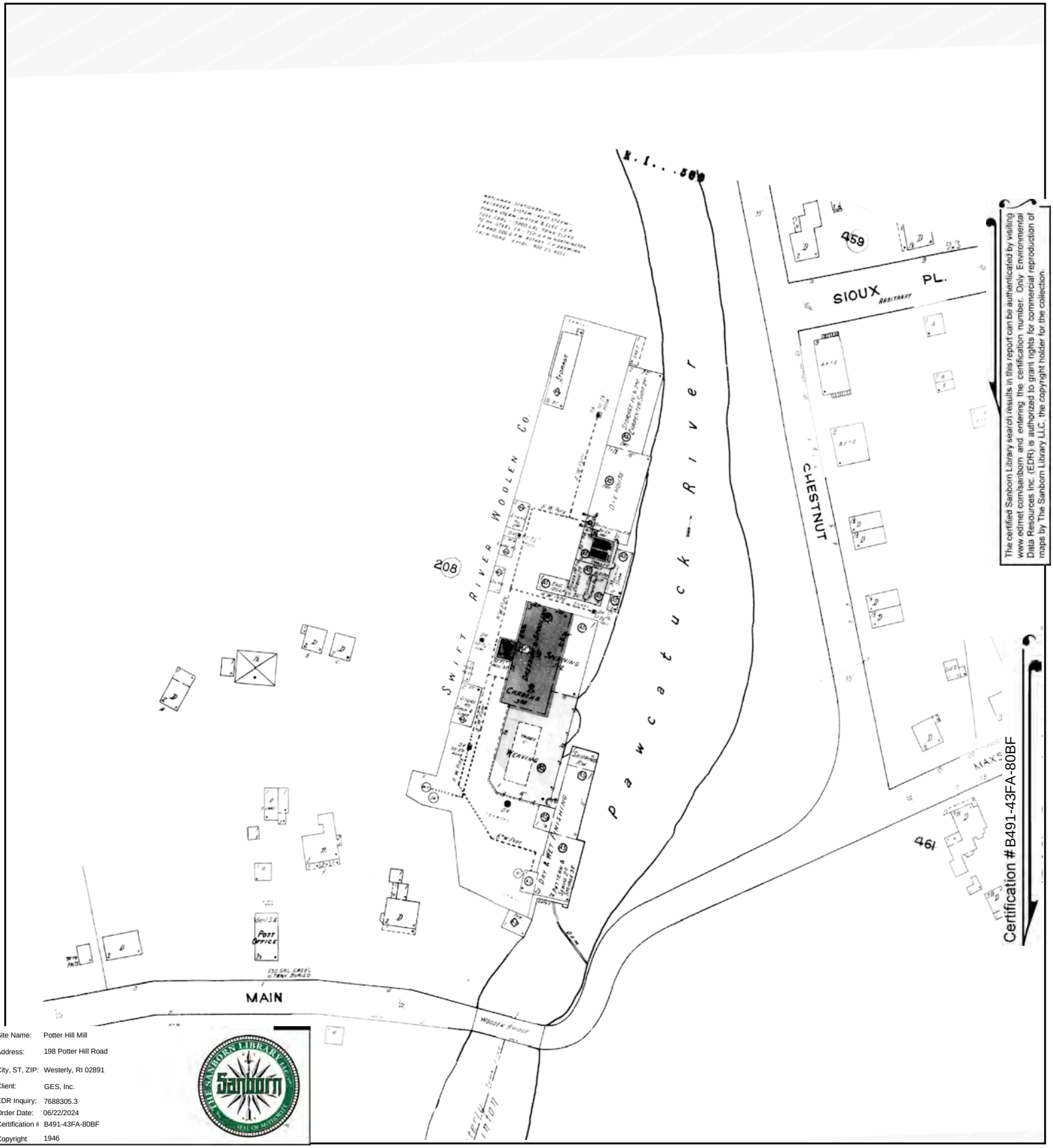




Volume 1, Sheet 29

0 Feet 150 300 600

N



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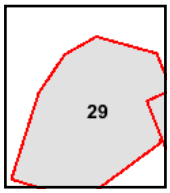
Site Name: Potter Hill Mill
Address: 198 Potter Hill Road
City, ST, ZIP: Westerly, RI 02891
Client: GES, Inc.
EDR Inquiry: 7688305.3
Order Date: 06/22/2024
Certification #: B491-43FA-80BF
Copyright: 1946

This Certified Sanborn Map combines the following sheets.
Outlined areas indicate map sheets within the collection.





Volume 1, Sheet 29

0 Feet 150 300 600

N

Potter Hill Mill

198 Potter Hill Road

Westerly, RI 02891

Inquiry Number: 7688305.8

June 22, 2024

The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

06/22/24

Site Name:

Potter Hill Mill
198 Potter Hill Road
Westerly, RI 02891
EDR Inquiry # 7688305.8

Client Name:

GES, Inc.
100 Sebethe Drive, Unit A8
CROMWELL, CT 06416
Contact: Hannah Pallein

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Search Results:

Year	*Scale*	*Details*	*Source*
2018	1"=500'	Flight Year: 2018	USDA/NAIP
2014	1"=500'	Flight Year: 2014	USDA/NAIP
2010	1"=500'	Flight Year: 2010	USDA/NAIP
2006	1"=500'	Flight Year: 2006	USDA/NAIP
2001	1"=500'	Acquisition Date: January 01, 2001	USGS/DOQQ
1996	1"=500'	Flight Date: April 15, 1996	CTMAGIC
1992	1"=500'	Acquisition Date: March 18, 1992	USGS/DOQQ
1985	1"=500'	Flight Date: April 17, 1985	USDA
1981	1"=500'	Flight Date: April 13, 1981	RIGIS
1974	1"=500'	Flight Date: April 20, 1974	USGS
1970	1"=500'	Flight Date: March 11, 1970	USGS
1962	1"=500'	Flight Date: April 27, 1962	RIGIS
1960	1"=500'	Flight Date: May 01, 1960	USGS
1957	1"=500'	Flight Date: April 10, 1957	USGS
1951	1"=500'	Flight Date: November 21, 1951	CTMAGIC
1941	1"=500'	Flight Date: October 09, 1941	USGS
1939	1"=500'	Flight Date: May 10, 1939	RIGIS
1934	1"=500'	Flight Date: April 09, 1934	FAIR

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YEAR: 2018
= 500'
N
EDR


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YEAR: 2014
= 500'
N
EDR


INQUIRY #: 7688305.8
YEAR: 2010
= 500'
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EDR


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YEAR: 2006
= 500'
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EDR


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YEAR: 2001
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EDR


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EDR


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YEAR: 1981
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EDR


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EDR


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YEAR: 1970
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EDR


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EDR


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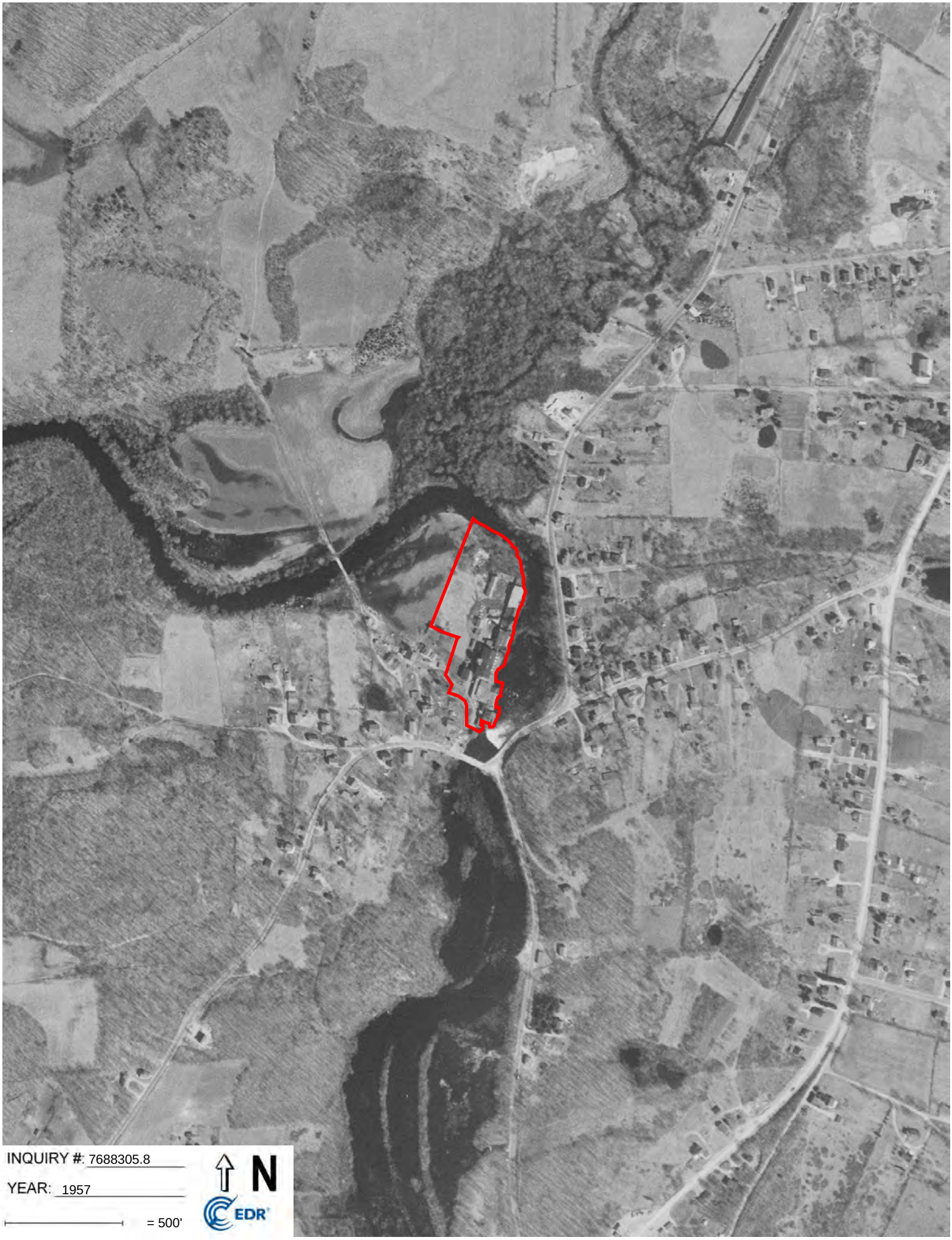
EDR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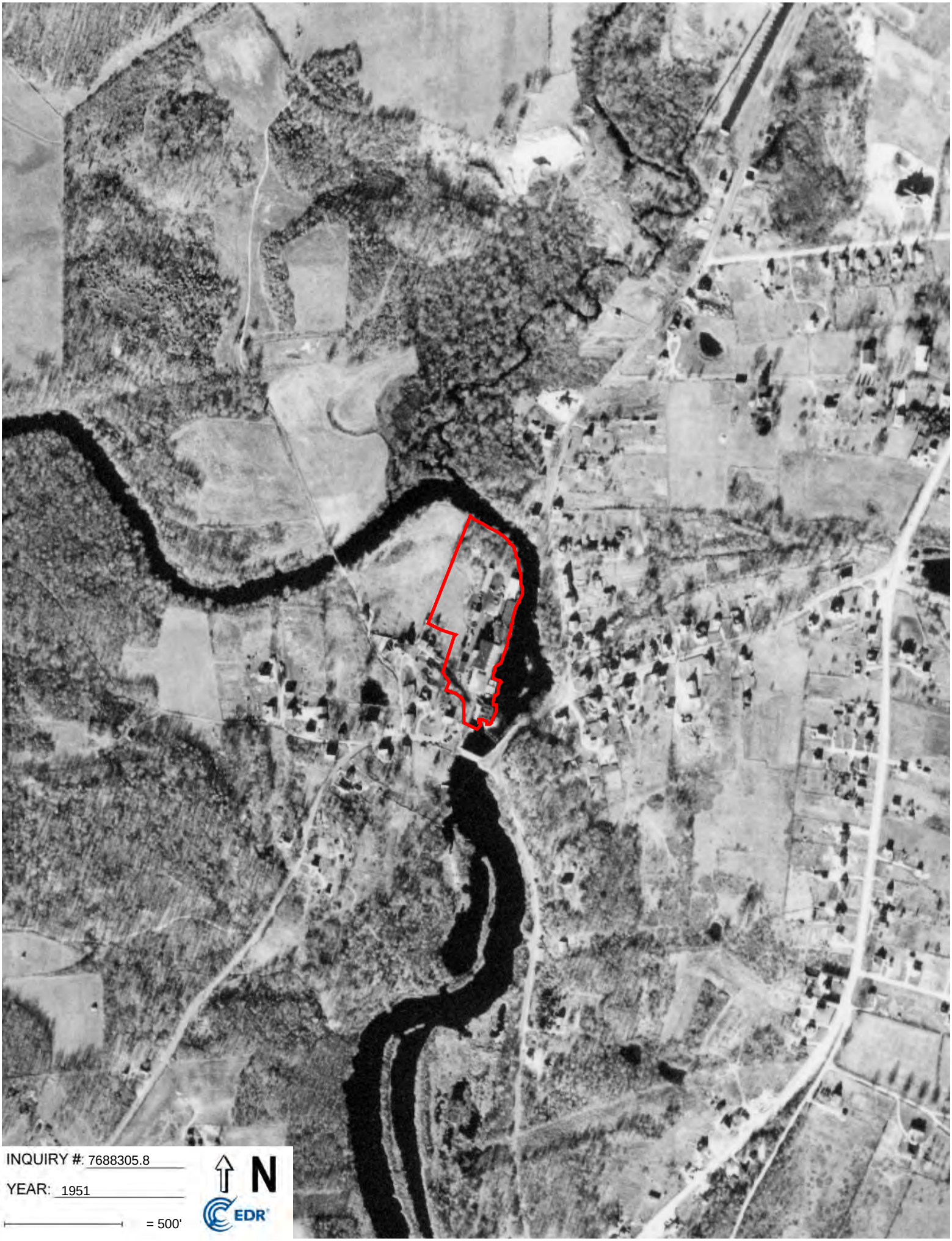
EDR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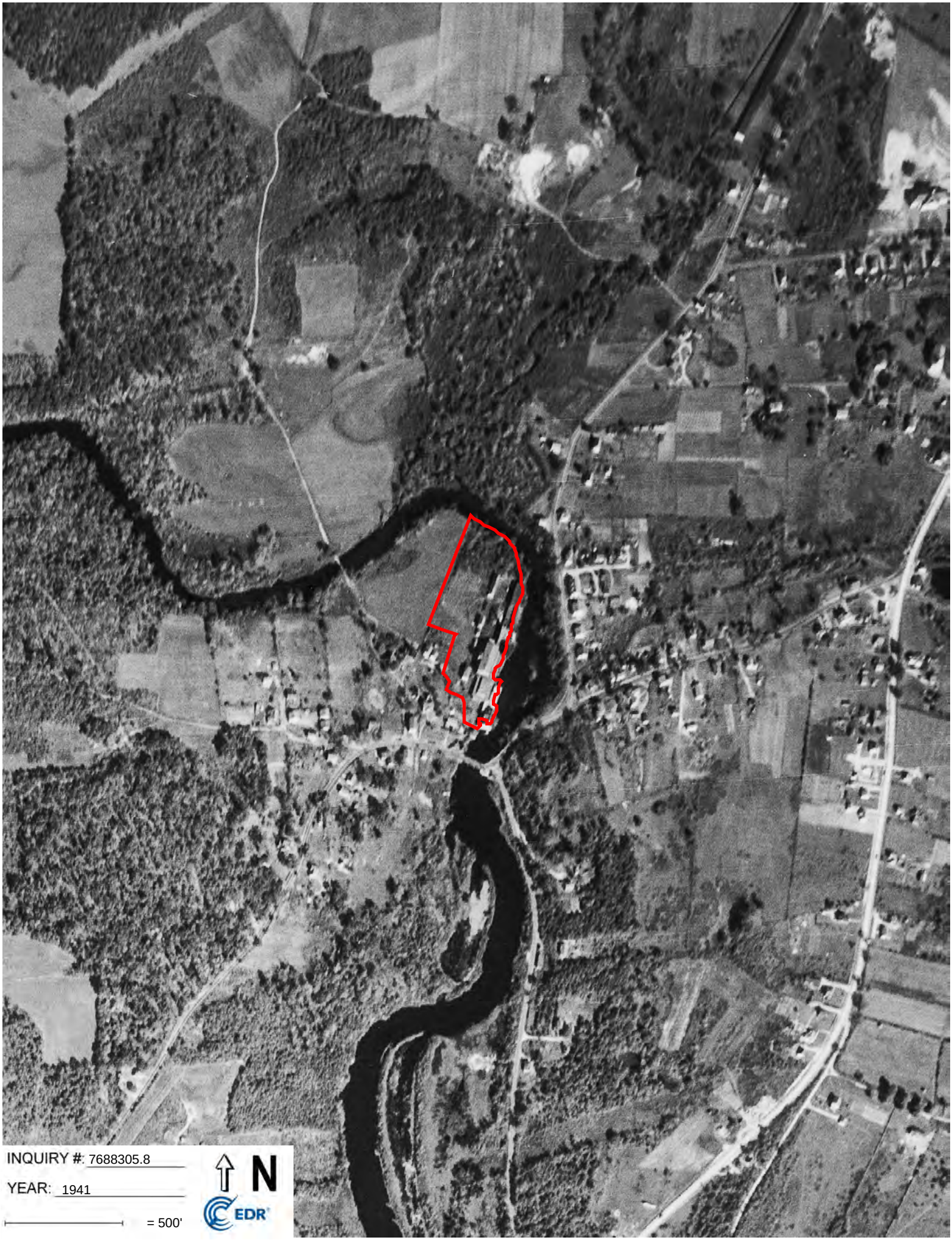
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EDR


INQUIRY #: 7688305.8
YEAR: 1939
= 500'
N
EDR


INQUIRY #: 7688305.8
YEAR: 1934
= 500'
N
EDR

Potter Hill Mill
198 Potter Hill Road
Westerly, RI 02891

Inquiry Number: 7688305.4
June 21, 2024

EDR Historical Topo Map Report

with QuadMatch™

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topo Map Report

06/21/24

Site Name:

Potter Hill Mill
198 Potter Hill Road
Westerly, RI 02891
EDR Inquiry # 7688305.4

Client Name:

GES, Inc.
100 Sebethe Drive, Unit A8
CROMWELL, CT 06416
Contact: Hannah Pallein

EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by GES, Inc. were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:

P.O.# 1524007/12/109

Project: Potter Hill Mill

Coordinates:

Latitude:	41.415396 41° 24' 55" North
Longitude:	-71.797156 -71° 47' 50" West
UTM Zone:	Zone 19 North
UTM X Meters:	266226.27
UTM Y Meters:	4588648.07
Elevation:	23.08' above sea level

Maps Provided:

2021	1953
2018	1947
2015	1943
2012	1921
2001	1913
1984	1893
1975	1889
1970	

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Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2021 Source Sheets



Ashaway
2021
7.5-minute, 24000

2018 Source Sheets



Ashaway
2018
7.5-minute, 24000

2015 Source Sheets



Ashaway
2015
7.5-minute, 24000

2012 Source Sheets



Ashaway
2012
7.5-minute, 24000

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2001 Source Sheets



Ashaway
2001
7.5-minute, 24000
Aerial Photo Revised 2001

1984 Source Sheets



Ashaway
1984
7.5-minute, 24000
Aerial Photo Revised 1980

1975 Source Sheets



Ashaway
1975
7.5-minute, 24000
Aerial Photo Revised 1975

1970 Source Sheets



Ashaway
1970
7.5-minute, 24000
Aerial Photo Revised 1970

Topo Sheet Key

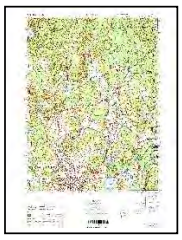
This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1953 Source Sheets



Ashaway
1953
7.5-minute, 24000

1947 Source Sheets



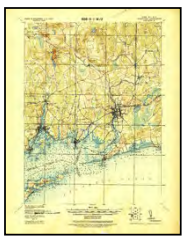
ASHAWAY
1947
7.5-minute, 25000

1943 Source Sheets



Ashaway
1943
7.5-minute, 31680

1921 Source Sheets



Stonington
1921
15-minute, 62500

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1913 Source Sheets



STONINGTON
1913
15-minute, 62500

1893 Source Sheets



Stonington
1893
15-minute, 62500

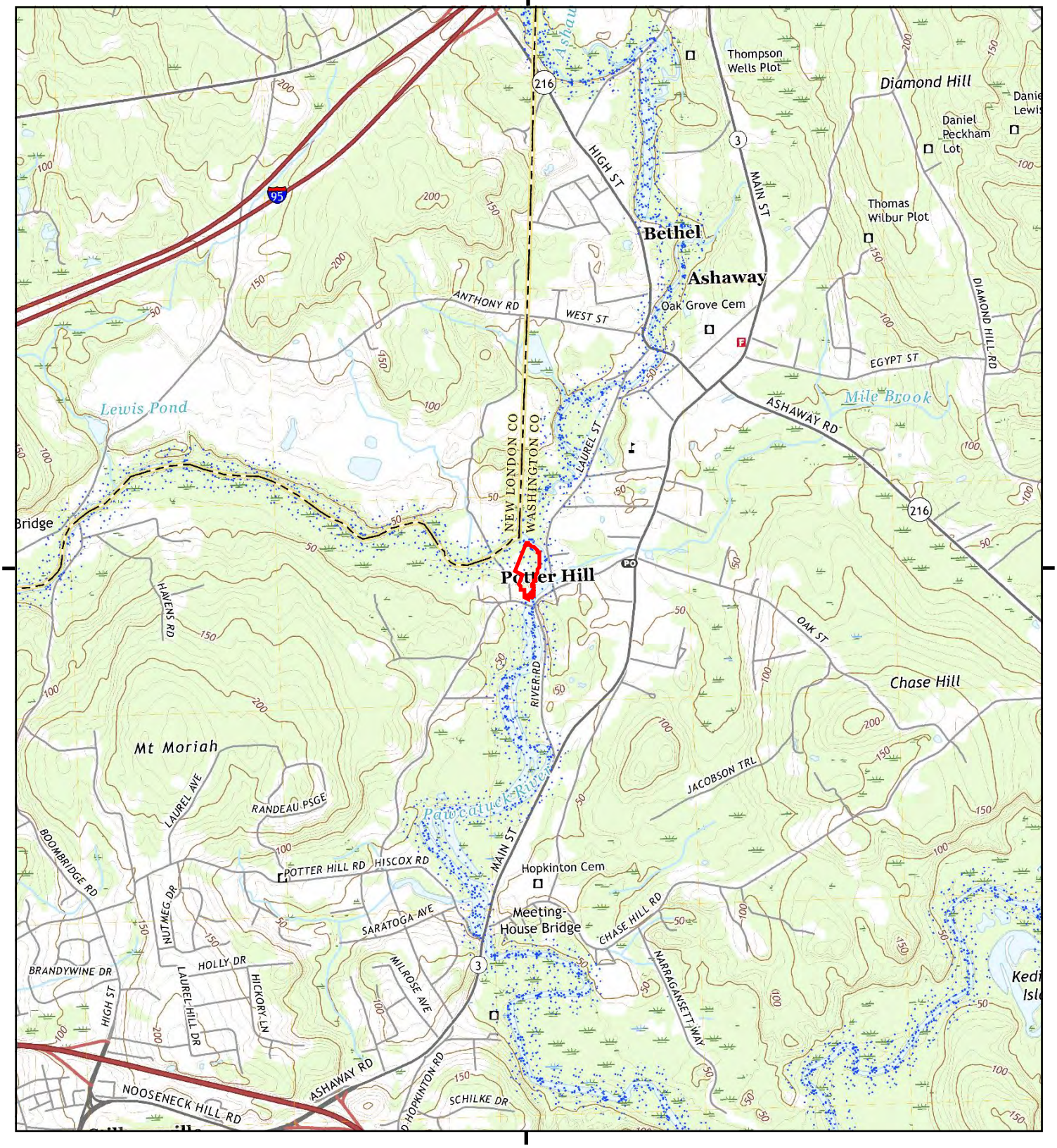
1889 Source Sheets



Stonington
1889
15-minute, 62500

Historical Topo Map

2021



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

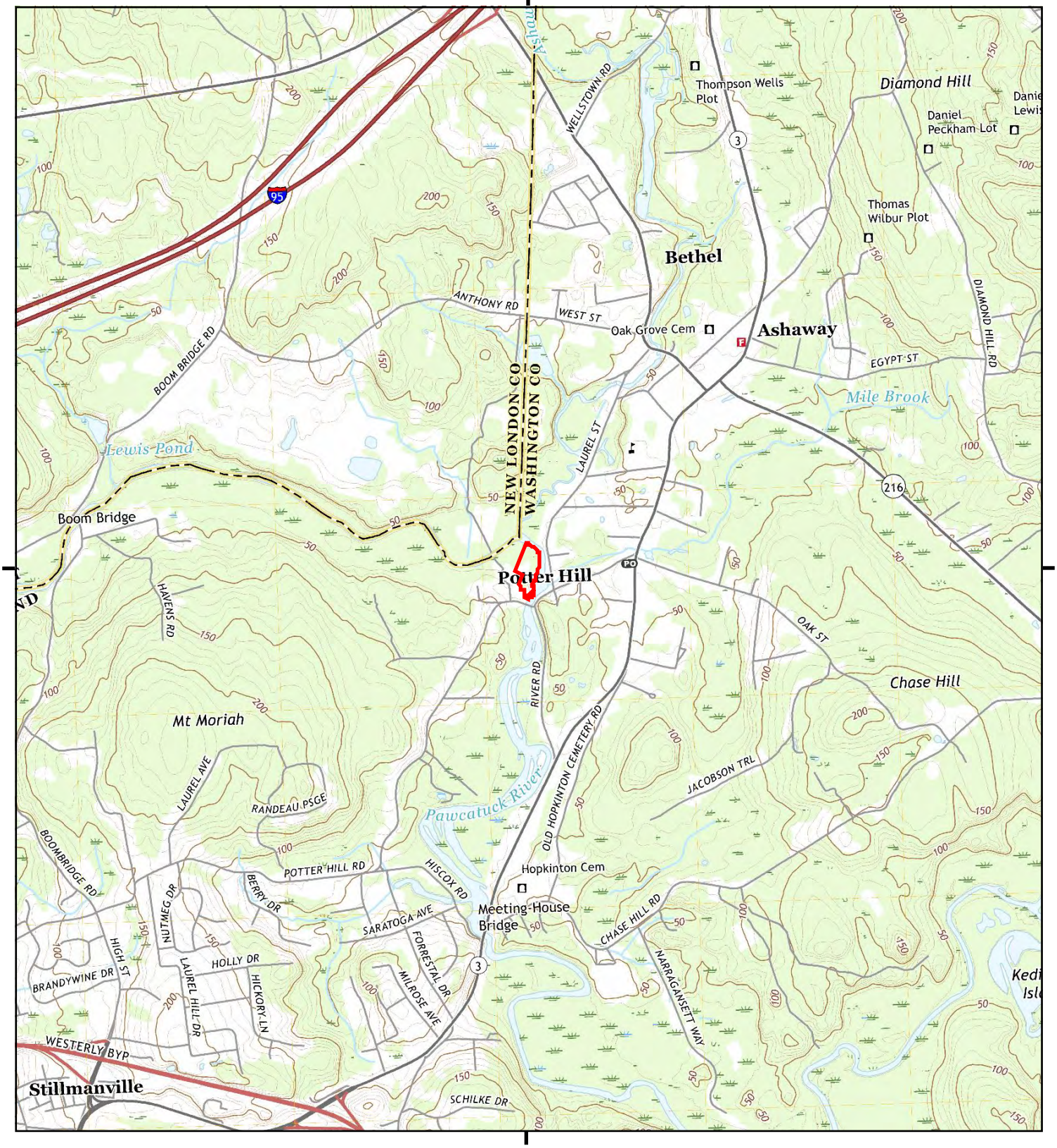
TP, Ashaway, 2021, 7.5-minute

SITE NAME: Potter Hill Mill
ADDRESS: 198 Potter Hill Road
Westerly, RI 02891
CLIENT: GES, Inc.

N

Historical Topo Map

2018



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

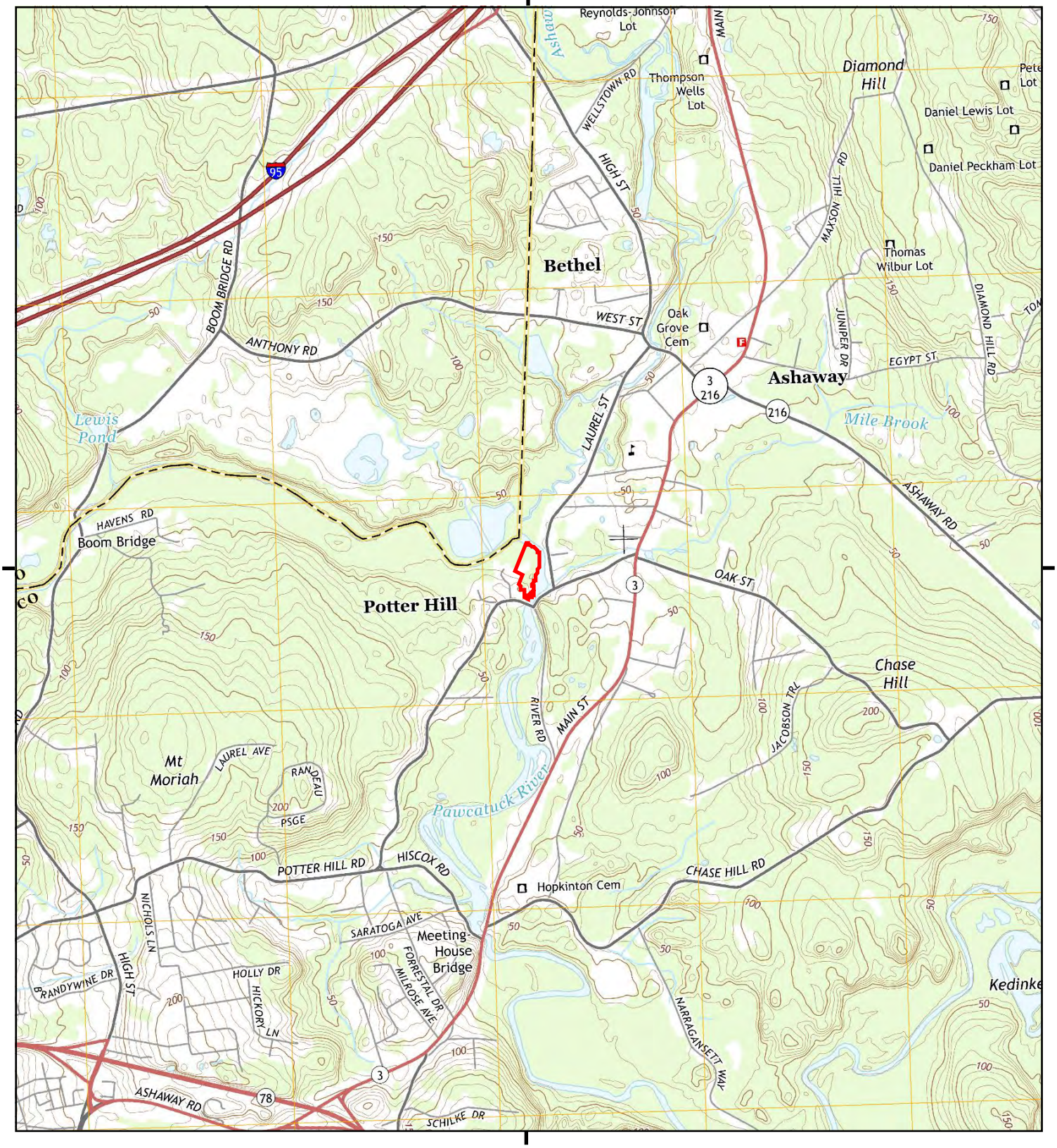
TP, Ashaway, 2018, 7.5-minute

SITE NAME: Potter Hill Mill
ADDRESS: 198 Potter Hill Road
Westerly, RI 02891
CLIENT: GES, Inc.

N

Historical Topo Map

2015



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W E
SW S SE

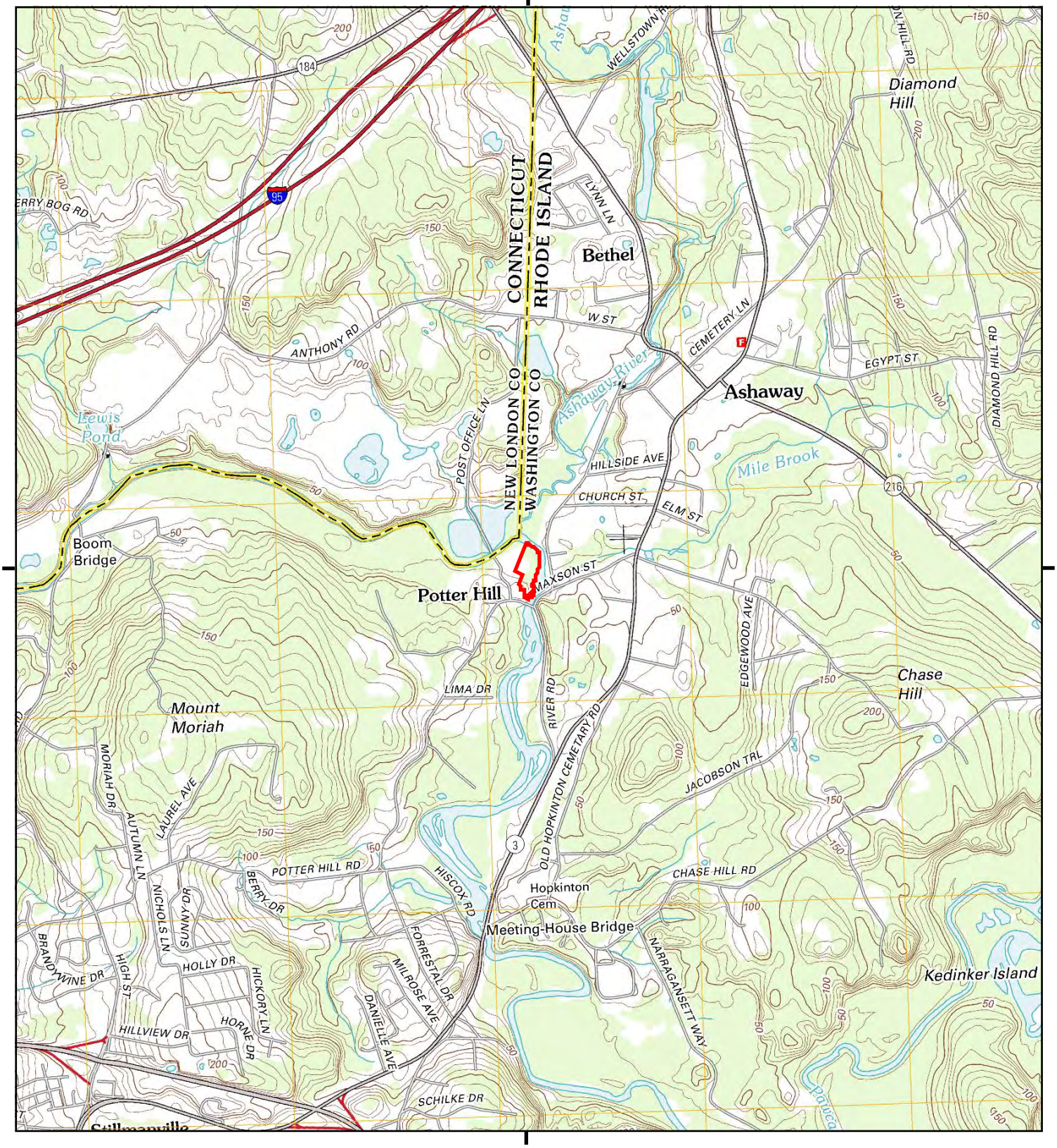
TP, Ashaway, 2015, 7.5-minute

SITE NAME: Potter Hill Mill
ADDRESS: 198 Potter Hill Road
Westerly, RI 02891
CLIENT: GES, Inc.

N

Historical Topo Map

2012



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W E
SW S SE

TP, Ashaway, 2012, 7.5-minute

SITE NAME: Potter Hill Mill
ADDRESS: 198 Potter Hill Road
Westerly, RI 02891
CLIENT: GES, Inc.

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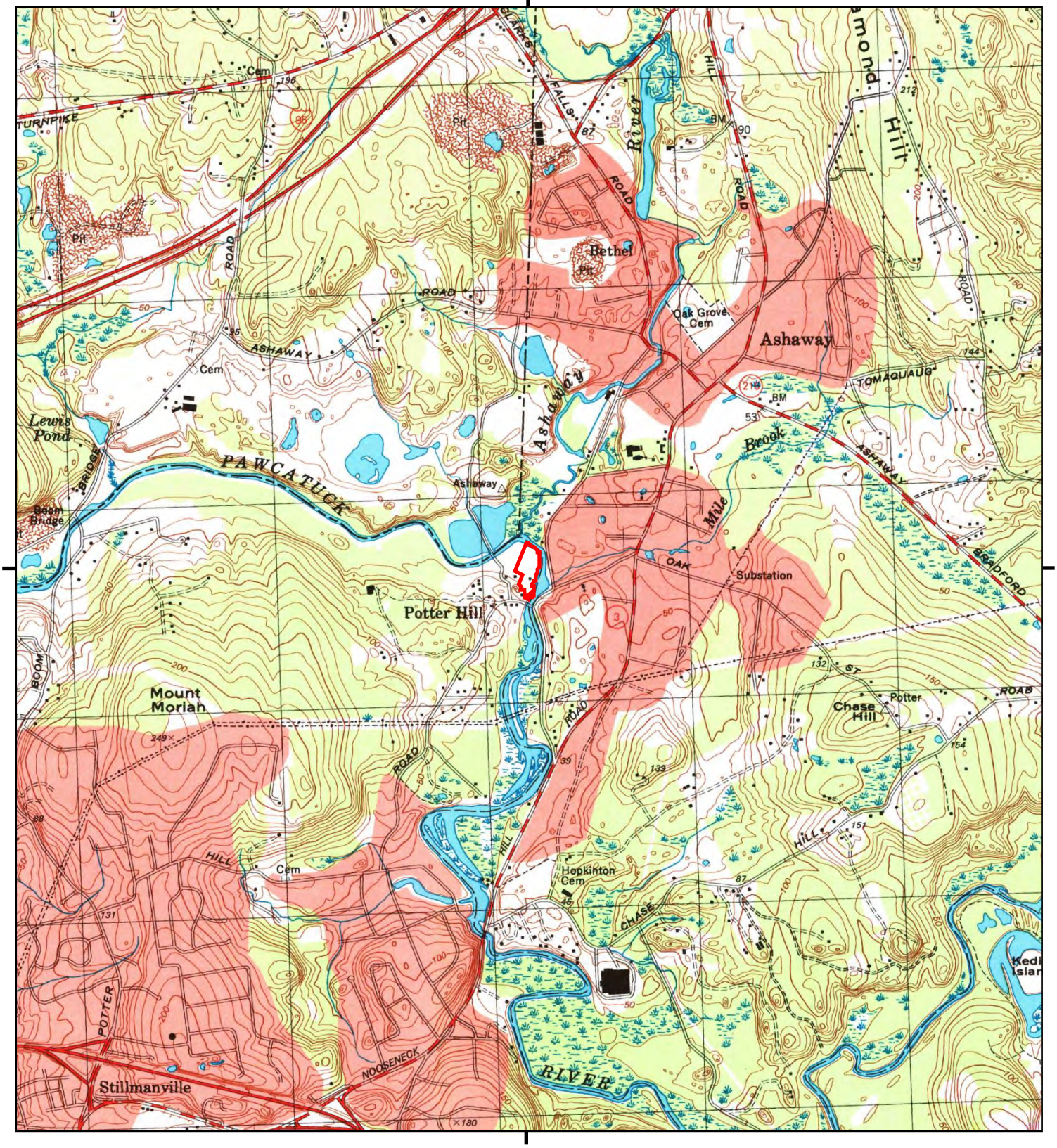

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NW N NE
W E
SW S SE

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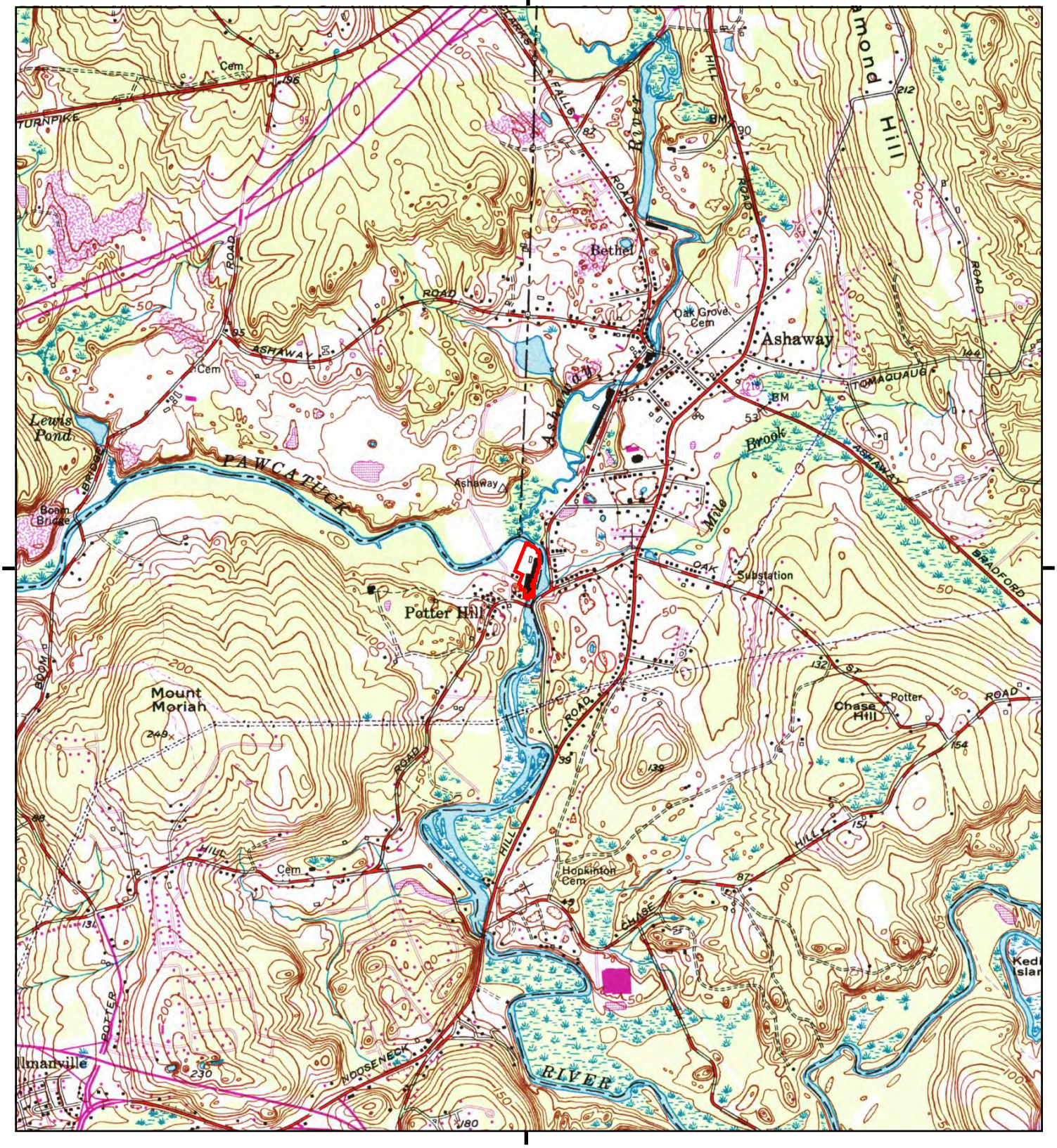
ADDRESS: 198 Potter Hill Road
Westerly, RI 02891
CLIENT: GES, Inc.

N



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0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Ashaway, 1984, 7.5-minute

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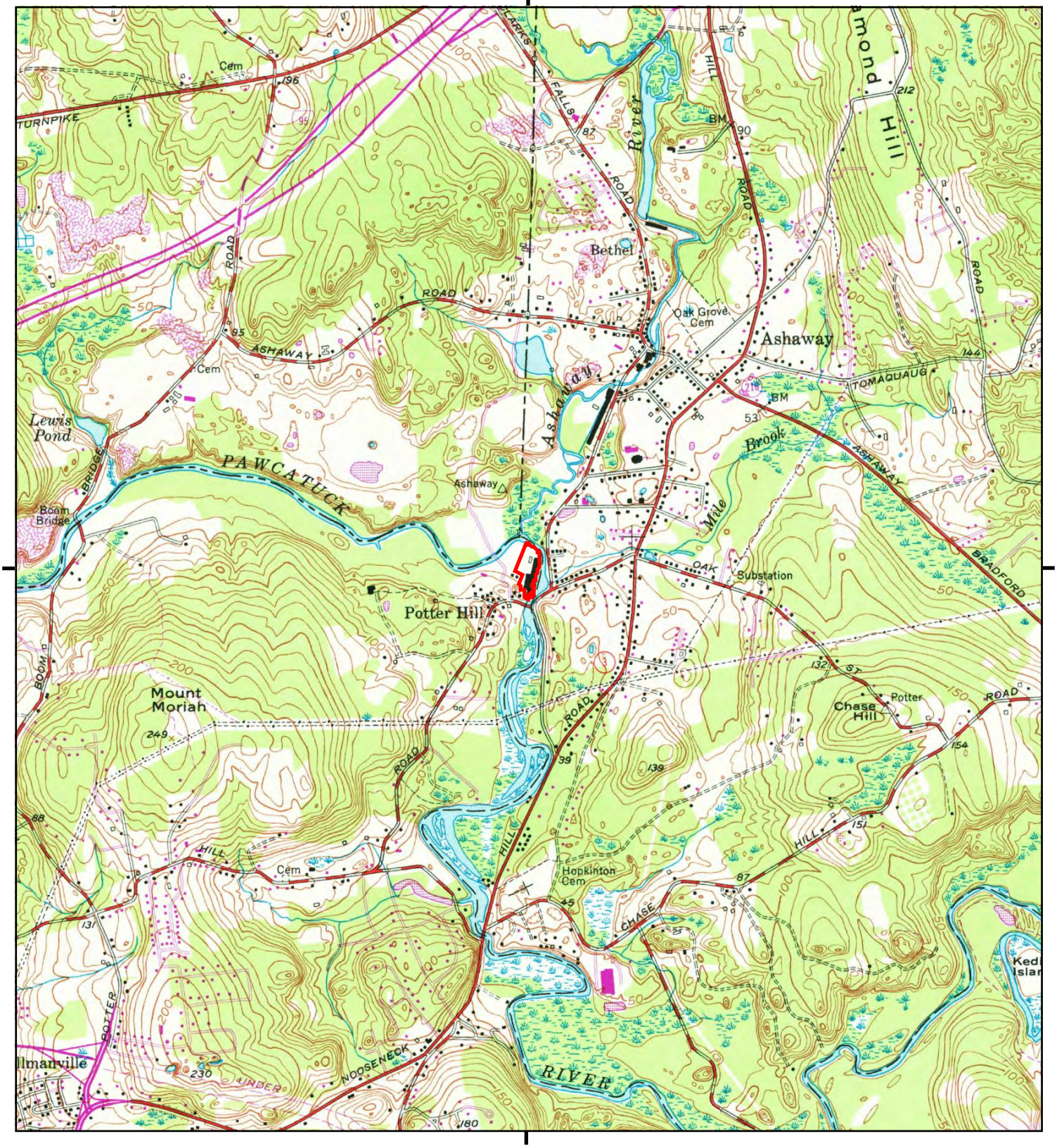
ADDRESS: 198 Potter Hill Road
Westerly, RI 02891
CLIENT: GES, Inc.

N



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0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Ashaway, 1975, 7.5-minute

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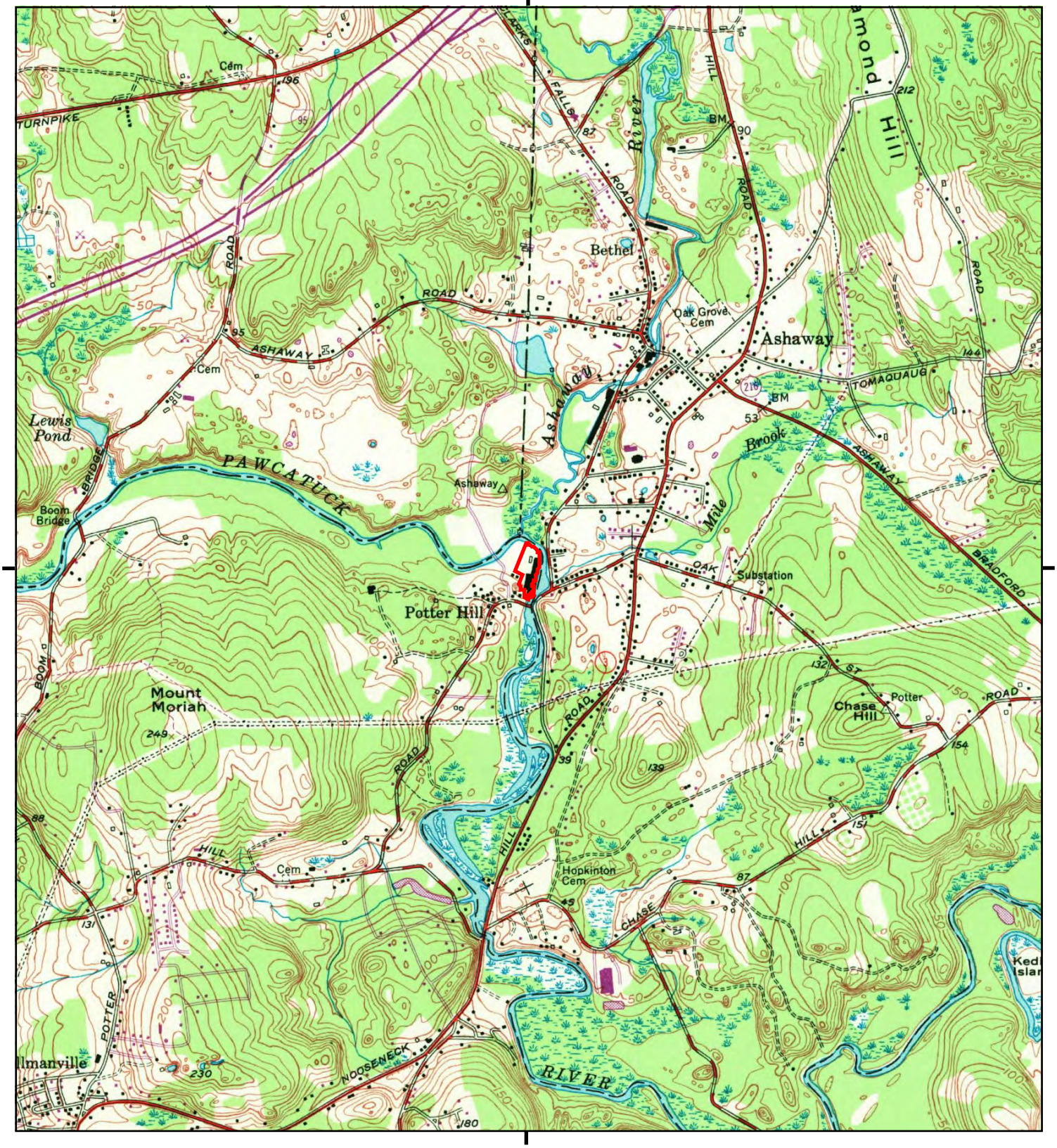
ADDRESS: 198 Potter Hill Road
Westerly, RI 02891
CLIENT: GES, Inc.

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Ashaway, 1970, 7.5-minute

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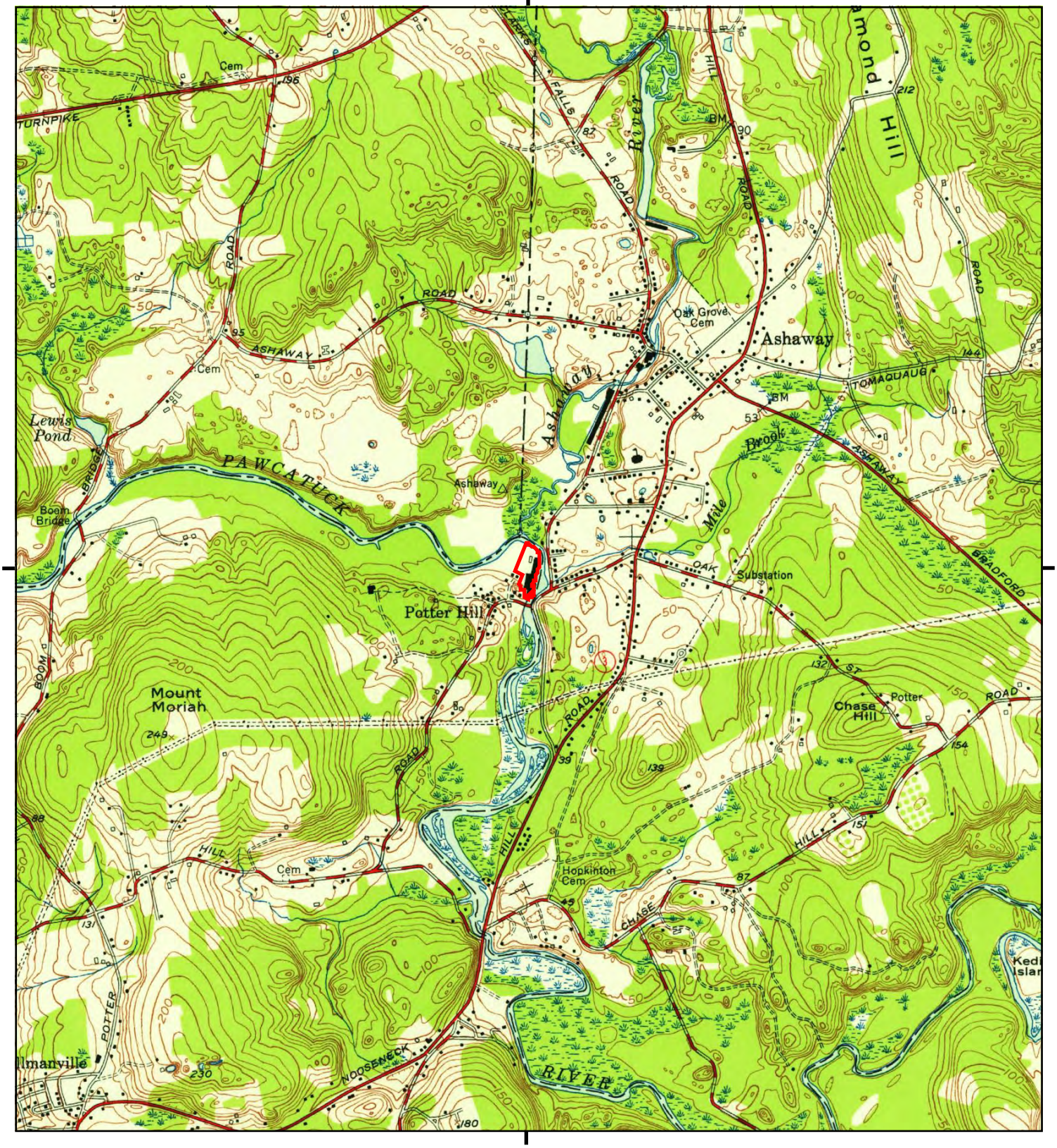
ADDRESS: 198 Potter Hill Road
Westerly, RI 02891
CLIENT: GES, Inc.

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

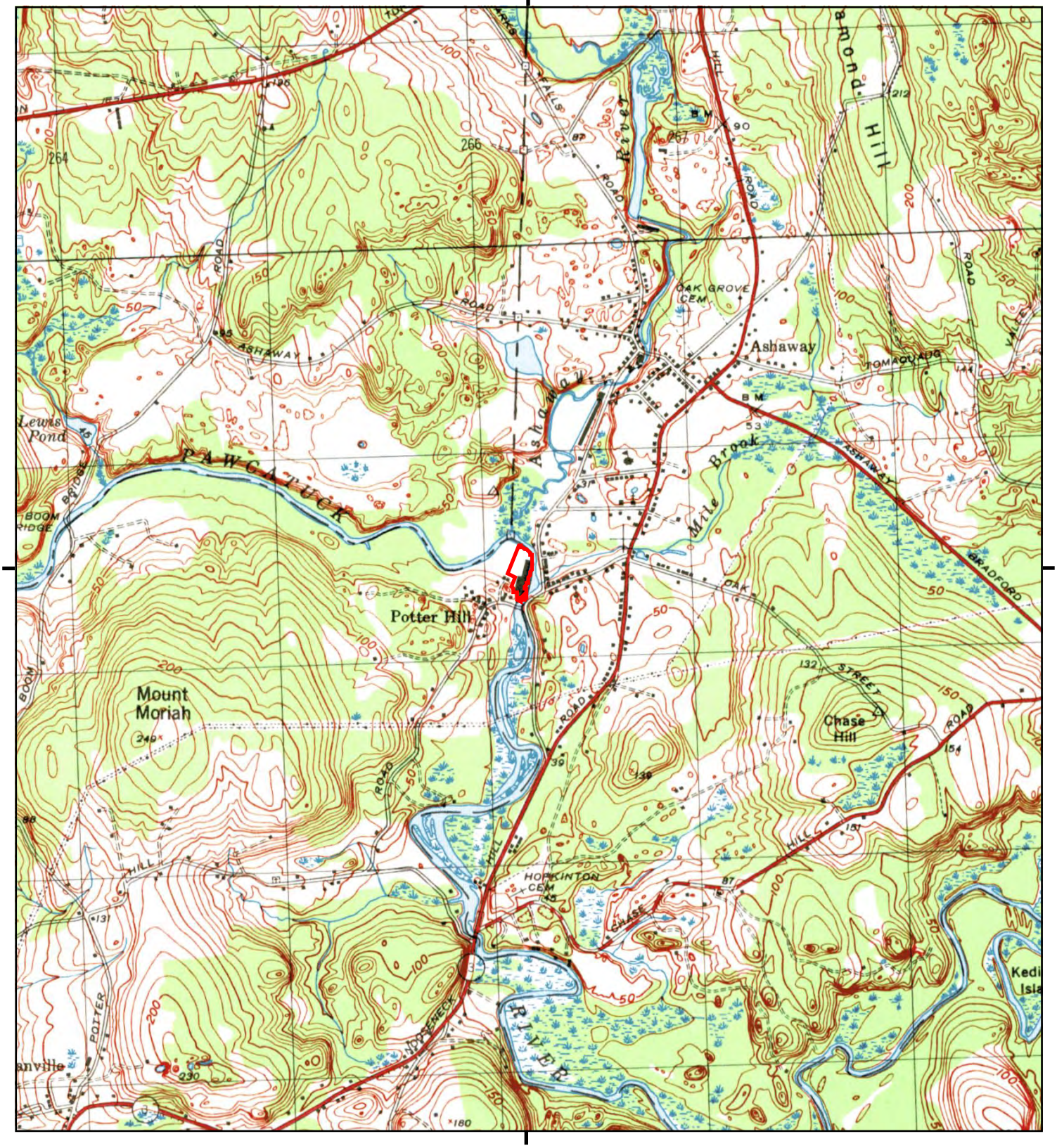
TP, Ashaway, 1953, 7.5-minute

SITE NAME: Potter Hill Mill
ADDRESS: 198 Potter Hill Road
Westerly, RI 02891
CLIENT: GES, Inc.

N

Historical Topo Map

1947



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NW N NE
W E
SW S SE

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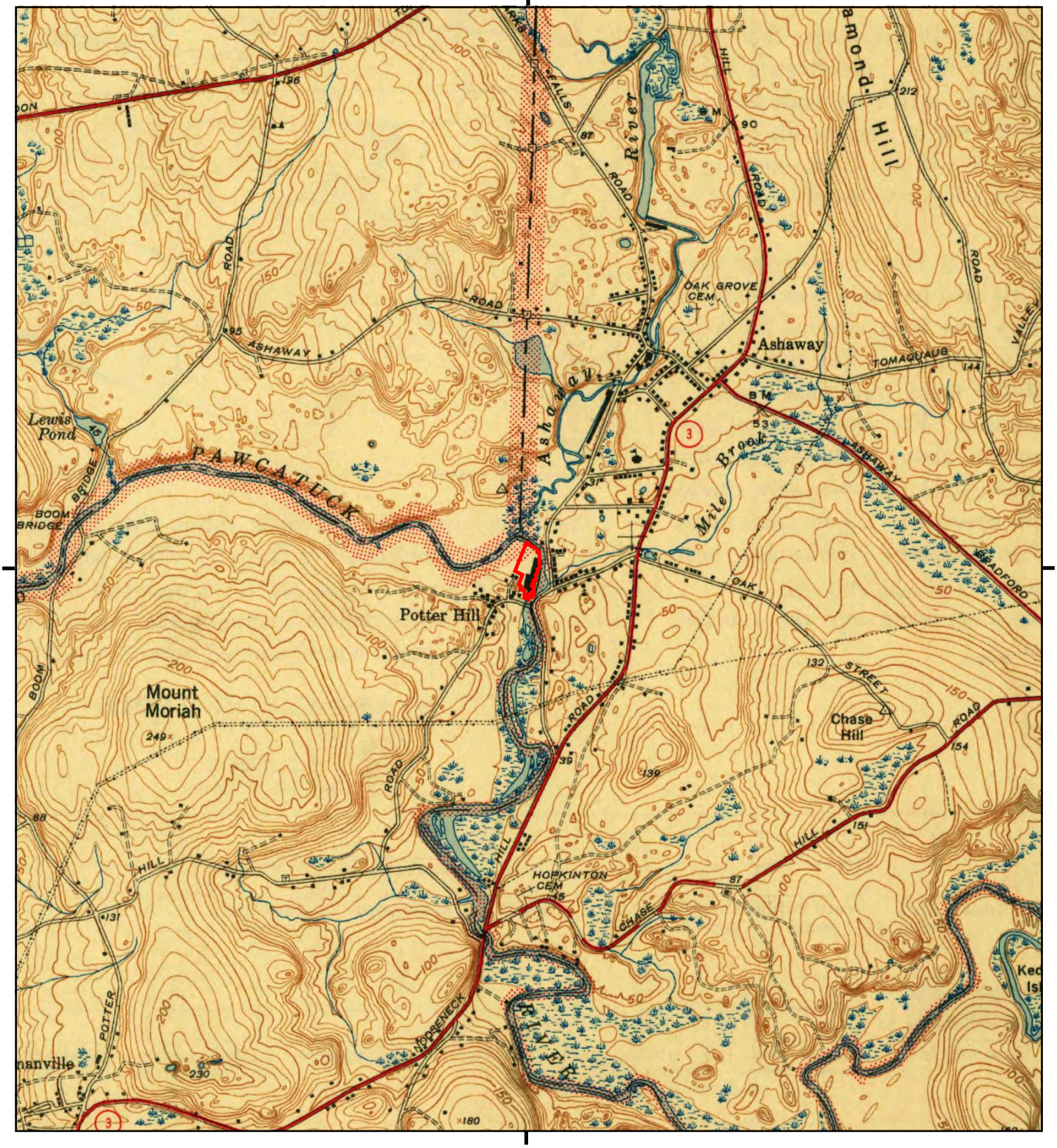
ADDRESS: 198 Potter Hill Road
Westerly, RI 02891
CLIENT: GES, Inc.

N



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NW N NE
W E
SW S SE

TP, Ashaway, 1943, 7.5-minute

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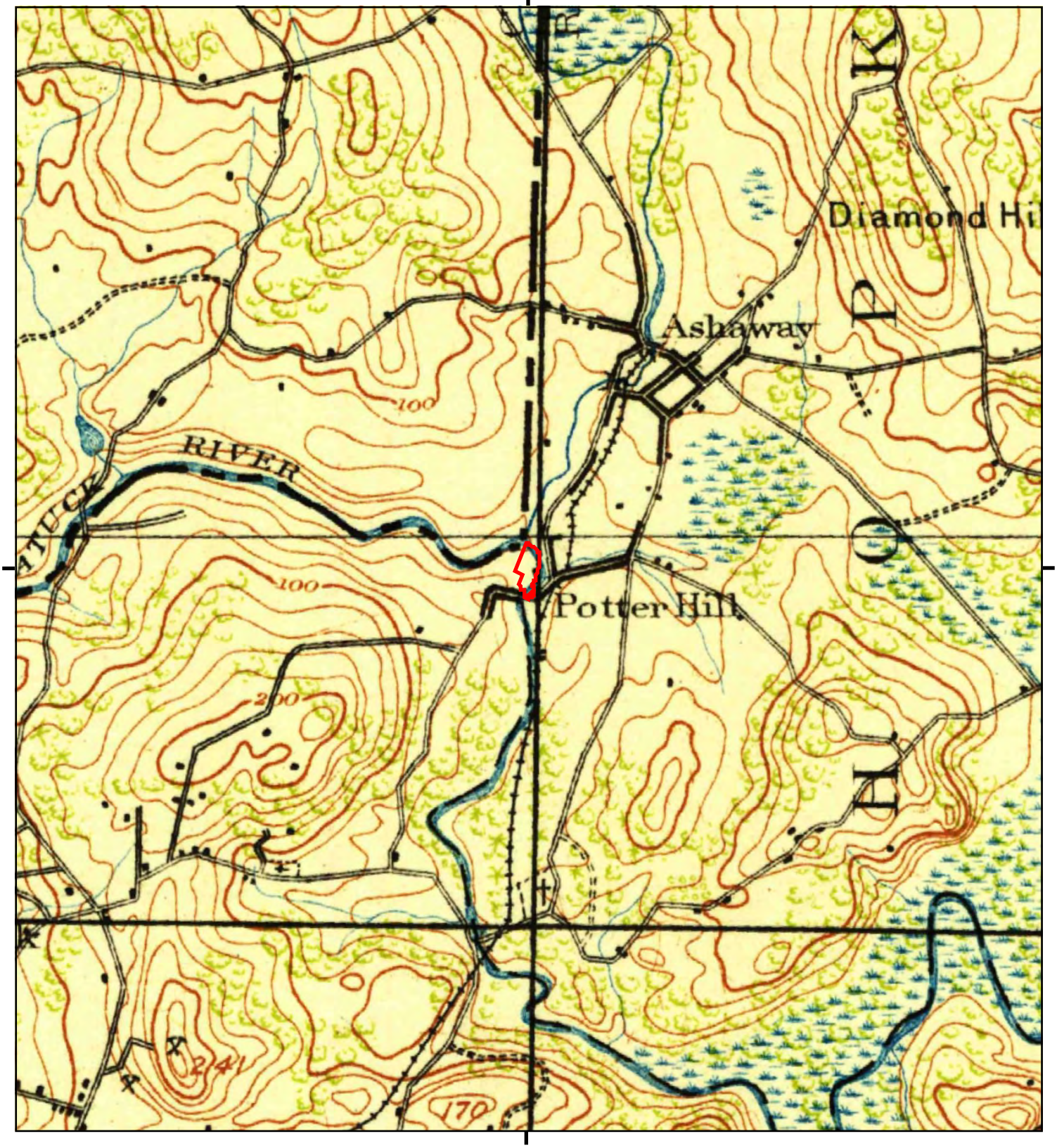
ADDRESS: 198 Potter Hill Road
Westerly, RI 02891
CLIENT: GES, Inc.

N



This report includes information from the following map sheet(s).

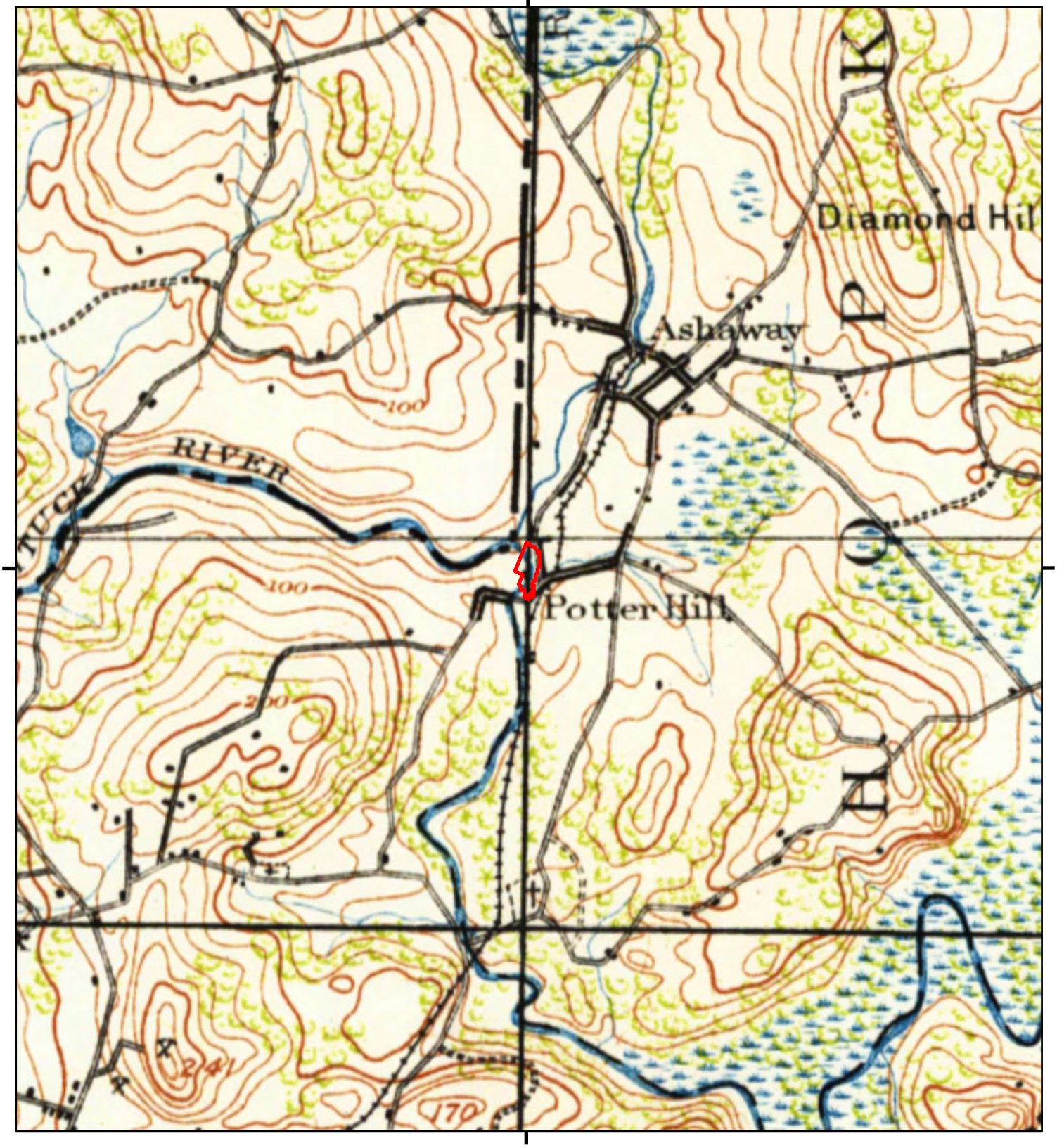
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Stonington, 1921, 15-minute

SITE NAME: Potter Hill Mill
ADDRESS: 198 Potter Hill Road
Westerly, RI 02891
CLIENT: GES, Inc.

N



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NW N NE
W E
SW S SE

TP, STONINGTON, 1913, 15-minute

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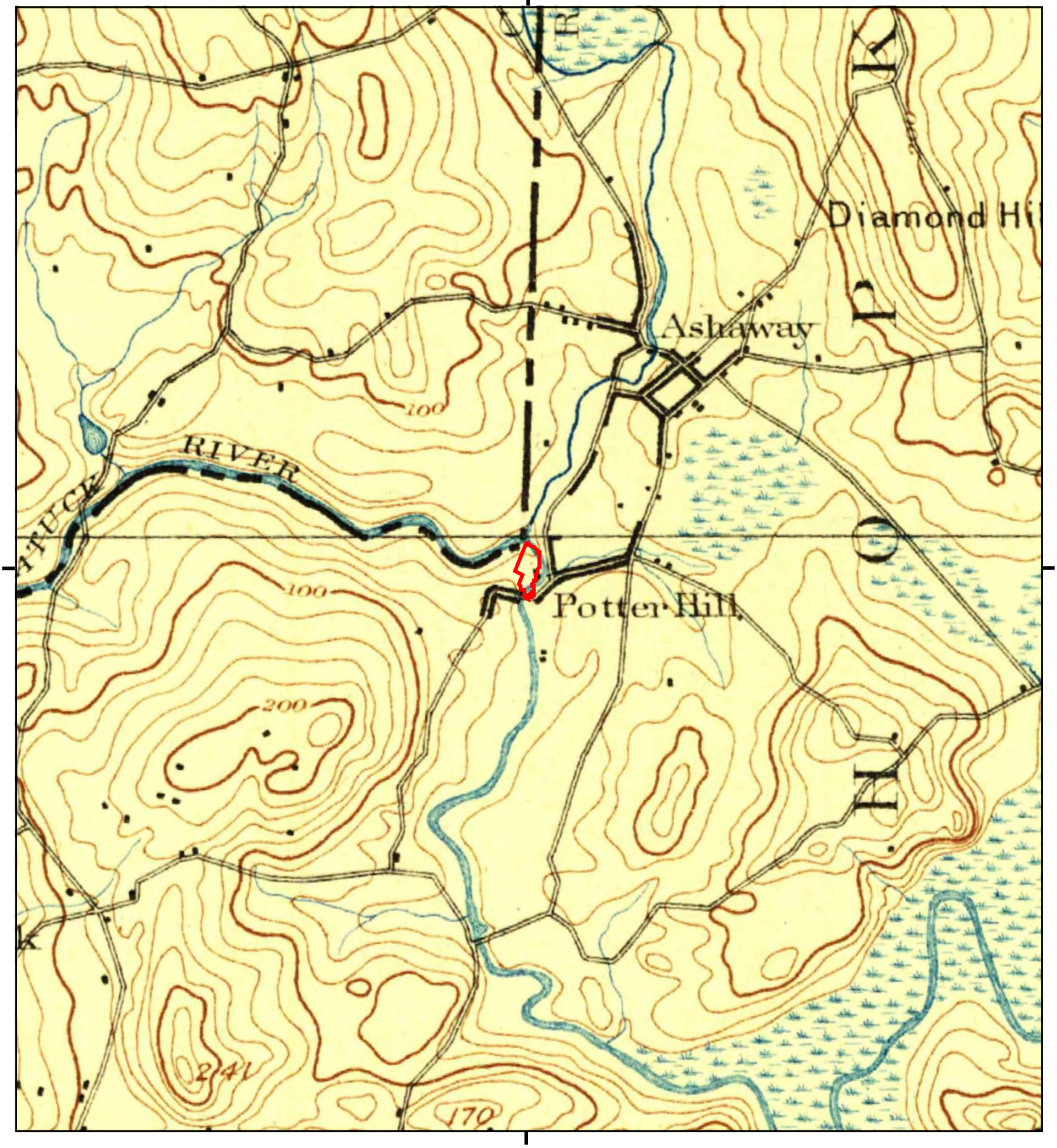
ADDRESS: 198 Potter Hill Road
Westerly, RI 02891
CLIENT: GES, Inc.

N



This report includes information from the following map sheet(s).

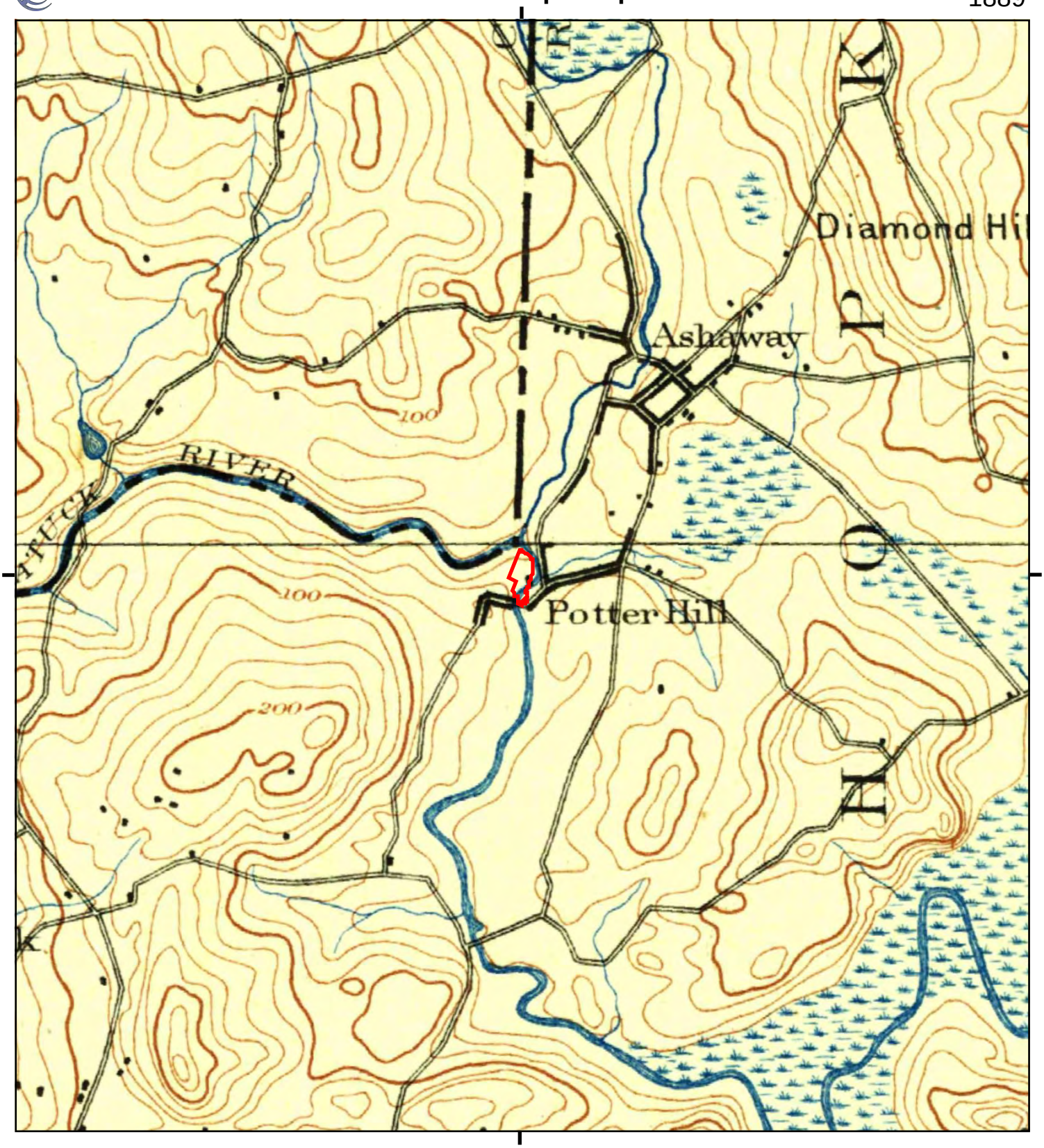
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Stonington, 1893, 15-minute

SITE NAME: Potter Hill Mill
ADDRESS: 198 Potter Hill Road
Westerly, RI 02891
CLIENT: GES, Inc.

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Stonington, 1889, 15-minute

SITE NAME: Potter Hill Mill
ADDRESS: 198 Potter Hill Road
Westerly, RI 02891
CLIENT: GES, Inc.

N

Potter Hill Mill
198 Potter Hill Road
Westerly, RI 02891

Inquiry Number: 7688305.5
June 26, 2024

The EDR-City Directory Image Report

Environmental Data Resources Inc
6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

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City Directory Images

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available business directory data at approximately five year intervals.

RECORD SOURCES

The EDR City Directory Report accesses a variety of business directory sources, including Haines, InfoUSA, Polk, Cole, Bresser, and Stewart. Listings marked as EDR Digital Archive access Cole and InfoUSA records. The various directory sources enhance and complement each other to provide a more thorough and accurate report.

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RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

Year	*Target Street*	*Cross Street*	*Source*
2020	☑	☐	EDR Digital Archive
2017	☑	☐	Cole Information
2014	☑	☐	Cole Information
2010	☑	☐	Cole Information
2005	☑	☐	Cole Information
2000	☑	☐	Cole Information
1995	☑	☐	Cole Information
1992	☑	☐	Cole Information
1988	☑	☐	Cole Criss-Cross Directory
1984	☑	☐	Cole Criss-Cross Directory
1980	☑	☐	Polk's City Directory
1975	☑	☐	Polk's City Directory
1971	☑	☐	Polk's City Directory
1967	☑	☐	Polk's City Directory
1963	☑	☐	Polk's City Directory
1960	☑	☐	Polk's City Directory
1950	☑	☐	Polk's City Directory
1945	☑	☐	Polk's City Directory
1941	☑	☐	Polk's City Directory
1938	☑	☐	Sampson-Murdock City Directory

EXECUTIVE SUMMARY

RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

Year	***Target Street***	***Cross Street***	***Source***

FINDINGS

TARGET PROPERTY STREET

198 Potter Hill Road
Westerly, RI 02891

Year	*CD Image*	*Source*
POTTER HILL RD		
2020	pg A2	EDR Digital Archive
2017	pg A7	Cole Information
2014	pg A9	Cole Information
2010	pg A11	Cole Information
2005	pg A14	Cole Information
2000	pg A16	Cole Information
1995	pg A18	Cole Information
1992	pg A20	Cole Information
1988	pg A22	Cole Criss-Cross Directory
1988	pg A23	Cole Criss-Cross Directory
1984	pg A24	Cole Criss-Cross Directory
1984	pg A25	Cole Criss-Cross Directory
1980	pg A26	Polk's City Directory
1980	pg A27	Polk's City Directory
1980	pg A28	Polk's City Directory
1975	pg A29	Polk's City Directory
1975	pg A30	Polk's City Directory
1971	pg A31	Polk's City Directory
1971	pg A32	Polk's City Directory
1967	pg A33	Polk's City Directory
1967	pg A34	Polk's City Directory
1963	pg A35	Polk's City Directory
1963	pg A36	Polk's City Directory
1960	pg A37	Polk's City Directory
1960	pg A38	Polk's City Directory
1950	pg A39	Polk's City Directory
1945	pg A40	Polk's City Directory

FINDINGS

Year	***CD Image***	***Source***
1941	pg A41	Polk's City Directory
1941	pg A42	Polk's City Directory
1938	pg A43	Sampson-Murdock City Directory

FINDINGS

CROSS STREETS

No Cross Streets Identified

City Directory Images

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

POTTER HILL RD 2020

5	CINDY MCGUIRE
	DECARO GRAZIA
	DYLAN MCGUIRE
	FRANK DECARO
	MICHAEL MCGUIRE
	PAM CEKALA
8	JOANNE SULIMA
	JOHN SULIMA
	RACHAEL SULIMA
9	JENNIFER LUZZI
	JILLIAN LUZZI
	JOSEPH LUZZI
	MARIA LUZZI
10	LYNDSAY PARNIGONI
14	CHRISTOPHER SALAUN
	DONALD CHACE
22	MARY LAMOURINE
	MICHAEL MAIN
	RICHARD LAMOURINE
23	FAYETTE FINNEY
	SARAH FLORA
24	CAITLIN WALL
	STEPHEN WALL
	ZACHARY WALL
27	BRIAN WHITE
	LYDIA WHITE
28	JUTTA CHAPMAN
29	ALISHA ALGIER
	ANGELA ALGIER
	BRUCE ALGIER
	RICHARD LAMOURINE
31	SABRINA GILLHEENEY
	SABRINA LUPINACCI
35	FAY PICCOLO
	SAMUEL PICCOLO
	SHANE PICCOLO
	STEVEN PICCOLO
36	MARGARET MORIN
	MATTHEW WEST
37	EMILY MCBRIDE
	NANCY MCBRIDE
38	GEORGE WEST
	MARY WEST
40	JOHN HUME
	LINDA HUME
	ROBERT HUME
41	JEFFREY FARRAR
	JOHN FARRAR
43	AMANDA BAILEY
	DEAN BAILEY

POTTER HILL RD 2020 (Cont'd)

43	DONNA BAILEY
	PETER BAILEY
44	ADRIENNE ALTOBELLI
	CHRISTOPHER WOOD
	JOHN LEPIKKO
	ROBERT GRAYSON
45	JOHN BABCOCK
	PIERRE LAMONTTE
46	LORNA DUNE
	ZACHARY PLACE
49	JOSEPH CAPALBO
	KEITH ROCHEFORT
51	AMANDA COWAN
53	JUSTIN BOTHUR
	REBEKAH MARTINEZ
55	MICHELLE PERKINS
	SCOTT PERKINS
56	SHIRLEY SPOSATO
	STEPHEN SPOSATO
58	ERICA SPOSATO
	STEPHEN SPOSATO
59	ROBERT CASEY
60	MARK RIZZO
	TINA RIZZO
61	LAUDONE LAUREN
	STEPHANIE BROWN
	STEPHEN LAUDONE
63	ANTHONY SACCAMANDO
	CHRISTINE SACCAMANDO
65	ALEXANDRA CHASE
	JOSEPH BRUNO
	PALMANN BRUNO
67	JAMES SEICZKIEWICZ
	JAMES SIECZKIEWICZ
	RENEE SIECZKIEWICZ
70	CHELSEA BETHEL
	SAMUEL BURDICK
71	GAYLE MCMAHON
	JUSTIN MCMAHON
	THEODORE MCMAHON
72	BRITNEY FINDEISEN
	JAMIE FELKER
	MARY MCLAUGHLIN
73	JAMES RIGGS
	LINDA RIGGS
74	JACOB SHORT
	MARY SHORT
	TIMOTHY SHORT
75	RACHEL DOYLE
	SEAN DOYLE

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

POTTER HILL RD 2020 (Cont'd)

76	SEAN HIGGINS
	TAMELA HIGGINS
77	ELIZABETH TOLMIE
78	DEBORAH QUARATELLA
	THOMAS QUARATELLA
79	STEVEN GAVITT
80	COLE CARTER
	HEATHER CARTER
	SCOTT CARTER
82	JEANNE DONATO
	JOHN DONATO
	KATHERINE DONATO
83	KENNETH BURTON
84	GERALDINE SHORTMAN
	GORDON SHORTMAN
88	ELISA WARD
	GARY ZALESKI
	JAMES WARD
	WARD ZALESKI
92	CATHY DUDA
	JESSICA DUDA
	MICHAEL DUDA
95	ANNE HOWE
	TIMOTHY HOWE
96	JORDAN HUSEREAU
	JOSEPH HUSEREAU
	PAMELA HUSEREAU
	SHANNON HUSEREAU
	TAYLOR HUSEREAU
98	JEFFREY DUDA
	KRISTEN LARSON
101	ALBERT TILT
	CHARLES THOMPSON
	CHRISTINA TILT
103	DANIEL SCHMITT
105	CHRISTOPHER ABBOTT
	FATIMA ABBOTT
106	JOYCE WORKMAN
109	LORIE HELLERT
	RYAN HELLERT
110	ROBERTA KEENA
	THOMAS KEENA
111	ALEXANDER THOMPSON
	DOROTHY THOMPSON
	JENNIFER THOMPSON
	NADINE TACELLI
112	JEANNIE CABIGTING
	KATHRYNN BURNS
	KATHRYNN CABIGTING
	MARK CABIGTING

POTTER HILL RD 2020 (Cont'd)

112	WILLIAM BURNS
113	JAMIE LARIVIERE
	NADINE LARIVIERE
	ROLAND LARIVIERE
116	CHAD TROMBINO
	KRISTEN TROMBINO
	MAIYA TROMBINO
	MARISSA TROMBINO
118	JOHN BOUCHER
	MELISSA BOUCHER
121	JEFFREY COTE
	JODY BROWN
	LUCILLE BROWN
	WILLIAM BROWN
124	JAMES SNOOK
	PATRICIA MORAVEC-SNOOK
125	NORVESA RUSSELL
	ROBERT RUSSELL
127	DEREK ROCKHOLZ
129	DALE CARR
	DAWN ECKLID
	JOHANNA SMITH
	THOMAS ECKLID
	ZACHARY RODERICK
135	DOUGLAS LIMA
	SETH TROMBINO
	STACEY TROMBINO
142	JAMES SMITH
143	AMANDA ARRUDA
	DEBRA OTTAVIANI
	PAUL OTTAVIANI
	STEVEN OTTAVIANI
146	BARBARA FALLON
	PATRICK WHISTON
156	WILLIAM BELLUCCI
161	LIAM AUDETTE
	MARY AUDETTE
163	BRUCE JACQUES
167	BRUCE JACQUES
	JANE JACQUES
175	KJELL INGEBRETSEN
181	LORIE BATES
	SHAWN SMITH
182	JOHN BENNETT
183	CHRISTOPHER WILES
186	HAROLD LAMOTTE
	MARTIN SHELDON
189	RICHARD MANN
190	GIOVANNI ALFIERI
	LESIA ALFIERI

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

POTTER HILL RD 2020 (Cont'd)

194 RICHARD MANN
196 ALLISON GOODSELL

Target Street	Cross Street	Source
✓	-	Cole Information

POTTER HILL RD 2017

5	DECARO, FRANK J
8	SULIMA, JOHN P
9	LUZZI, JOSEPH N
10	PARNIGONI, EDWARD F
14	CHACE, DON L
22	LAMOURINE, RICHARD D
23	FLORA, SARAH A
24	WALL, STEPHEN M
28	CHAPMAN, JUTTA G
29	ALGIER, BRUCE G
31	LUPINACCI, SABRINA
35	PICCOLO, SAM
36	WEST, MATTHEW T
37	MCBRIDE, MICHAEL T
38	WEST, GEORGE E
39	DAURAY, HEIDI M
40	HUME, JOHN A
41	FARRAR, JOHN E
42	LARSON, DIANNE M
43	BAILEY, PETER N
44	LEPIKKO, JOHN E
45	TROMBINO, ALDO
46	PLACE, ZACHARY L
47	CAPALBO, JOSEPH
49	ROCHEFORT, KEITH
53	GAUDLAP, RONALD C
55	PERKINS, SCOTT K
56	SPOSATO, MARK
58	SPOSATO, STEPHEN J
59	CASEY, ROBERT J
60	RIZZO, MARK R
61	BROWN, SIMON
63	SACCAMANDO, ANTHONY C
65	BRUNO, JOSEPH J
67	SIECZKIEWICZ, JAMES K
70	BETHEL, LINDSAY L
71	MCMAHON, THEODORE C
72	BETHEL, ELISHA C
73	RIGGS, JAMES A
75	DOYLE, SEAN K
76	HIGGEINS, RYAN W
77	EDWARDS, DERRICK
78	QUARATELLA, THOMAS J
	SMALLRIDGE, THOMAS L
79	GAVITT, DAVID E
80	CARTER, SCOTT A
81	BURTON, KENNETH P
82	DONATO, JOHN P
84	SHORTMAN, GERALDINE A
88	ZALESKI, GARY J

Target Street	Cross Street	Source
✓	-	Cole Information

POTTER HILL RD 2017 (Cont'd)

92	DUDA, MICHAEL F
95	HOWE, ANNE B
96	HUSEREAU, JOSEPH A
105	ABBOTT, CHRISTOPHER J
106	WORKMAN, JOYCE A
109	HELLERT, RYAN M
110	KEENA, THOMAS W
111	THOMPSON, ALXNDR F
112	BURNS, WILLIAM E
113	LARIVIERE, RONALD
116	TROMBINO, CHAD M
121	BROWN, JAMIE T
125	RUSSELL, ROBERT J
127	ROCKHOLZ, STEVEN R
128	WILLETTE, DONALD E
129	MONAHAN, DAVID
135	LIMA, DOUGLAS M
143	OTTAVIANI, PAUL G
146	FALLON, ROBERT E
161	AUDETTE, LIAM
167	JACQUES, BRUCE R
170	MAJEIKA, HELEN B
175	INGEBRETSEN, KJELL
177	COOK, PATRICIA K
181	SMITH, SHAWN P
182	BENNETT, JOHN R
183	A ACTION APPLIANCE REPAIR SERVICE
	BEAUCHAINE, TONYA
	WILES, CHRISTOPHER
186	BLIVEN, FRANK H
190	MCKAY, KIMBERLY
194	MANN, RICHARD E
196	ALLISON B GOODSELL RARE BOOKS
	GODSELL, ALLISON B

Target Street	Cross Street	Source
✓	-	Cole Information

POTTER HILL RD 2014

5	DECARO, FRANK J
7	OCCUPANT UNKNOWN,
8	SULIMA, JOHN P
9	LOZZI, JOSEPH
10	PARNIGONI, EDWARD F
14	CHACE, DON L
	MOLES, STANLEY C
	PRIESTLEY, JOSEP
22	LAMOURINE, RICHARD D
23	FLORA, SARAH A
24	WALL, STEPHEN T
27	WHITE, BRIAN E
28	CHAPMAN, JUTTA G
29	ALGIER, BRUCE A
31	OCCUPANT UNKNOWN,
35	PICCOLO, SAM
36	WEST, MATTHEW
37	MCBRIDE, MICHAEL T
38	OCCUPANT UNKNOWN,
39	DAURAY, HEIDI M
40	HUME, JOHN A
41	FARRAR, JOHN E
42	LARSON, DIANNE
43	BAILEY, DEAN A
44	WOOD, CHRISTOPHER
45	BABCOCK, JOHN S
46	MYLLYMAKI, RACHELLE
47	CAPALBO, JOSEPH
49	SARRICA, THOMAS
53	GAUDLAP, RONALD C
55	PERKINS, SCOTT K
56	SPOSATO, MARK
58	SPOSATO, STEPHEN J
59	CASEY, ROBERT J
60	RIZZO, MARK R
61	LAUDONE, STEPHEN M
63	SACCAMANDO, ANTHONY C
65	BRUNO, JOSEPH J
67	OCCUPANT UNKNOWN,
70	BETHEL, KEITH J
71	MCMAHON, THEODORE C
72	BETHEL, ELISHA C
73	RIGGS, JAMES A
74	SHORT, TIM J
75	DOYLE, SEAN K
76	HIGGEINS, RYAN W
77	JACOBSON, CLEO J
78	OCCUPANT UNKNOWN,
	QUARATELLA, THOMAS J
	SMALLRIDGE, THOMAS L

Target Street	Cross Street	Source
✓	-	Cole Information

POTTER HILL RD 2014 (Cont'd)

79	GAVITT, DAVID E
80	CARTER, SCOTT A
81	CHURCH, CLARENCE R
82	DONATO, JOHN A
83	BURTON, KENNETH P
84	SHORTMAN, GERALDINE A
88	ZALESKI, GARY J
92	DUDA, MICHAEL F
95	HOWE, TIMOTHY F
96	HUSEREAU, JOSEPH A
98	LARSON, KRISTEN L
101	THOMPSON, MARCIA G
103	THOMPSON, DAVID B
105	ABBOTT, CHRISTOPHER J
109	HELLERT, RYAN M
110	KEENA, THOMAS W
111	THOMPSON, ALXNDR F
112	CABINGTING, MARK
113	LARIVIERE, RONALD
116	TROMBINO, CHAD M
121	BROWN, JAMIE T
125	RUSSELL, ROBERT E
127	ROBINSON, ALISA
	ROCKHOLZ, STEVEN R
128	OCCUPANT UNKNOWN,
129	MONAHAN, DAVID
131	TAIVALANTTI, ERIC L
135	GRAY, DAWNE M
142	SMITH, JAMES P
143	OTTAVIANI, PAUL G
146	FALLON, ROBERT E
150	COTTRELL, NICKOLAS
161	AUDETTE, MARY E
	HIRST, DORA W
167	JACQUES, BRUCE R
170	MAJEIKA, HELEN B
175	INGEBRETSEN, KJELL
177	COOK, RONALD M
181	SMITH, SHAWN P
182	BENNETT, JOHN R
183	BRADBURD, JASON K
	GILSON, CONNOR
	TURNER, BRITTANY
186	OCCUPANT UNKNOWN,
189	MANN, RICHARD A
190	MCKAY, KIMBERLY
196	GOODSELL ALLISON B RARE BOOKS
	GOODSELL, MARION E

Target Street	Cross Street	Source
✓	-	Cole Information

POTTER HILL RD 2010

5	OCCUPANT UNKNOWN,
7	OCCUPANT UNKNOWN,
8	SULIMA, JOHN P
9	LUZZI, JOSEPH M
10	ROMANO, MARC H
14	CHACE, DON L
	CHASE, DONALD
	MOLES, STANLEY C
	PRIESTLEY, JOSEP
22	OCCUPANT UNKNOWN,
23	FLORA, SARAH A
24	WALL, STEPHEN T
27	WHITE, BRIAN E
28	CHAPMAN, JUTTA G
29	ALGIER, BRUCE A
31	COZZOLINO, SAMUEL R
35	PICCOLO, SAM
36	WEST, MATTHEW
37	MCBRIDE, MICHAEL T
38	OCCUPANT UNKNOWN,
39	DAURAY, HEIDI M
40	FERRIS, DEREK P
41	FARRAR, JOHN E
42	OCCUPANT UNKNOWN,
43	OCCUPANT UNKNOWN,
44	LEPIKKO, JOHN E
46	DUNE, LORNA
47	CAPALBO, JOSEPH
49	CAPALBO, LINDA
	SARRICA, THOMAS
51	OCCUPANT UNKNOWN,
53	GAUDLAP, RONALD C
54	OCCUPANT UNKNOWN,
55	BRANCATO, MICHELLE
56	SPOSATO, MARK
59	CASEY, ROBERT J
60	RIZZO, MARK R
61	LAUDONE, STEPHEN M
63	SACCAMANDO, ANTHONY C
65	BRUNO, JOSEPH J
67	SPELLMAN, M
70	BETHEL, KEITH J
71	OCCUPANT UNKNOWN,
72	OCCUPANT UNKNOWN,
73	RIGGS, JAMES A
74	SHORT, TIM J
75	DOYLE, SEAN K
76	HIGGINS, BILL D
77	JACOBSON, CLEO J
78	QUARATELLA, THOMAS J

Target Street	Cross Street	Source
✓	-	Cole Information

POTTER HILL RD 2010 (Cont'd)

78 RUTHBUN, DEBORAH H
SMALLRIDGE, THOMAS L
79 GAVITT, DAVID E
80 CARTER, SCOTT A
81 CHURCH, CLARENCE R
82 BALLOONS BY JOYOLOONS
DOWDAL, ROBERT L
83 BURTON, KENNETH P
84 SHORTMAN, GERALDINE A
88 ZALESKI, GARY J
92 DUDA, MICHAEL F
MICHAELS TREES SHRUBS
95 OCCUPANT UNKNOWN,
96 HUSEREAU, JOSEPH A
98 LIESE, RONALD M
101 THOMPSON, MARCIA G
103 THOMPSON, DAVID B
105 MARTINS, FATIMA
106 COX, CAROL J
109 HELLERT, RYAN M
110 OCCUPANT UNKNOWN,
111 THOMPSON, ALXNDR F
112 BURNS OFF ROAD
CABIGTING, MARK
113 LARIVIERE, ROLAND F
116 TROMBINO, CHAD
118 LUZZI, JOSEPH
121 BROWN, JAMIE T
125 RUSSELL, ROBERT E
127 ROCKHOLZ, STEVEN R
128 KEENAN, JIL L
129 RUSSELL, HAROLD C
131 TAIVALANTTI, ERIC L
135 GRAY, ROBERT D
137 GONSALVES, JOANNE E
143 OTTAVIANI, DEBRA L
146 FALLON, ROBERT E
150 COTTRELL, NICKOLAS
156 OCCUPANT UNKNOWN,
161 HIRST, DORA I
167 JACQUES, BRUCE R
170 MAJEIKA, HELEN B
175 INGEBRETSEN, KJELL
177 COOK, RONALD M
181 BATES, SHAWN L
182 BENNETT, JOHN R
183 CHRONISTER, JACOB
ORNBERG, KAREN
186 LANKINS, MYRA
187 OCCUPANT UNKNOWN,

Target Street	Cross Street	Source
✓	-	Cole Information

POTTER HILL RD 2010 (Cont'd)

190	TREIBER, ANGEL
194	MANN, RICHARD A
195	OCCUPANT UNKNOWN,
196	GOODSELL, ALLISON B

Target Street	Cross Street	Source
✓	-	Cole Information

POTTER HILL RD 2005

3	J R B CABINET MAKING
5	OCCUPANT UNKNOWN,
7	DECARLO, NICHOLAS M
8	SULIMA, JOHN P
9	LUZZI, JOSEPH N
10	KENNEDY, KEVIN M
14	CHACE, DON L
	YELES, MIHKEL
22	LAMOURINE, RICHARD D
23	FLORA, SARAH A
24	WALL, STEPHEN T
27	WHITE, BRIAN E
28	CHAPMAN, JUTTA G
29	LAMOURINE, RICHARD
31	OCCUPANT UNKNOWN,
35	PICCOLO, SAM
37	CASSIDY, FRANCIS J
38	OCCUPANT UNKNOWN,
39	DAURAY, HEIDI M
40	ARTERTON, ALFRED A
41	FARRAR, JOHN E
42	OCCUPANT UNKNOWN,
43	BAILEY, DEAN A
44	LEPIKKO BUILDERS INC
	OCCUPANT UNKNOWN,
45	JACOBS, KELSIE L
46	BARRINGTON, DOUGLAS S
47	OCCUPANT UNKNOWN,
49	BRANCATO, FRANK
53	GAUDLAP, RONALD
54	OCCUPANT UNKNOWN,
56	SPOSATO, FRANK J
58	SPOSATO, STEPHEN
59	CASEY, ROBERT J
60	RIZZO, MARK R
61	LAUDONE, STEPHEN M
63	SACCAMANDO, ANTHONY C
65	BRUNO, JOSEPH J
67	SIECZKIEWIC, MARGUERITE
70	REBELLO, WILLIAM X
71	MCMAHON, THEODORE C
72	GABRIELE, SAL J
73	RIGGS, JAMES A
74	MACLEAN, DOUGLAS L
76	OCCUPANT UNKNOWN,
77	JACOBSON, WILLIAM E
79	GAVITT, DAVID E
80	BREARLEY, JOSEPH B
82	DONATO, JOHN A
	JOY O LOONS

Target Street	Cross Street	Source
✓	-	Cole Information

POTTER HILL RD 2005 (Cont'd)

83	BURTON, KENNETH P
88	TREBISACCI, ROBERT G
92	DUDA, MICHAEL F
95	OCCUPANT UNKNOWN,
96	HUSEREAU, JOSEPH A
98	SANFORD, ELEANOR A
101	THOMPSON, MARCIA G
103	THOMPSON, DAVID B
105	OCCUPANT UNKNOWN,
106	COX, CAROL
109	HELLERT, RYAN M
110	KEENA, THOMAS W
111	THOMPSON, ALXNDR F
112	MIANNAY, SHAWN
113	MONTALTO, CHRISTOPHER J
118	LUZZI, JOSEPH
121	BROWN, JAMIE T
123	ORLANDO, LAWRENCE W
124	OCCUPANT UNKNOWN,
125	RUSSELL, ROBERT E
127	ROCKHOLZ, STEVEN R
129	WILKINSON, F
131	TAIVALANTTI, ERIC L
135	LIMA, DOUGLAS M
137	GONSALVES, JOANNE E
142	SMITH, JAMES R
146	FALLON, ROBERT E
161	HIRST, DORA W
167	JACQUES, BRUCE R
170	MAJEIKA, HELEN B
175	INGEBRETSEN, KJELL
177	COOK, RONALD M
181	BATES, SHAWN
182	BENNETT, JOHN R
183	HOLLAND, CINDY L
	KENYON, FRANK R
	ORNBERG, KAREN
186	BLIVEN, FRANK H
190	LLOYDD A BAKER
	MACPHERSON, WINIFRED A
194	OCCUPANT UNKNOWN,
195	OCCUPANT UNKNOWN,
196	ALLISON B GOODSELL RARE BOOKS
	GOODSELL, ALLISON B

Target Street	Cross Street	Source
✓	-	Cole Information

POTTER HILL RD 2000

7	MUOIO, FRANK A
8	SULIMA, J
9	OCCUPANT UNKNOWN,
10	BETTENCOURT, JOHN
14	GERVASINI, MICHAEL A
16	OCCUPANT UNKNOWN,
17	OCCUPANT UNKNOWN,
22	LAMOURINE, MARY
27	WHITE, BRIAN
28	CHAPMAN, ROBERT A
29	ALGIER, BRUCE
	LAMOURINE, RICHARD
30	OCCUPANT UNKNOWN,
31	PRESCOTT, THELMA
33	OCCUPANT UNKNOWN,
35	PICCOLO, SAM
37	CASSIDY, FRANCIS J
38	WEST, GEORGE
39	DAURAY, HEIDI M
40	PROIA, JOHN
41	OCCUPANT UNKNOWN,
42	OCCUPANT UNKNOWN,
43	OCCUPANT UNKNOWN,
44	LEPIKKO, LILLIAN M
45	LAVIER, GERALD
46	HUBER, PETER
47	WHIPPLE, NITA J
49	GAUTHIER, DONALD F
	KING, MICHAEL
51	BRANCATO, FRANK
	BRUNO, JOSEPH J
56	SPOSATO, FRANK
58	OCCUPANT UNKNOWN,
59	EVANS, P
60	RIZZO, MARK
61	LAUDONE, STEPHEN
63	OCCUPANT UNKNOWN,
65	BRUNO, S
67	OCCUPANT UNKNOWN,
70	OCCUPANT UNKNOWN,
71	MCMAHON, T G
72	GABRIELE, SAL
73	OCCUPANT UNKNOWN,
74	MACLEAN, E T
76	OCCUPANT UNKNOWN,
77	JACOBSON, WILLIAM
79	GAVITT, DAVID E
80	BREARLEY, JOSEPH B
82	BALLOONS BY JOY O LOONS
	DONATO, JOHN

Target Street	Cross Street	Source
✓	-	Cole Information

POTTER HILL RD 2000 (Cont'd)

82	SENN, M
84	SHORTMAN, G
88	AIELLO, JOHN
92	OCCUPANT UNKNOWN,
95	HOWE, TIM
96	HUSEREAU, JOSEPH
99	OCCUPANT UNKNOWN,
101	OCCUPANT UNKNOWN,
105	ABBOTT, C J
109	OCCUPANT UNKNOWN,
110	KEENA, THOMAS
111	THOMPSON, ALXNDR F
112	MIANNAY, SHAWN
113	MONTALTO, C
121	BROWN, LUCILLE M
125	RUSSELL, ROBERT
127	ROCKHOLZ, LEA K
129	CADDICK, TODD
135	LIMA, J
143	JACQUES, E
	STEDMAN, AMANDA
146	BARITEAU, ERIC
150	OATES, SHAWN
161	OCCUPANT UNKNOWN,
167	OCCUPANT UNKNOWN,
170	MAJEIKA, SIMON
175	INGEBRETSEN, KJELL
181	RAPHAELA, AUREA
182	BENNETT BONNIE
	BENNETT, BONNIE
183	HOLLAND, CINDY
	PONDER, DAVID
186	BLIVEN, MARY
	BOSS, ERNEST L
	SHELDON, F
189	OCCUPANT UNKNOWN,
190	PHILLIPS, H
194	OCCUPANT UNKNOWN,
195	OCCUPANT UNKNOWN,
196	GOODSELL, ALLISON B

Target Street	Cross Street	Source
✓	-	Cole Information

POTTER HILL RD 1995

5	GERRISH, WALTER
	LABBE, DAVID & LISA
7	MUOIO, FRANK A, JR
8	SULIMA, J
	SULIMA, JOHN, CONSLTNT
14	ALGIERE, RUDOLPH
	GERVASINI, D J & M G
	GERVASINI, MICHAEL A
23	JOHNSON, K
27	WHITE, BRIAN
28	CHAPMAN, ROBT A
29	ALGIER, BRUCE & ANGELA
	LAMOURINE, RICHARD, JR
35	PICCOLO, SAM, III
37	CASSIDY, FRANCIS J
38	WEST, GEO
39	DAURAY, HEIDI MARIE
46	CHIARADIO, ANTHONY
47	ECKSTEIN, J
49	LONGO, BILL-JIM
	MCCLURE, EUGENE
51	BRANCATO, FRANK
	BRUNO, JOS J, JR
56	SPOSATO, FRANK & SHIRLEY
60	RIZZO, MARK
61	LAUDONE, STEPHEN & LAUREN
63	BOYLE, F J
71	MCMAHON, THEODORE G
72	COVEYOU, THOS N
74	MACLEAN, EDW
76	STRAFACH, JOHN J & RUTH-ANN
77	JACOBSON, WM
79	GAVITT, DAVID E
82	BALLOONS BY JOY-O-LOONS
	DONATO, JOHN & JEANNE
	DONATO, JOHN & JEANNE-CHILDRENS TELPH
	JOY-O-LOONS
84	SHORTMAN, GORDON
88	GALLAGHER, PHILIP J JR & JANET
92	DUDA, MICHAEL
95	HOWE, TIM & ANNE
96	HUSEREAU, JOS & PAMELA
105	THOMPSON, WM C, JR
109	THOMPSON, WM C III & SUSAN
110	KEENA, THOS
111	THOMPSON, ALXNDR F & DOROTHY E
125	RUSSELL, ROBT
129	PATTON, IAN
135	LIMA, JOSEPHINE
143	JACQUES, E

Target Street	Cross Street	Source
✓	-	Cole Information

POTTER HILL RD 1995 (Cont'd)

146	REPEP, J E
150	WALDRON, JOHN
170	MAJEIKA, SIMON, JR
	WESTCOTT PERENNIALS
181	VAN HORN, S & D
182	BENNETT, BONNIE
183	ARNOLD, JOHN
	DOUGHERTY, CHRIS
	FOURNIER, E A
	LETSON, BRYAN
	LOVE, CHRISTINA
	MINER, SUNSHINE
186	BLIVEN, M
196	GOODSELL ALLISON B RARE BOOKS
	GOODSELL, ALLISON B

Target Street	Cross Street	Source
✓	-	Cole Information

POTTER HILL RD 1992

5	GERRISH, WALTER
7	MUOIO, FRANK A, JR
14	GERVASINI, EUGENE
	GERVASINI, MICHAEL A
23	JOHNSON, MICHAEL & HEIDI
	JOHNSON, MICHAEL E, SR
27	WHITE, BRIAN
37	CASSIDY, FRANCIS J
47	HUGHES, CHERYL
49	BUCKRIDGE, J
	COLE, KIM & MICHAEL
51	BRUNO, JOS J, JR
	ROBINSON, DAVID JR & CRAIG
56	SPOSATO, FRANK & SHIRLEY
61	LAUDONE, STEPHEN & LAUREN
63	BOYLE, F J
70	COX, FRAN
71	MCMAHON, THEODORE G
72	COVEYOU, THOS N
74	MACLEAN, EDW
76	STRAFACH, JOHN J & RUTH-ANN
77	JACOBSON, WM
79	GAVITT, DAVID E
82	BALLOONS BY JOY-O-LOONS
	DONATO, JOHN & JEANNE
	JOY-O-LOONS
84	SHORTMAN, GORDON
88	GALLAGHER, PHILIP J JR & JANET
92	DUDA, MICHAEL
95	HOWE, TIM & ANNE
96	HUSEREAU, JOS & PAMELA
105	THOMPSON, WM C, JR
109	THOMPSON, WM C III & SUSAN
110	KEENA, THOS
111	THOMPSON, ALXNDR F
125	RUSSELL, ROBT
135	LIMA, JOSEPHINE
146	REPEP, J E
150	WEBSTER, D G
170	MAJEIKA, SIMON, JR
181	VAN HORN, S & D
182	BENNETT, BONNIE
183	FOURNIER, E A
	LEBELLE, DAVID, JR
	ROBERT, KALJAY
	SALISBURY, N
	SHAW, MARTIN & CHERYL
186	BLIVEN, CHERYL A
	BLIVEN, M
196	TOOLS & BOOKS LTD

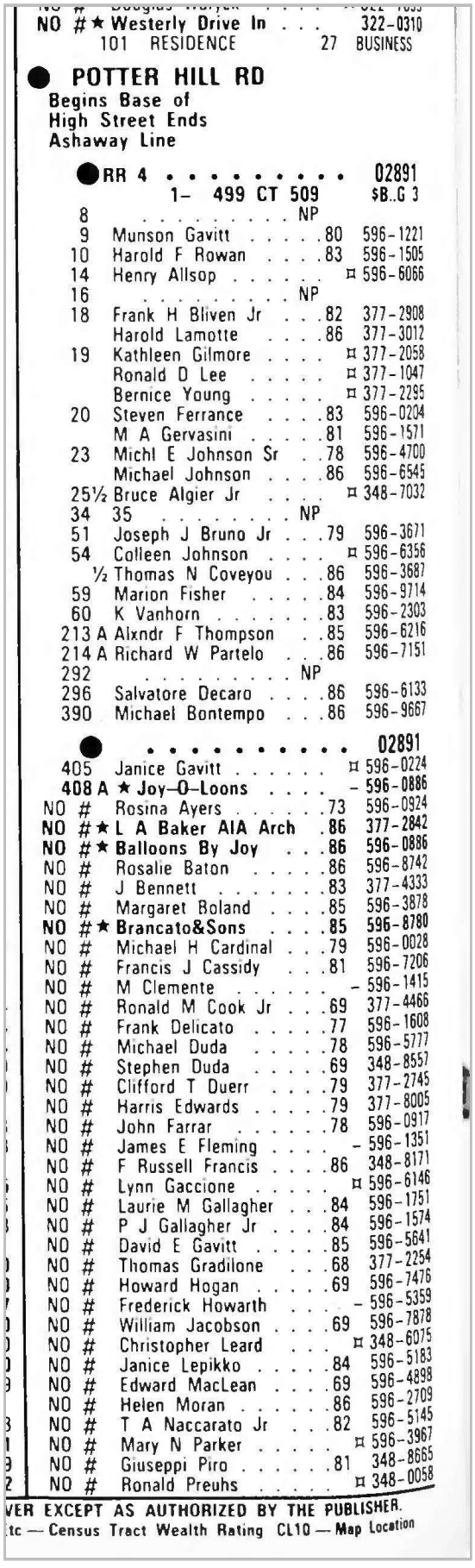
Target Street	Cross Street	Source
✓	-	Cole Information

POTTER HILL RD 1992 (Cont'd)

2512 ALGIER, BRUCE & ANGELA

Target Street	Cross Street	Source
✓	-	Cole Criss-Cross Directory

POTTER HILL RD 1988



NO # ★ Westerly Drive In . . . 322-0310
101 RESIDENCE 27 BUSINESS

POTTER HILL RD

Begins Base of
High Street Ends
Ashaway Line

RR 4 02891
1- 499 CT 509 $B..G 3

8 . . . . . NP
9 Munson Gavitt 80 596-1221
10 Harold F Rowan 83 596-1505
14 Henry Allsop . . . . . ¤ 596-6066
16 . . . . . NP
18 Frank H Bliven Jr . . .82 377-2908
Harold Lamotte 86 377-3012
19 Kathleen Gilmore . . . . ¤ 377-2058
Ronald D Lee . . . . . ¤ 377-1047
Bernice Young . . . . . ¤ 377-2295
20 Steven Ferrance 83 596-0204
M A Gervasini 81 596-1571
23 Michl E Johnson Sr . .78 596-4700
Michael Johnson 86 596-6545
25½ Bruce Algier Jr . . . . ¤ 348-7032
34 35 . . . . . NP
51 Joseph J Bruno Jr . . .79 596-3671
54 Colleen Johnson . . . . ¤ 596-6356
½ Thomas N Coveyou . . .86 596-3687
59 Marion Fisher 84 596-9714
60 K Vanhorn 83 596-2303
213 A Alxndr F Thompson . .85 596-6216
214 A Richard W Partelo . . .86 596-7151
292 . . . . . NP
296 Salvatore Decaro 86 596-6133
390 Michael Bontempo . . .86 596-9667

. 02891
405 Janice Gavitt . . . . . ¤ 596-0224
408 A ★ Joy-O-Loons . . . . - 596-0886
NO # Rosina Ayers 73 596-0924
NO # ★ L A Baker AIA Arch .86 377-2842
NO # ★ Balloons By Joy . . .86 596-0886
NO # Rosalie Baton 86 596-8742
NO # J Bennett 83 377-4333
NO # Margaret Boland 85 596-3878
NO # ★ Brancato&Sons 85 596-8780
NO # Michael H Cardinal . . .79 596-0028
NO # Francis J Cassidy . . .81 596-7206
NO # M Clemente . . . . . - 596-1415
NO # Ronald M Cook Jr . . .69 377-4466
NO # Frank Delicato 77 596-1608
NO # Michael Duda 78 596-5777
NO # Stephen Duda 69 348-8557
NO # Clifford T Duerr 79 377-2745
NO # Harris Edwards 79 377-8005
NO # John Farrar 78 596-0917
NO # James E Fleming . . . . - 596-1351
NO # F Russell Francis 86 348-8171
NO # Lynn Gaccione . . . . . ¤ 596-6146
NO # Laurie M Gallagher . . .84 596-1751
NO # P J Gallagher Jr 84 596-1574
NO # David E Gavitt 85 596-5641
NO # Thomas Gradilone . . .68 377-2254
NO # Howard Hogan 69 596-7476
NO # Frederick Howarth . . . . - 596-5359
NO # William Jacobson 69 596-7878
NO # Christopher Leard . . . ¤ 348-6075
NO # Janice Lepikko 84 596-5183
NO # Edward MacLean 69 596-4898
NO # Helen Moran 86 596-2709
NO # T A Naccarato Jr . . .82 596-5145
NO # Mary N Parker . . . . . ¤ 596-3967
NO # Giuseppi Piro 81 348-8665
NO # Ronald Preuhs . . . . . ¤ 348-0058

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tc — Census Tract Wealth Rating CL10 — Map Location

Target Street	Cross Street	Source
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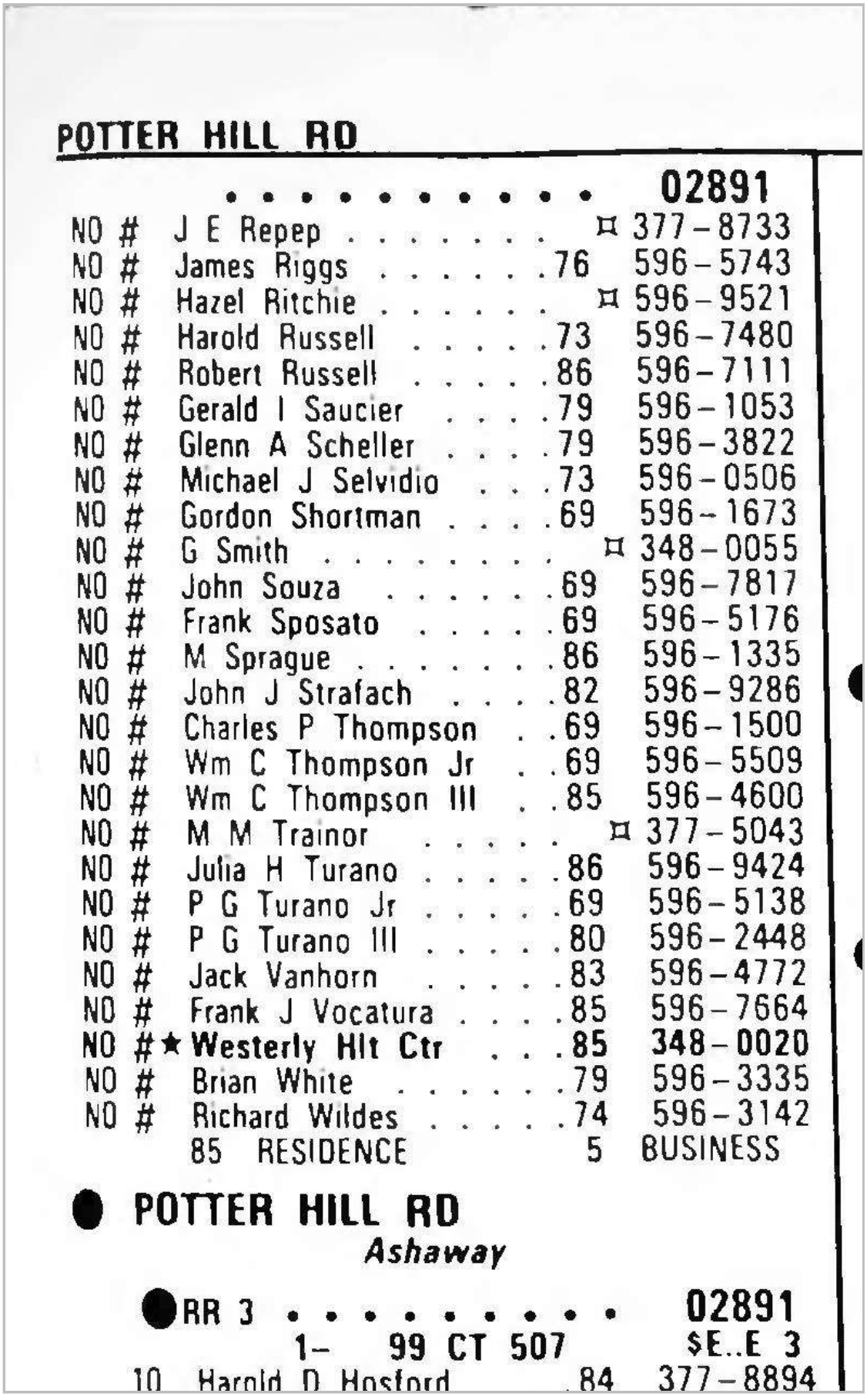
POTTER HILL RD 1988



POTTER HILL RD

02891

NO	#	J E Repep	¤	377-8733
NO	#	James Riggs .76		596-5743
NO	#	Hazel Ritchie	¤	596-9521
NO	#	Harold Russell .73		596-7480
NO	#	Robert Russell .86		596-7111
NO	#	Gerald I Saucier .79		596-1053
NO	#	Glenn A Scheller .79		596-3822
NO	#	Michael J Selvidio .73		596-0506
NO	#	Gordon Shortman .69		596-1673
NO	#	G Smith	¤	348-0055
NO	#	John Souza .69		596-7817
NO	#	Frank Sposato .69		596-5176
NO	#	M Sprague .86		596-1335
NO	#	John J Strafach .82		596-9286
NO	#	Charles P Thompson .69		596-1500
NO	#	Wm C Thompson Jr .69		596-5509
NO	#	Wm C Thompson III .85		596-4600
NO	#	M M Trainor	¤	377-5043
NO	#	Julia H Turano .86		596-9424
NO	#	P G Turano Jr .69		596-5138
NO	#	P G Turano III .80		596-2448
NO	#	Jack Vanhorn .83		596-4772
NO	#	Frank J Vocatura .85		596-7664
NO	#★	**Westerly Hlt Ctr .85**		**348-0020**
NO	#	Brian White .79		596-3335
NO	#	Richard Wildes .74		596-3142

85 RESIDENCE 5 BUSINESS

POTTER HILL RD

Ashaway

RR 3 02891

1- 99 CT 507 $E..E 3

10 Harold D Hosford .84 377-8894

Target Street	Cross Street	Source
✓	-	Cole Criss-Cross Directory

POTTER HILL RD 1984

No # Nathan Saunders 79 377-2158
6 Residence

POTTER HILL RD
Begins Base of
High Street Ends
Ashaway Line

RR 4 02891
022140

8 . . . . . .NP
9 Munson Gavitt 80 596-1221
10 Harold F Rowan . . . . . .¤ 596-1505
18 Frank H Bliven Jr 82 377-2908
19 Diane Bayer . . . . . .¤ 377-2759
Joseph Warner . . . . . .¤ 377-4377
20 Steven Ferrance . . . . . .- 596-7075
M A Gervasini 81 596-1571
23 Coleen Johnson . . . . . .¤ 596-9621
M E Johnson Sr 78 596-4700
★**Johnson Realty 596-4700**
Kathy Palmer . . . . . .¤ 596-7933
35 . . . . . .NP
51 Joseph J Bruno Jr 79 596-3671
54 Raymond Hewins Jr 80 596-0922
½Dorothy Cochran 73 596-5401
60 Stephen Vanhorn . . . . . .- 596-2303

. . . . . **02891**
292 Clarence Oliver 81 596-0215
No # Rosina Ayers 73 596-0924
No # Lloyd Baker 76 377-8398
No # Lloyd A Baker 76 377-2842
No # J Bennett . . . . . .¤ 377-4333
No # Michael H Cardinal 79 596-0028
No # Francis J Cassidy 81 596-7206
No # Ronald M Cook Jr 69 377-4466
No # Frank Delicato 77 596-1608
No # Michael Duda 78 596-5777
No # Stephen Duda 69 348-8557
No # Clifford T Duerr 79 377-2745
No # Harris Edwards 79 377-8005

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¤ — New Listing to the Directory - — New Lis

Target Street	Cross Street	Source
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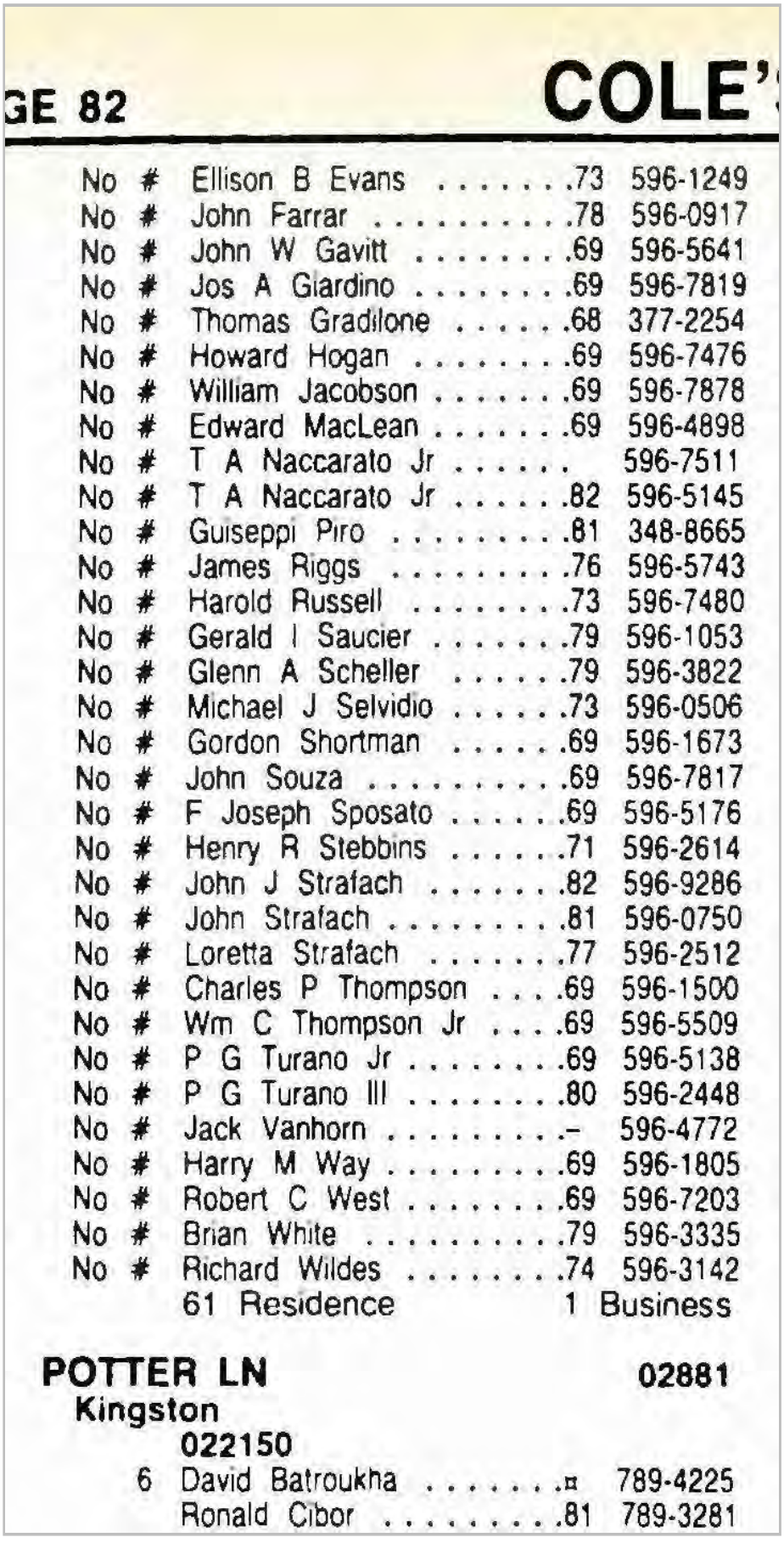
POTTER HILL RD 1984



GE 82 COLE'

No # Ellison B Evans 73 596-1249
No # John Farrar 78 596-0917
No # John W Gavitt 69 596-5641
No # Jos A Giardino 69 596-7819
No # Thomas Gradilone 68 377-2254
No # Howard Hogan 69 596-7476
No # William Jacobson 69 596-7878
No # Edward MacLean 69 596-4898
No # T A Naccarato Jr 596-7511
No # T A Naccarato Jr 82 596-5145
No # Guiseppi Piro 81 348-8665
No # James Riggs 76 596-5743
No # Harold Russell 73 596-7480
No # Gerald I Saucier 79 596-1053
No # Glenn A Scheller 79 596-3822
No # Michael J Selvidio 73 596-0506
No # Gordon Shortman 69 596-1673
No # John Souza 69 596-7817
No # F Joseph Sposato 69 596-5176
No # Henry R Stebbins 71 596-2614
No # John J Strafach 82 596-9286
No # John Strafach 81 596-0750
No # Loretta Strafach 77 596-2512
No # Charles P Thompson 69 596-1500
No # Wm C Thompson Jr 69 596-5509
No # P G Turano Jr 69 596-5138
No # P G Turano III 80 596-2448
No # Jack Vanhorn .....- 596-4772
No # Harry M Way 69 596-1805
No # Robert C West 69 596-7203
No # Brian White 79 596-3335
No # Richard Wildes 74 596-3142
61 Residence 1 Business

POTTER LN **02881**
Kingston
022150
6 David Batroukha .....¤ 789-4225
Ronald Cibor 81 789-3281

Target Street	Cross Street	Source
✓	-	Polk's City Directory

POTTER HILL RD 1980

STANTON AV BEGINS
620 No Return
OLD POST RD BEGINS
Shelter Harbor Inn 322-8883
Dey James T

15

POTTER HILL RD —FROM HIGH ST TO ASHAWAY TOWN LINE

ZIP CODE 02891
NUMBERS IRREGULAR
LEWIS LA BEGINS
ASHAWAY RD BEGINS
236 Palumbo Paul ◎
CENTER ST BEGINS
2 Naccarato Alvira F Mrs ◎ 596-7876
3 Hutchings Kenneth J ◎ 596-2117
HILLVIEW DR BEGINS
4 Pingalore Frank 596-5343
No Return
5 Palazzolo Anthony M ◎ 596-5239
6 Angelo James A ◎ 348-8670
7 Algier Joseph S ◎ 596-4139
8 Greene Gordon A ◎ 596-7488
9 Gavitt Munson E ◎ 596-1221
10 Mitchell Fred ◎ 596-1505
11 Mc Cracken Kenneth J ◎ 596-7879
12 West Robt C ◎ 596-7203
13 Vacant
Vacant
14 Turano Peter G Jr ◎ 596-5138
14½ Turano Peter G III ◎ 596-2448
15 Nardone Henry J ◎ 596-4828
VARIETYVILLE RD ENDS
BOOM BRIDGE RD BEGINS
16 Delicato Frank J ◎ 596-1608

Target Street	Cross Street	Source
✓	-	Polk's City Directory

POTTER HILL RD 1980

Pre-Cast Concrete Products — Finest Quality Lifetime Reinforced Concrete Septic Tanks
Galleys - Flow Diffusors - Sewer Manholes - Catch Basins
Tels. 596-7225, 596-3355 Gavitt Ave. Westerly, Rhode Island 02891

POTTER HILL RD—Contd

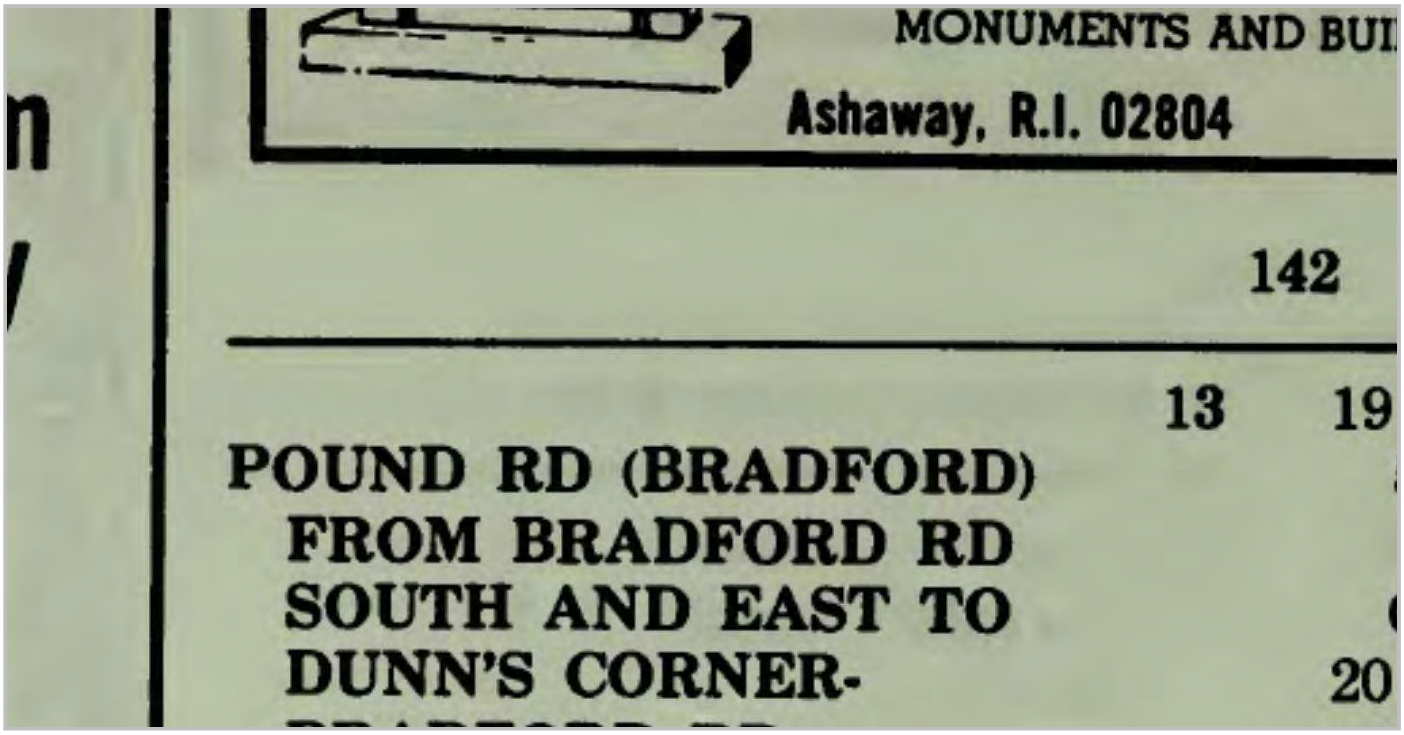
17 Sulima John P ◎ 596-5780
18 Muoio Frank A Jr ◎ 596-1854
18½ Cardinal Michl ◎ 596-0028
19 Vacant
Gervasini Gary ◎ 596-1571
OLD BOOM BRIDGE BEGINS
NICHOLS LANE BEGINS
20★Antoch Anthony G ◎ 596-7817
Vacant
21 Brown Eug E ◎ 596-7551
22 Giardino Joseph A ◎ 596-7819
23 Johnson Michl E ◎ 596-4700
24 Strafach John & Sons Inc cement foundations 596-4115
Strafach John J ◎ 596-2512
LAUREL AV BEGINS
25 White Brian ◎ 596-3305
25½ Way Harry M ◎ 596-1805
OAK HILL DR BEGINS
26 Cozzolino Saml ◎
27 Vacant
28 West Geo E ◎ 596-7890
29 Cassidy Francis J ◎ 596-7206
30 Dauray Raymond J ◎ 596-4226
31 Wildes Richd F ◎ 596-3142
32 Farrar John E ◎ 596-0917
32½★Scheller Glenn A ◎
33 Lepikko John E Builder 596-5609
Lepikko John E ◎ 596-5938
34 Ayers Rosina S Mrs ◎ 596-0924
35★Young Wayne L 596-1040
36 Vetelino Aili M Mrs ◎ 596-5709
37 Coon Frank J ◎ 596-7816
38 Stewart Walter R 596-5705
39 Sposato Frank J ◎ 596-5176
40 Selvidio Michl J ◎ 596-0506
41 Saucier Gerald ◎ 596-1053
42 Stebbins Henry R ◎ 596-2614
43 Boyle Francis ◎ 596-5654
44 Westerly Historic Cemetery No 16
45★Bruno Joseph J Jr ◎ 596-3671
46 Riggs James A ◎ 596-5743
54 Hewit Raymond
54½ Cochron Carroll L ◎ 596-5401
49 Mac Lean Edw L ◎ 596-4898
50 Jacobson Wm E ◎ 596-7878
50½ Edwards Harris ◎ 377-8005
51 Gavitt John W ◎ 596-5641
52 Brearley Joseph B ◎
53 Church Clarence R ◎
53½ Burton Kenneth P ◎
54 Shortman Gordon R ◎ 596-1673
55 Evans Ellison B Jr ◎ 596-1249
FORESTAL DR BEGINS
Duda Michl ◎ 596-5777
57 Duda Alex J ◎ 596-5615
58 Brown Frances Mrs ◎ 596-1219
Duda Steph W 348-8557
59 Thompson Marcia G Mrs ◎ 596-1500
60 Thompson Wm C Jr ◎ 596-5509
61 Gerbitz John J Jr ◎ 596-7240
62 Cozzolino Eug J ◎ 596-1338
62½ Smith J David 596-0429
63 Russell Harold C ◎ 596-7480
63½★Tillinghast Marion R Mrs ◎ 596-1697
64½ Haapanen Elinor M ◎
LIMA DR BEGINS
66 Smith S Helen Mrs ◎
67 Jacques Ernest B ◎ 377-2951
68 Fallon Robt E ◎ 377-2730
68½★Sidebottom Harry ◎ 377-4724
69 Majeika Simon J ◎ 377-2046
70 Whiteley Flora E Mrs ◎ 377-4626
71 Jacques Bruce R
72 Ingebretsen Anna J Mrs ◎ 377-4690
73 Cook Ronald M Jr ◎ 377-4466
74 Gradilone Wenonah E Mrs ◎ 377-2254
75 Sum Res
CHRISTIAN HILL RD BEGINS
76 Duerr Clifford T ◎ 377-2745
78 Bliven Frank H ◎
80 Sheldon Martin 377-4585
No Return
Greene Mabel R Mrs 377-2435
81 Barber Jeffrey 377-2827
Vacant
82 Baker Lloyd ◎ 377-2842
83 Church Elliott ◎ 377-4352
84 Vacant
85 Brown Angie Mrs
87 Goodsill

WESTERLY FURNITURE CO.
U.S. Route 1 Westerly 322-7225
DRAPERIES, WALL COVERING, INTERIOR DECORATING

MODERN HOME SUPPLY INC.
ALCOA SIDING SOLID VINYL
Aluminum Products From Cellar To Roof
105 Cross St. Extension Westerly, R.I. 02891 Tels. 596-7166 or 596-5112

Target Street	Cross Street	Source
✓	-	Polk's City Directory

POTTER HILL RD 1980


MONUMENTS AND BUI

Ashaway, R.I. 02804

142

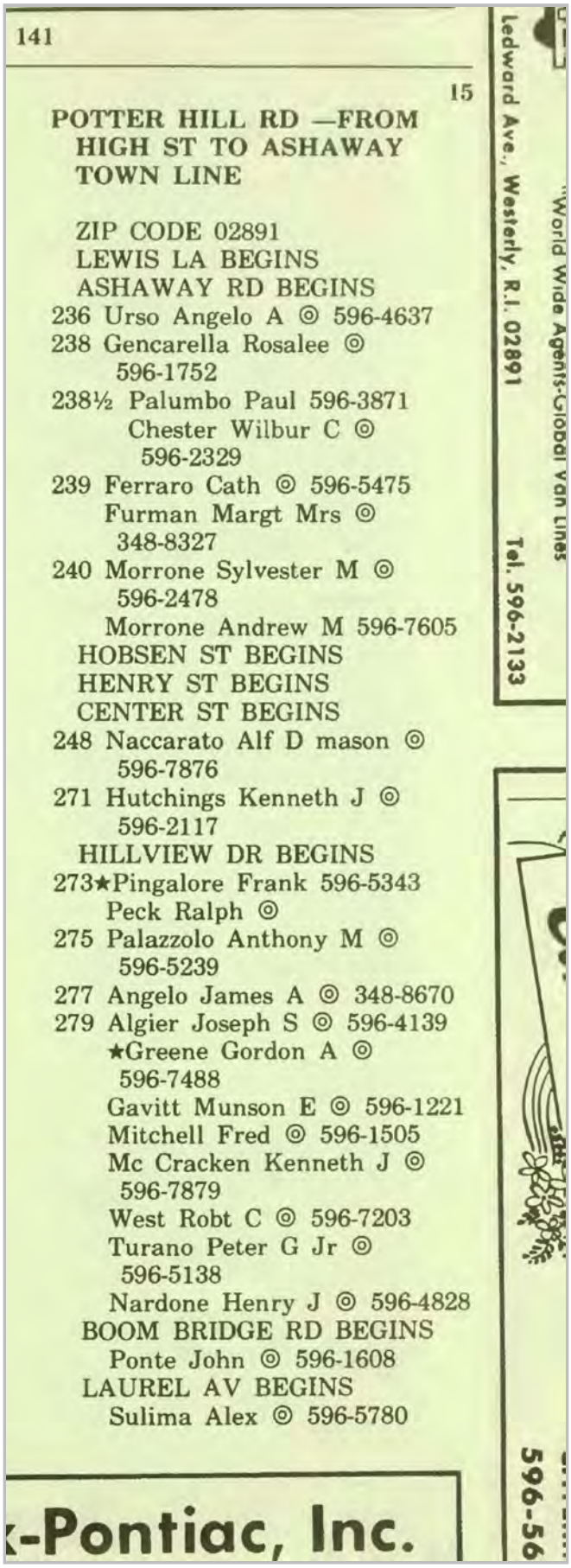
13 19

POUND RD (BRADFORD)
FROM BRADFORD RD
SOUTH AND EAST TO
DUNN'S CORNER-

20

Target Street	Cross Street	Source
✓	-	Polk's City Directory

POTTER HILL RD 1975



141

15

POTTER HILL RD —FROM HIGH ST TO ASHAWAY TOWN LINE

ZIP CODE 02891
LEWIS LA BEGINS
ASHAWAY RD BEGINS
236 Urso Angelo A ◎ 596-4637
238 Gencarella Rosalee ◎ 596-1752
238½ Palumbo Paul 596-3871
Chester Wilbur C ◎ 596-2329
239 Ferraro Cath ◎ 596-5475
Furman Margt Mrs ◎ 348-8327
240 Morrone Sylvester M ◎ 596-2478
Morrone Andrew M 596-7605
HOBSEN ST BEGINS
HENRY ST BEGINS
CENTER ST BEGINS
248 Naccarato Alf D mason ◎ 596-7876
271 Hutchings Kenneth J ◎ 596-2117
HILLVIEW DR BEGINS
273★Pingalore Frank 596-5343
Peck Ralph ◎
275 Palazzolo Anthony M ◎ 596-5239
277 Angelo James A ◎ 348-8670
279 Algier Joseph S ◎ 596-4139
★Greene Gordon A ◎ 596-7488
Gavitt Munson E ◎ 596-1221
Mitchell Fred ◎ 596-1505
Mc Cracken Kenneth J ◎ 596-7879
West Robt C ◎ 596-7203
Turano Peter G Jr ◎ 596-5138
Nardone Henry J ◎ 596-4828
BOOM BRIDGE RD BEGINS
Ponte John ◎ 596-1608
LAUREL AV BEGINS
Sulima Alex ◎ 596-5780

Ledward Ave., Westerly, R.I. 02891 Tel. 596-2133
"World Wide Agents-Global Van Lines
k-Pontiac, Inc.
596-56

Target Street	Cross Street	Source
✓	-	Polk's City Directory

POTTER HILL RD 1975

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POTTER HILL RD—Contd
Muoio Frank A Jr ◎ 596-1854
Furman Thos ◎ 596-7959
Wohleber David O 596-1388
OLD BOOM BRIDGE BEGINS
NICHOLS LANE BEGINS
Brown Eug E ◎ 596-7551
Giardino Joseph A ◎ 596-7819
Johnson Michl ◎ 596-4700
Strafach John & Sons Inc cement foundations 596-4115
Strafach John J ◎ 596-4115
Way Harry M ◎ 596-1805
OAK HILL DR BEGINS
Cozzolino Saml ◎ 596-4539
★Longo Kathryn Mrs ◎
West Geo E ◎ 596-7890
Cassidy Francis J ◎ 596-7206
Dauray Raymond ◎ 596-4226
Wildes Richd F ◎ 596-3142
La Rocca Sherry A Mrs ◎
Lepikko John E Inc bldr 596-5609
Lepikko John E ◎ 596-2938
Ayers Rosina S Mrs ◎ 596-0924
★Richardosn Elberta J Mrs 596-1040
Vetelino Aili M ◎ 596-5709
★Coon Frank J ◎ 596-7816
Stewart Walter R 596-5705
Sposato Frank J ◎ 596-5176
Selvidio Michl J ◎ 596-0506
Hebert Lawrence J ◎ 596-5563
Stebbins Henry R ◎ 596-2614
Boyle Francis J ◎ 596-5654
Westerly Historic Cemetery No 16
★Evans Ernest ◎ 596-3218
Maki Susan A Mrs ◎ 596-5743
Cochran Carol ◎ 596-5401
Allison Rodger S 596-4777
Mac Lean Edw L ◎ 596-4898
Jacobson Wm J ◎ 596-7878
Gavitt John W ◎ 596-5641
Brearley Joseph B ◎ 596-2785
Church Clarence R ◎
Shortman Gordon R ◎ 596-1673
Evans Ellison B Jr ◎ 596-1249
Latherow Geo J ◎ 596-4017
Duda Alex J ◎ 596-5615
Brown Frances Mrs ◎ 596-1219
Duda Steph W ◎ 348-8557
Thompson Charles P ◎ 596-1500
Thompson Wm C Jr ◎ 596-5509
Gerbitz John J Jr coml artist ◎ 596-7240
Cozzolino Eug J ◎ 596-1338
Russell Harold C ◎ 596-7480
Haapanen Elinor M ◎
★Malloney Philip W
Smith S Helen Mrs ◎
Jacques Ernest B ◎ 377-2951
★Fallon Robt W ◎ 377-2730
Majeika Simon J ◎ 377-2046
Whiteley Flora E Mrs ◎ 377-4626
Jacoinski Eug 377-2830
Ingebretsen Anna J Mrs ◎ 377-4690
Cook Ronald M Jr ◎ 377-4466
Gradilone Thos E ◎ 377-2254
★Andrews Lillian Mrs ◎ 377-4396
CHRISTIAN HILL RD BEGINS
Goodwin Joyce B Mrs ◎ 377-2745
Vacant
Brown Angie Mrs
★Bliven Frank H ◎
20 Sheldon Martin 377-2603
Greene Dennis M 377-2435
★Smith Birdie Mrs 377-4050
★Jackobson Amos
★Barber Eliz Mrs ◎ 377-2251
Vacant
★Baker Lloyd ◎
Bromley H Dwight 377-2671
Church Ruth A ◎ 377-4352
★Lastes Thos J ◎
Hayes Donald E ◎ 377-4044
Vacant

POUND RD (BRADFORD) FROM BRADFORD RD SOUTH AND EAST TO DUNN'S CORNER-BRADFORD RD

ZIP CODE 02891

29 Jefferson Av.
New London, Conn. 06320
Toll Free 596-2679
DAIRY PRODUCTS

Grills Motor & Body Shop
AUTOMATIC TRANSMISSION SERVICE

Target Street	Cross Street	Source
✓	-	Polk's City Directory

POTTER HILL RD 1971

Grade A Pasteurized Milk and Cream
Tels. 596-2679 - 596-2270
9 OAK ST. WESTERLY, R.I. 02891

POST RD (DC)—Contd
Rose Bruce R ◎ 322-7689
Williams Geo G ◎ 322-7857
Spencer Pat E Mrs ◎ 322-8950
Saunders Joseph T ◎ 322-0230
Vacant
Gavitt Philip S ◎ 322-0436

15

POTTER HILL RD —FROM HIGH ST TO ASHAWAY TOWN LINE

ZIP CODE 02891
LEWIS LA BEGINS
ASHAWAY RD BEGINS
235 Vacant
Vacant
236 Urso Angelo A ◎ 596-4637
238 Gencarella James ◎ 596-1752
238½ Gencarella Paul 596-2260
Chester Wilbur C ◎ 596-2329
239 Ferraro Edward ◎ 596-5475
Vacant
239½ Furman Frank W 596-1148
240 Morrone Sylvester M ◎ 596-2478
Morgan Herman E 348-8901
241 Abruzzese Anthony C ◎ 596-7875
241½ Abruzzese Domenic ◎ 596-7874
Vincent Joseph ◎ 596-1635
242 Ruisi Peter J ◎ 596-5903
Vacant
HENRY AV BEGINS
244 Vacant
Vacant
246 No Return
CENTER ST BEGINS
248 Naccarato Alf D mason ◎ 596-7876
271 Hutchings Kenneth J ◎ 596-2117
HILLVIEW DR BEGINS
273 Pengalose Frank ◎ 596-5343
275 Palazzolo Anthony M ◎ 596-5239
277 Angelo James A ◎ 348-8670
279 Algier Joseph S ◎ 596-1439
State Highway Department 596-2179
Gavitt Munson E ◎ 596-1221
Greene Gordon A ◎ 596-7488
Mitchell Fred ◎ 596-1505
Mc Cracken Kenneth J ◎ 596-7879
Robichaud Rolland 596-5424
Reynolds John F 596-7256
West Robt C ◎ 596-7203
Turano Peter G Jr ◎ 596-5138
Nardone Henry J ◎ 596-4828
Nichols John D ◎ 596-1875
BOOM BRIDGE RD BEGINS
Ponte John ◎ 596-1608
LAUREL AV BEGINS
Sulima Alex ◎ 596-5780
Muoio Frank A Jr ◎ 596-1854
Furman Thos
Peck Ralph III 596-4839
OLD BOOM BRIDGE BEGINS
NICHOLS LANE BEGINS
Brown Eug E 596-5841
Giardino Joseph A ◎ 596-7819
Vacant
Vacant
Strafach John & Sons Inc cement foundations 596-4115
Strafach John J ◎ 596-4115
Way Harry M ◎ 596-1805
OAK HILL DR BEGINS
Cozzolino Saml ◎ 596-4539
Perri Joseph A Jr ◎ 596-7454
West Geo E ◎ 596-7890
Cassidy Francis J ◎ 596-7206
Dauray Jeanne ◎ 596-4226
Dubois Richd R ◎
La Rocca Frank J ◎
Ayers Rosina S Mrs ◎ 596-0924
John E Lepikko Inc bldr 596-5609
Lepikko John E ◎ 596-5609
Lyers Rosina S Mrs ◎ 596-0924
Vacant
Vetelino Joseph plmb ◎ 596-5709
Brancato Joseph P ◎ 596-5601
Vacant
Stewart Walter R 596-5705
Sposato Frank J ◎ 596-5176
Hebert Lawrence J ◎ 596-5563
Stebbins Henry R ◎

MEN AND BOYS CLOTHING, FURNISHERS
VAN HEUSEN SHIRTS—PURITAN SPORTSWEAR
GLEN EAGLE COATS—WEMBLY TIES
DOBBS HATS—HICKOCK BELTS
56 High Street Westerly, R.I. 02891—Tel. 596-2295

Stoning
Commu
Cred
Union,
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Man
599
43 W
Broad
Pawcat
Conn. 0

Target Street	Cross Street	Source
✓	-	Polk's City Directory

POTTER HILL RD 1971

International Motor Trucks
100 GRANITE STREET, WESTERLY, R.I. 02891 TELEPHONE 596-2829

POTTER HILL RD—Contd

Boyle Francis J ◎ 596-5654
Bariteau Romeo A 596-5538
Make Susan A Mrs ◎ 596-5743
Peckkam Dorothy D Mrs
Allison Rodger S 596-4777
Mac Lean Edw L ◎ 596-4898
Jacobson Wm E ◎ 596-7878
Gavitt John W ◎ 596-5641
Brearley Joseph B ◎ 596-2785
Church Clarence R ◎
Shortman Gordon R ◎ 596-1673
Latherow Geo J ◎ 596-4017
Duda Alex J ◎ 596-5615
Brown Frances Mrs ◎ 596-1219
Duda Stephen W ◎ 348-8557
Thompson Charles P ◎ 596-1500
Vacant
Thompson Wm C Jr ◎ 596-5509
Gerbitz John J Jr coml artist ◎ 596-7240
Cozzolino Eug J ◎ 596-5823
Haapanen Ida Mrs ◎
Gordon Barry R
Smith S Helen Mrs ◎
Jacques Ernest B ◎ 377-2695
Majeika S J Co cabinet makers 377-2046
Majeika Simon J ◎ 377-2046
Fallon Robt E ◎ 377-2730
Whiteley Flora E Mrs ◎ 377-4626
Vacant
Ingebretsen Anna J Mrs ◎ 377-4690
Cook Ronald M Jr ◎ 377-4466
Gradilone Thos E ◎ 377-2254
Vacant
Scott Elinore B Mrs 377-4765
Hanrahan Irene F Mrs ◎
Vacant
Vacant
Lepikko Eric E ◎ 377-2229
Lepikko Eug ◎
Vacant
Vacant
Mayheu Geo E Jr 377-2374
Barrus James A 377-4795
Brown Angie Mrs
Hunt Francis J
Bliven Frank H ◎
Corbin Bill 377-2545
Greene Dennis M 377-2435
Smith John K
Jacobson Amos
Barber Eliz Mrs ◎ 377-2251
Bromley H Dwight 377-2671
Church Ruth A ◎ 377-4352
Vacant
Karawish John sum res
Holland Charles V ◎ 377-2316

7

POUND RD (DUNN'S CORNERS)—FROM BRADFORD RD SOUTH AND EAST TO BRADFORD DUNN'S RD

ZIP CODE 02891
Campbell Ernest L ◎ 322-8832
Davidson Nevin ◎
Werrbach Geo A III 322-7395
Ultsch Terry R 322-8872
Vacant
Trebisacci Louis J ◎ 596-2353
Riley Geo T ◎
Reese Claire Mrs ◎ 348-8938
LAKESIDE DR BEGINS
Gingerella Robt E ◎ 596-1430

2

PROSPECT ST (PAWCATUCK)—FROM 20 PALMER TO 149 MECHANIC

ZIP CODE 02891
1 Card Edw
Evans John J
Earl Steven 599-2037
2 Groppelli's Market 599-4457
Madrid Walter 599-1249
Collins Irene Mrs 599-4166
Prachniak Lottie
3 Palmer Elbert E 599-4377
Conelly Marie 599-2775
Rathbun Woerner
4 Nolka Foster
Vacant
Cross Helen M Mrs 599-4916
Wasyluk Danl 599-1120
Richmon David
Thorp Emma J Mrs
5 Wheeler Florence

Imported ● Domestic Liquors, Beers and Ales
Richard L. Pignataro, Jr.
56 Canal St., Westerly, R.I. 02891 Tel. 596-5711

WHOLESALE & RETAIL PAINTS
Brushes - Sundries - Painters Supplies
FREE DELIVERY — FREE PARKING
24 High Street, Westerly, R.I. 02891 Tel. 348-0300

Target Street	Cross Street	Source
✓	-	Polk's City Directory

POTTER HILL RD 1967

"By Air, By Sea, By Land To All Parts of the World"
15 Roilrood Ave. Westerly, R. I.
AMERICAN SOCIETY OF TRAVEL AGENTS ASTA
Coll Westerly 596-7744
R. I. Memoriol Union Bldg. 783-4214

PHONES 322-0495 and 322-06
OFFICE: DUNN'S CORNERS

POST RD—CONTD

RODMAN DOROTHY MRS ●
322-0258
VACANT
DREDGE DAVID E ●
322-0311
GAVITT WM S ● 322-0327
FLETCHER CHRISTINA G MRS
● 322-0553
PARKER RUTH M MRS ●
322-8806
DREW THEO B
HAVERSHAM INN RESTR
322-0314
HAVERSHAM INN INC
VACANT
JOEST RUDOLPH ● 322-0505
SMITH ARTH B JR ●
322-7151
VACANT
VACANT
GILCHRIST CHARLES J ●
322-7731
GAVITT SAML C ● 322-7936
---SHORE RD ENDS
BEEBE JAMES D ● 322-7707
SMITH ARTH M ● 322-0238
BARNES HAROLD M ●
322-0353
WESTERLY DRIVE IN
THEATRE INC 322-0310
GARDINER ROBT ● 322-7293
GAVITT PHILIP S ●
322-0436
GAVITT JOSEPH ● 322-0368
GIRVEN HAROLD W ●
322-7113
---SHELTER HARBOR RD
BEGINS
GAVITT PHILIP H ●
GAVITT ELIZ B MRS ●
322-0225
NO RETURN
DE PIETRO EVA B MRS ●
322-7911
VACANT
SAUNDERS JOSEPH T ●
322-6230
VACANT

15

POTTER HILL RD -FROM END
OF HIGH TO ASHAWAY TOWN

---ZIP CODE 02891
PONTE JOHN ● 595-1608
SULIMA ALEX 596-5780
MUOIO FRANK A JR ●
596-7854
20 WILLIAMS CHARLES M
596-5580
---OLD BOOM BRIDGE BEGINS
---NICHOLS LANE BEGINS
BROWN EUG E 596-5841
FURMAN THOS ● 596-7959
GIARDINO JOSEPH A ●
596-7819
BABCOCK GEO I ● 596-5440
GRIFFIN FREDK B 596-1700
STRAFACH JOHN J ●
596-4115
LAMELIN RICHD A ●
596-7290
CASSIDY FRANCIS ●
596-1087
STASKOWSKI JOSEPH F ●
VACANT
FAILLACE GASPER A ●
LEPIKKO JOHN E ●
596-5609
AYERS ALVIN ● 596-7624
OJOLA TILDA ●
VETELINO JOSEPH PLMB ●
596-5709
COON FRANK J ● 596-7816
VACANT
SPOSATO FRANK J ●
596-5176
HINDLE RICHD A ●
LYNCH ROBT P ●
WEST GEO E ● 596-7890
GRISPINO THOS
BARITEAU ROMEO A
596-5538
GILCHRIST WM L
PECKHAM W HAROLD ●
596-5401
MAC LEAN EDW L ●
596-4898
MAKI SUSAN A MRS ●
596-5743
JACOBSON WM E ● 596-7878
GAVITT JOHN W. ● 596-5641
CRONEN MARY ●
CHURCH CLARENCE R ●
THOMPSON WM C ● 596-5509
THOMPSON WM III 596-1081
DUDA ALEX J ● 596-5615

WESTERLY-STONINGTON CREDIT BUREAU, Inc.
CREDIT REPORTING—COLLECTIONS
MEDICAL DENTAL—REPOSSESSIONS

Target Street	Cross Street	Source
✓	-	Polk's City Directory

POTTER HILL RD 1967

SHERWIN-WILLIAMS PAINTS
INDUSTRIAL FINISHES AND SUPPLIES
18 BROAD ST. PHONE 596-2110 WESTERLY, R. I.

POTTER HILL RD—CONTD

KERR AMELIA ●
DUDA STEPHEN W ● 348-8557
THOMPSON CHARLES P ● 596-1500
DIGHT LOUISE D MRS ●
GERBITZ JOHN J JR ARTIST ● 596-7240
HAAPANEN IDA MRS ●
FALLON ROBT E ● 377-2730
SMITH S HELEN ● 377-4406
BSMT SAUNDERS YVONNE G ● 377-2158
COTTRELL NICKOLAS ● 377-4687
JACQUES ERNEST B ● 377-2695
MAJEIKA S J CO CABINET MAKERS 377-2046
MAJEIKA SIMON J ● 377-2046
VACANT
WHITELEY FLORA E MRS ● 377-4626
VACANT
INGEBRETSEN ANNA J MRS ● 377-4690
THORNTON WM B ● 377-4452
GRADILONE THOS E ● 377-2254
VACANT
SCOTT ELINORE B MRS 377-4765
HANRAHAN IRENE F MRS ●
VACANT
VACANT
VACANT
VACANT
LEPIKKO ERIC E ● 377-2229
LEPIKKO EUG ●
VACANT
BARRUS JAMES A 377-4795
SHELDON JAMES
JOHNSON SIDNEY L 377-2002
CORBIN GLADYS I MRS 377-2545
GREENE DENNIS M 377-2435
BARBER ELIZ MRS ● 377-2251
BROMLEY H DWIGHT 377-2671
HUNT FRANCIS J ● 377-4344
CHURCH RUTH A ● 377-4352
PENDLETON KARL A ●
KENYON REGINALD D ● 377-4468
THORP HOWARD E ● 377-2240
HOLLAND CHARLES V ● 377-2316
GARDNER WM

2

PROSPECT ST
(PAWCATUCK)-FROM 20 PALMER TO 149 MECHANIC

---ZIP CODE 12891
1 VACANT
EVANS JOHN J
KINNEY JACK C 599-2281
2 GROPPELLI'S MARKET GRO 599-4457
FINNERAN EDW M JR 599-1249
BOLTON ELIZ H MRS 599-4166
FERNETTE ARMAND
3 KENYON RUSSELL E 599-4377
LEWIS ARTH L 599-2775
RATHBUN WOEPNER
4 BURNS MADELINE MRS 599-2952
BURGESS JOSEPH H JR
CROSS HELEN M MRS 599-4916
WASYLUK DANL 599-1120
BURNS JAMES K 599-1555
THORP EMMA J MRS
5 WHEELER FLORENCE
BARBER JESSE W ● 599-5492
7 CERCENA EDW E ● 599-4110
8 WESTERLY ELECTRONICS TV SLS & SERV 599-4992
9 SULLIVAN JOHANNA MRS ● 599-4793
MARTELL PAUL L
8 VACANT
11 HAYS WM H ●
13 SCHACKNER LOUIS L ●

TOP COVERAGE IN A TOP INCOME AREA
PUBLISHED BY THE UTTER CO.
The Westerly Sun
56 MAIN ST.
TELEPHONE (401) 596-7791

N. Stonington Rd.
Tel. 599-4529
Pawcatuck, Co

Target Street	Cross Street	Source
✓	-	Polk's City Directory

POTTER HILL RD 1963

NATIONAL BANK OF RHODE ISLAND
Granite Street Shopping Center

Post Rd—Contd
Church Floyd A ◎ FA 2-7750
Earl Wilbur R
Post Camera Repair Shop FA 2-0450
Newman Geo W ◎
Vacant
Rodman Dorothy Mrs ◎ FA 2-0258
Dredge David E ◎ FA 2-0311
Gavitt Wm S ◎ FA 2-0327
Fletcher Christina G Mrs ◎ FA 2-0553
Parker Ruth M Mrs ◎ FA 2-8806
Haversham Inn FA 2-0314
Joest Rudolph ◎ FA 2-0505
Bodenhorn Harold F ◎ FA 2-0043
Vacant
Gilchrist Chas J ◎ FA 2-7731
Gavitt Saml C ◎ FA 2-7936

Shore rd ends
Beebe Jas D ◎ FA 2-7707
Smith Arth M ◎ FA 2-0238
Vacant
Barnes Harold M ◎ FA 2-0353
Riley Gilbert T ◎ FA 2-0061
Westerly Drive-in Theatre Inc FA 2-0310
Gavitt Philip S ◎ FA 2-0436
Gavitt Jos W ◎ FA 2-0368

Shelter Harbor rd begins
Gavitt Wallace FA 2-0457
Gavitt Philip H ◎
Gavitt Eliz B Mrs ◎ FA 2-0225
Parnigoni Leonard ◎ FA 2-0501
DePietro Eva B Mrs ◎ FA 2-7911
Saunders Joseph T ◎ FA 2-6230
Schafmeister Vincent J jr FA 2-0255

3

POTTER HILL ROAD — From end of High to Ashaway Town Line

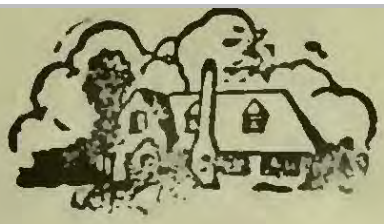
Ponte John ◎ 6-7373
Muoio Frank A ◎ 6-7374
Sulima Alexander ◎ 6-5780
Brown Eug E 6-5841
Furman Thos ◎ 6-7959
Williams Chas M 6-5580
Page Arth E ash & refuse remover ◎ 6-7818
Carr Percy ◎ 6-7800
Giardino Jos A ◎ 6-7819
Babcock Geo I ◎ 6-5440
Griffin Fred B 6-1700
Strafach John J ◎ 6-4115
Sullivan Leo A ◎ 6-5809
Robichaud Roland L 6-5424
Bertino Steve 6-4614
Lamelin Richd A ◎ 6-7290
West Robt C ◎ 6-7203
Sposato Frank J ◎ 6-5176
West Geo E ◎ 6-7890
Servidio Eug J ◎ 6-7351
Vetelino Jos plmb h ◎ 6-5709
Ojala John ◎
Coon Frank J ◎ 6-7816
Savage Frederic R & Son trucking ◎ FR 7-4716
Savage Robt E
Hindle David W ◎ carp
Nasi J Wm ◎
Peckham W Harold ◎ 6-5401
rear Steward Chas 6-7758
Maki Susan A Mrs ◎ 6-5743
Jacobson Wm E ◎ 6-7878
Lepikko John E ◎ 6-5609
Gavitt John W ◎ 6-5614
Cronen Mary Mrs ◎

Road to Hopkinton rd
Church Clarence R 6-7587
Thompson Wm C ◎ 6-5509
Duda Alex J ◎
Duda Stephen W 6-1600
Thompson Chas P ◎ 6-1500
Dight Louie D Mrs ◎
Gerhitz John J jr ◎ 6-7240
Haapanen Ida Mrs ◎
Vacant
Smith Alson T ◎ FR 7-4406
Jacques Ernest B ◎ FR 7-2695
Whiteley Flora E Mrs ◎ FR 7-4626
Majeika S J Co cabinet mkrs ◎ FR 7-2046
Majeika Simon J ◎
Beaupre Ida Mrs
Crofwell Wm T
Ingebretsen Arth G ◎
Thornton Wm B ◎ FR 7-4452
Gradilone Thos E ◎ FR 7-4690
Staskowski Joseph F ◎

Road to Christian Hill
Vacant
Scott Owen FR 7-4765
Hanrahan Irene F Mrs ◎
MacLean Edw L ◎ 6-4898
Vacant
Vacant
Vacant
Labrecque Arth ◎
Barrus James A FR 7-4791
Lepikko Eug ◎
Lepikko Eric E ◎ FR 7-2229
Bliven Frank H ◎

Target Street	Cross Street	Source
✓	-	Polk's City Directory

POTTER HILL RD 1963



COT NLAL
Real Estat
6 High St. Tel

Potter Hill Rd—Contd

Nigh Warren
Buck Linton L ◎
Sheldon Mary A Mrs
Johnson Sidney L FR 7-2002
Corbin Gladys I Mrs
Greene Dennis M FR 7-2435
Barber Clifford T gro ◎ FR 7-2251
Hunt Francis J ◎ FR 7-2244
Church Ruth A ◎ FR 7-2252
Pendleton Karl A ◎
Kenyon Reginald D FR 7-4468
Holland Chas B ◎ FR 7-2316
Bromley H Dwight FR 7-7621
Thorp Howard E ◎ FR 7-2240

Pawcatuck River crosses

2

PROSPECT (Pawcatuck) — From 20 Palmer to 149 Mechanic

1 Lamb David H
McGuire Matilda J
Chicorin Janet 9-5820

2 Groppelli's Market 9-4457
Finneran Edw M 9-1249

Target Street	Cross Street	Source
✓	-	Polk's City Directory

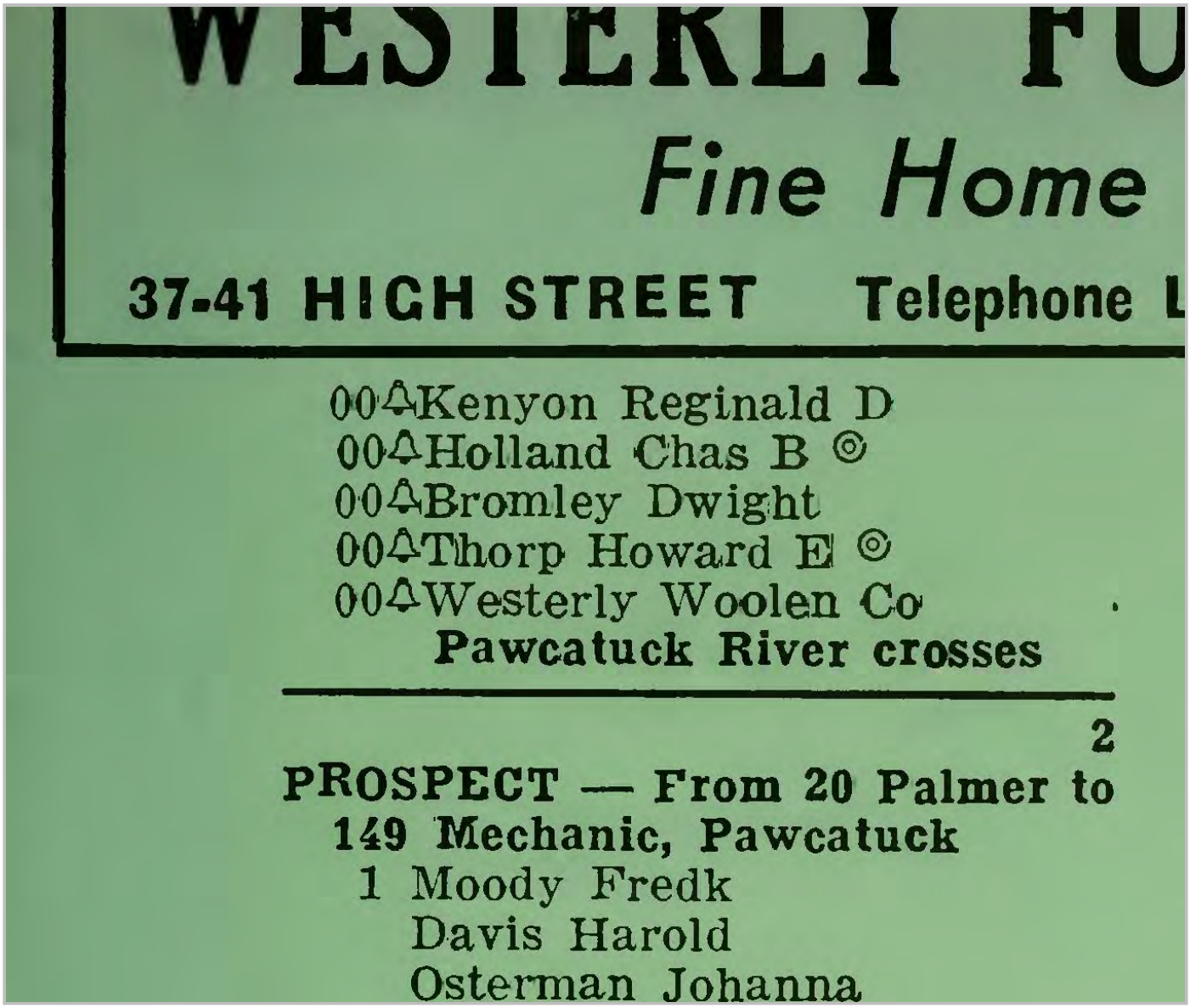
POTTER HILL RD 1960

POST RD—Contd
00△Harter Glen ◎
00△Ashworth Danl N restr ◎
Road to Woody Hill
00△Romanella Jos F ◎
00 Gully Ernest N ◎
00△Krebs The ofc
00△Krebs Harriet M Mrs ◎
00△Kalling Doris
00△Carr Hampton ◎
00△Proctor Geo C ◎
00△Nardone Gerard J ◎
00△Bliven Russell P ◎
00 Vacant
00△Hansbury Andrew J ◎
00 Vacant
00 Westerly Artesian Well Co
00△Newton Harold L ◎
00△McDarby Ward ◎
00 Mowrey Rochester C ◎
00△Mowrey Clinton ◎
00 Church Floyd A
00 Fletcher Christina G Mrs ◎
00△Dredge David E ◎
00△Post Camera Repair Shop
00 Newman Geo W ◎
00△Gavitt Margt M Mrs ◎
00△Rodman Thos C ◎
00△Gavitt Wm S ◎
00△Parker Ruth M Mrs ◎
00△Haversham Inn
00 Joest Reinhold ◎
00 Vacant
00 Gilchrist Chas J ◎
00△Gavitt Saml ◎
00△Beebe Jas D ◎
00 Vacant
00△Smith Arth M ◎
00△Barnes Harold M tourist home ◎
Shore rd ends
00△Westerly Drive-in Theatre
00△Gavitt Philip S ◎
00△Gavitt Jos W ◎
00△Gavitt Clara C Mrs ◎
00△Gavitt Wallace
00△Gavitt Philip H ◎
Shelter Harbor
00△Parnigoni Leonard ◎
00△Saunders Alice E Mrs ◎
00 Vacant

POTTER HILL ROAD—From end of High to Ashaway Town Line
00 Rhode Island State of—Dept of Public Works, Div of Roads & Bridges
00△Gavitt Munson E ◎
00△Pellegrino Louis A ◎
00△McCracken Kenneth J
00△West Robt C ◎
00△Turano Peter G jr ◎
00△Robichaud Rolland L
00 Davis Cyrus
Nichols Corner
00△Nardone Henry J ◎
Canal extension ends
00△Nichols John D ◎
Boombridge rd begins
00△Sulima Alexander ◎
00△Peck Ralph E jr ◎
00△Wucik Peter
00△Page Arth E trucker ◎
00△Carr Percy ◎
00△Brown Everett E ◎
00△Souza John P ◎
00△Vacca Jos A ◎
00△Nugent Wilfred D ◎
00△Vacca Gelto ◎
00△Giardino Jos A ◎
00△Gent Robt D
00△Babcock Geo I ◎
00 Vacant
00△Lanphear Dorothy E Mrs ◎
00△Schilke Harriet K Mrs ◎
00△Davis Emily A Mrs ◎
00△Swan Clarence H mason h ◎
00△Hamilton Isabella W Mrs ◎
00 Vacant
00 Bennett Raymond ◎
00△Hamilton Robt E
00 Vacant
00△Vetelino Jos plmb h ◎
00 Ojala John ◎
00△Coon Frank J ◎
00△Savage Frederic R & Son cesspool cleaning and trucking ◎
△Savage Frederic R ◎
00△Peckham Wm H jr
00 Nasi J Wm ◎
00△Peckham W Harold ◎
00 Maki Susan A Mrs ◎
00△Jacobson Wm ◎
00△Gavitt John W ◎
00 Eronen Mary Mrs ◎
00 Gough Carrie E Mrs
Road to Hopkinton rd
00△Thompson Grace G Mrs ◎
00 Duda Alex J ◎
00△Duda Stanley
00△Thompson Chas P ◎
00 Haapanen Ida Mrs
00 Jones Charlotte L Mrs ◎
00△Smith Alson T ◎
00△Jacques Ernest B ◎
00△Saunders Edna E Mrs ◎
00△Whiteley Flora E Mrs ◎
00△Majeika S H Co cabinet mkrs
△Majeika Simon J ◎
00 Vacant
00 Ingebretsen Arth
00△Kearney Paul M ◎
00△Gradilone Thos ◎
00△Andrews Mary E ◎
Road to Christian Hill
00 Vacant
00△Scott Owen ◎
00 Vacant
00 Greene Ethel C Mrs
00 Pendleton Annie Mrs
00 Vacant
00△Greene Dennis M ◎
00 Vacant
00 Lebrecque Arth
00 Palmer Mary D Mrs
00 Coon Richd L
00△Lepikko Eric E ◎
00 Lepikko Hilda Mrs
00△Elazer Vernon Buck Linton ◎
00 Hindle David W
00 Vacant
00△Johnson Sidney L
00△Barber Clifford T gro h ◎
00△Hunt Francis J ◎
00△Church Arth G ◎
00 Pendleton Karl A ◎

Target Street	Cross Street	Source
✓	-	Polk's City Directory

POTTER HILL RD 1960



WESTERLY FU

Fine Home

37-41 HIGH STREET Telephone L

00 Kenyon Reginald D
00 Holland Chas B ©
00 Bromley Dwight
00 Thorp Howard E ©
00 Westerly Woolen Co

Pawcatuck River crosses

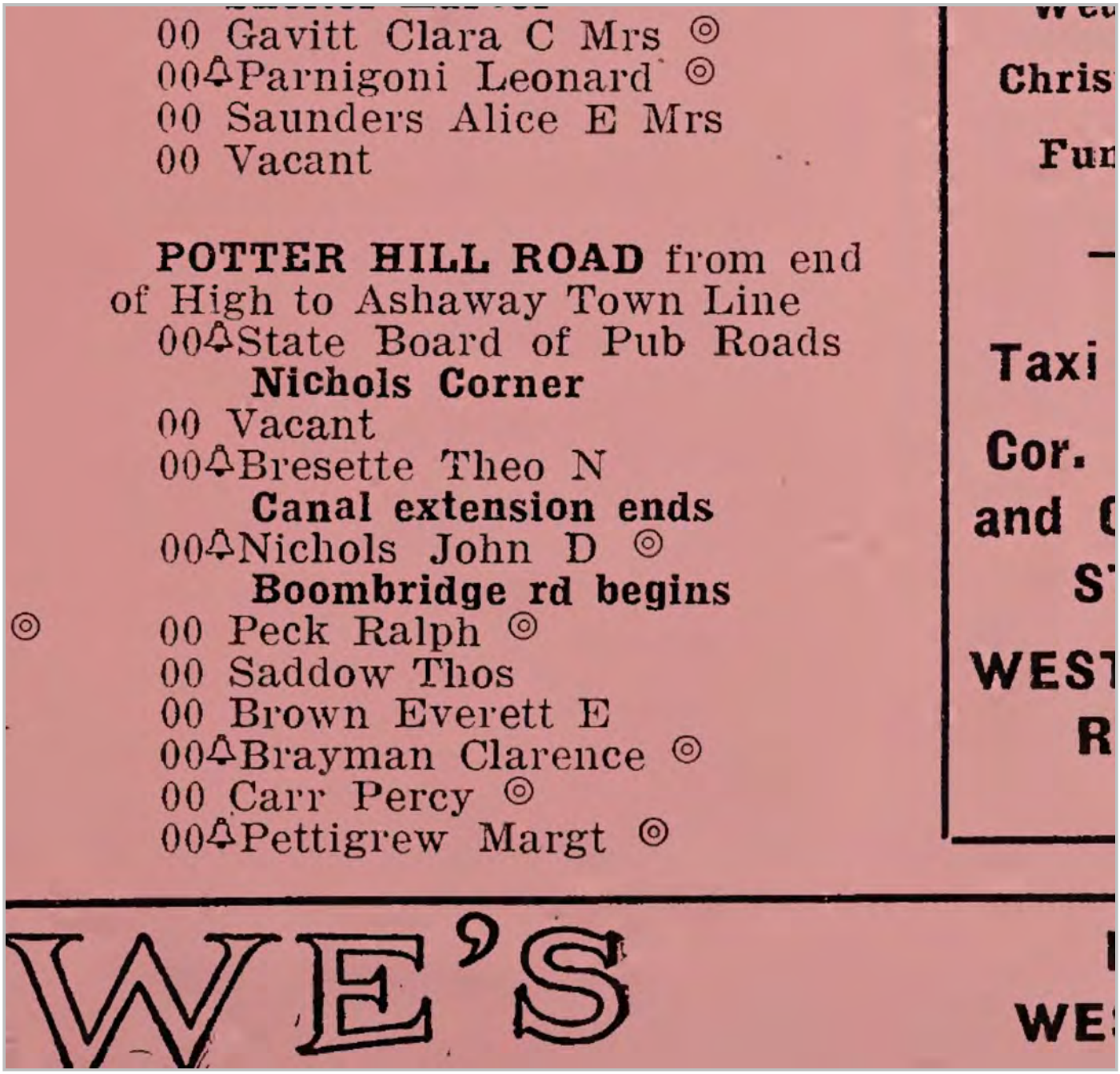
2

PROSPECT — From 20 Palmer to 149 Mechanic, Pawcatuck

1 Moody Fredk
Davis Harold
Osterman Johanna

Target Street	Cross Street	Source
✓	-	Polk's City Directory

POTTER HILL RD 1950



00 Gavitt Clara C Mrs ◎
00 Parnigoni Leonard ◎
00 Saunders Alice E Mrs
00 Vacant

POTTER HILL ROAD from end of High to Ashaway Town Line
00 State Board of Pub Roads
Nichols Corner
00 Vacant
00 Bresette Theo N
Canal extension ends
00 Nichols John D ◎
Boombridge rd begins
00 Peck Ralph ◎
00 Saddow Thos
00 Brown Everett E
00 Brayman Clarence ◎
00 Carr Percy ◎
00 Pettigrew Margt ◎

Chris
Fur
Taxi
Cor.
and
S
WEST
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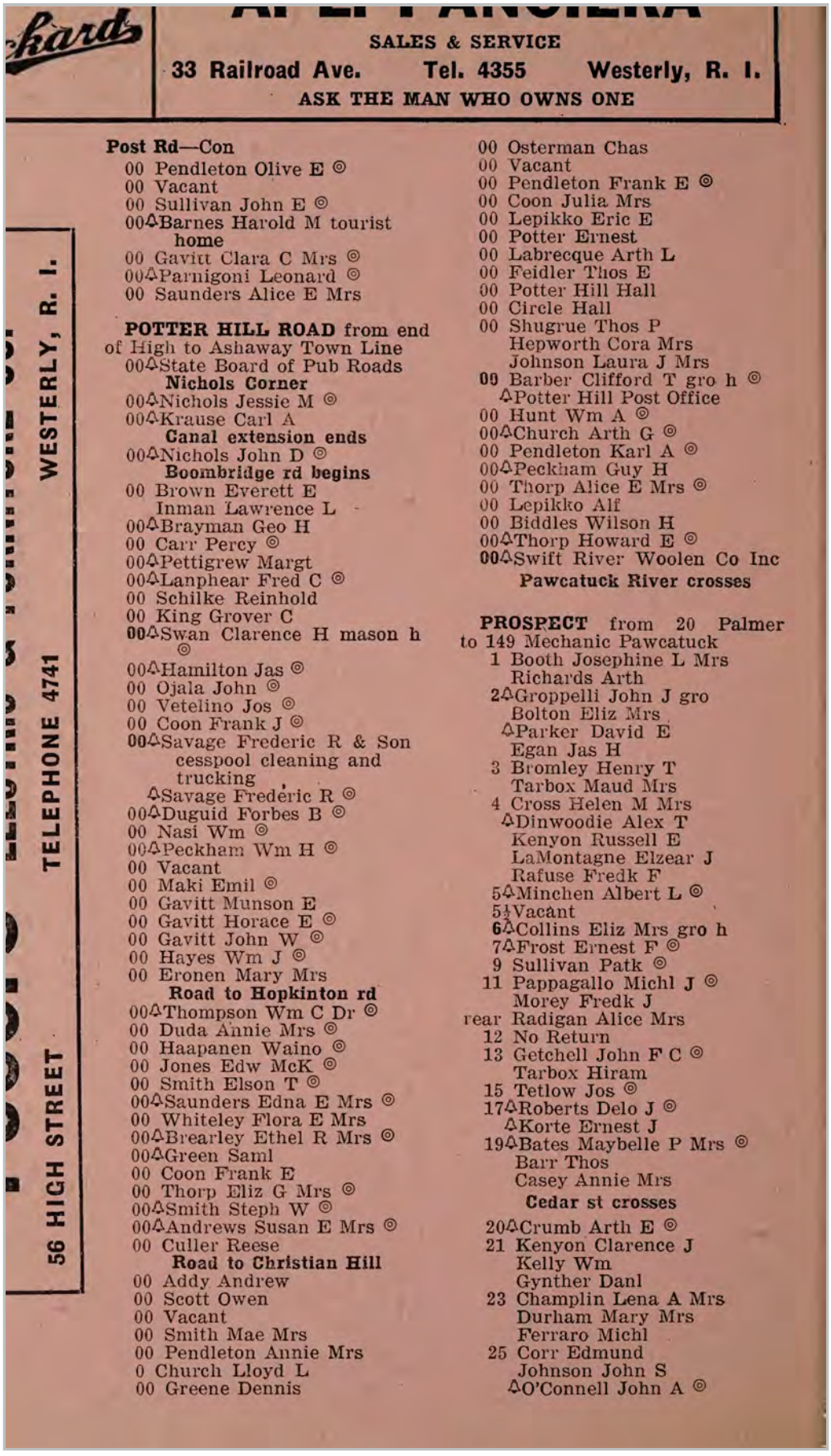
WE'S
WE

Target Street	Cross Street	Source
✓	-	Polk's City Directory

POTTER HILL RD 1945



SALES & SERVICE
33 Railroad Ave. Tel. 4355 Westerly, R. I.
ASK THE MAN WHO OWNS ONE

Post Rd—Con

00 Pendleton Olive E ◎
00 Vacant
00 Sullivan John E ◎
00△Barnes Harold M tourist home
00 Gavitt Clara C Mrs ◎
00△Parnigoni Leonard ◎
00 Saunders Alice E Mrs

POTTER HILL ROAD from end of High to Ashaway Town Line

00△State Board of Pub Roads
Nichols Corner
00△Nichols Jessie M ◎
00△Krause Carl A
Canal extension ends
00△Nichols John D ◎
Boombridge rd begins
00 Brown Everett E
Inman Lawrence L
00△Brayman Geo H
00 Carr Percy ◎
00△Pettigrew Margt
00△Lanphear Fred C ◎
00 Schilke Reinhold
00 King Grover C
00△Swan Clarence H mason h ◎
00△Hamilton Jas ◎
00 Ojala John ◎
00 Vetelino Jos ◎
00 Coon Frank J ◎
00△Savage Frederic R & Son cesspool cleaning and trucking
△Savage Frederic R ◎
00△Duguid Forbes B ◎
00 Nasi Wm ◎
00△Peckham Wm H ◎
00 Vacant
00 Maki Emil ◎
00 Gavitt Munson E
00 Gavitt Horace E ◎
00 Gavitt John W ◎
00 Hayes Wm J ◎
00 Eronen Mary Mrs
Road to Hopkinton rd
00△Thompson Wm C Dr ◎
00 Duda Annie Mrs ◎
00 Haapanen Waino ◎
00 Jones Edw McK ◎
00 Smith Elson T ◎
00△Saunders Edna E Mrs ◎
00 Whiteley Flora E Mrs
00△Brearley Ethel R Mrs ◎
00△Green Saml
00 Coon Frank E
00 Thorp Eliz G Mrs ◎
00△Smith Steph W ◎
00△Andrews Susan E Mrs ◎
00 Culler Reese
Road to Christian Hill
00 Addy Andrew
00 Scott Owen
00 Vacant
00 Smith Mae Mrs
00 Pendleton Annie Mrs
0 Church Lloyd L
00 Greene Dennis
00 Osterman Chas
00 Vacant
00 Pendleton Frank E ◎
00 Coon Julia Mrs
00 Lepikko Eric E
00 Potter Ernest
00 Labrecque Arth L
00 Feidler Thos E
00 Potter Hill Hall
00 Circle Hall
00 Shugrue Thos P
Hepworth Cora Mrs
Johnson Laura J Mrs
00 Barber Clifford T gro h ◎
△Potter Hill Post Office
00 Hunt Wm A ◎
00△Church Arth G ◎
00 Pendleton Karl A ◎
00△Peckham Guy H
00 Thorp Alice E Mrs ◎
00 Lepikko Alf
00 Biddles Wilson H
00△Thorp Howard E ◎
00△Swift River Woolen Co Inc
Pawcatuck River crosses

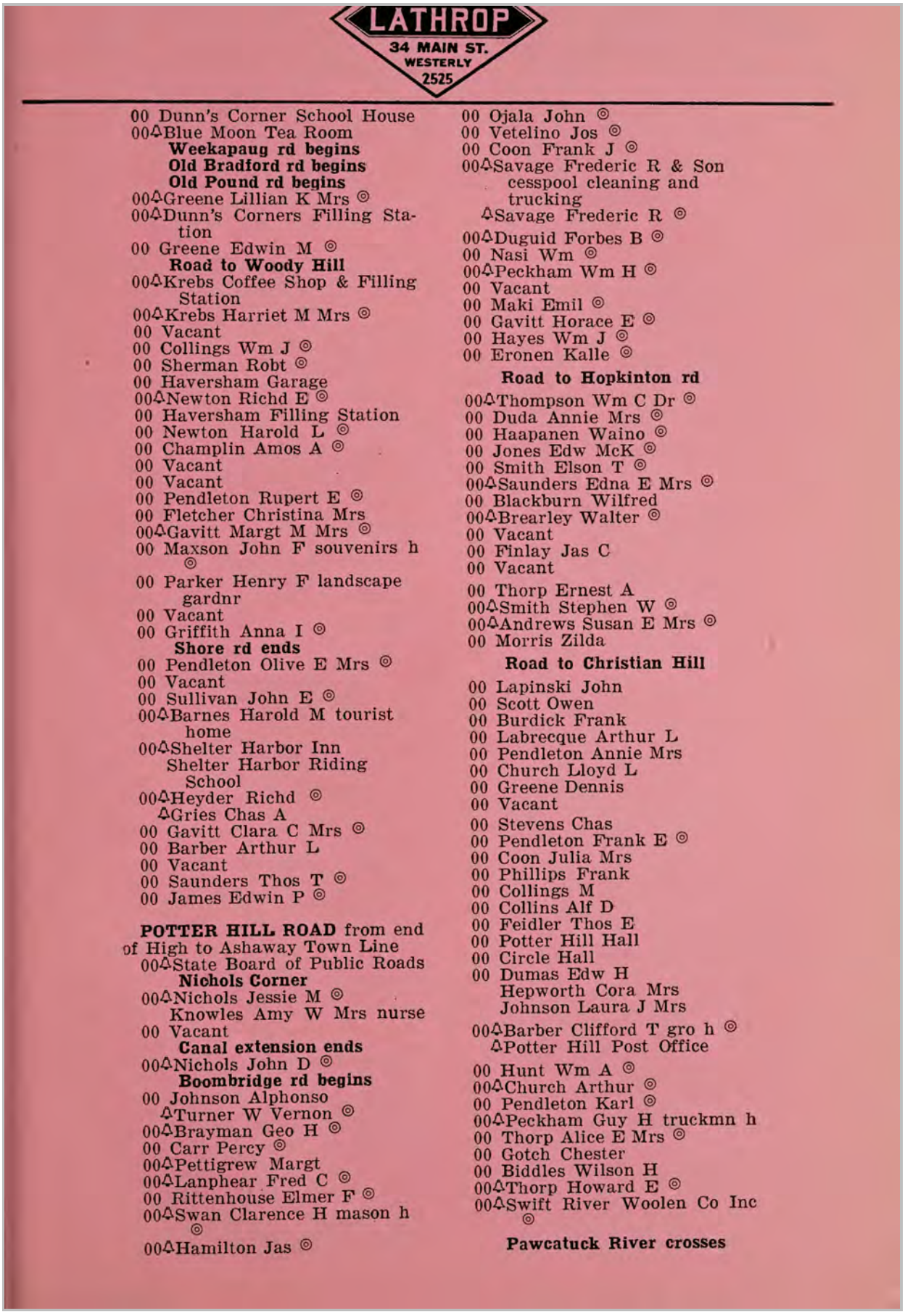
PROSPECT from 20 Palmer to 149 Mechanic Pawcatuck

1 Booth Josephine L Mrs
Richards Arth
2△Groppelli John J gro
Bolton Eliz Mrs
△Parker David E
Egan Jas H
3 Bromley Henry T
Tarbox Maud Mrs
4 Cross Helen M Mrs
△Dinwoodie Alex T
Kenyon Russell E
LaMontagne Elzear J
Rafuse Fredk F
5△Minchen Albert L ◎
5½ Vacant
6△Collins Eliz Mrs gro h
7△Frost Ernest F ◎
9 Sullivan Patk ◎
11 Pappagallo Michl J ◎
Morey Fredk J
rear Radigan Alice Mrs
12 No Return
13 Getchell John F C ◎
Tarbox Hiram
15 Tetlow Jos ◎
17△Roberts Delo J ◎
△Korte Ernest J
19△Bates Maybelle P Mrs ◎
Barr Thos
Casey Annie Mrs
Cedar st crosses
20△Crumb Arth E ◎
21 Kenyon Clarence J
Kelly Wm
Gynther Danl
23 Champlin Lena A Mrs
Durham Mary Mrs
Ferraro Michl
25 Corr Edmund
Johnson John S
△O'Connell John A ◎

56 HIGH STREET TELEPHONE 4741 WESTERLY, R. I.

Target Street	Cross Street	Source
✓	-	Polk's City Directory

POTTER HILL RD 1941

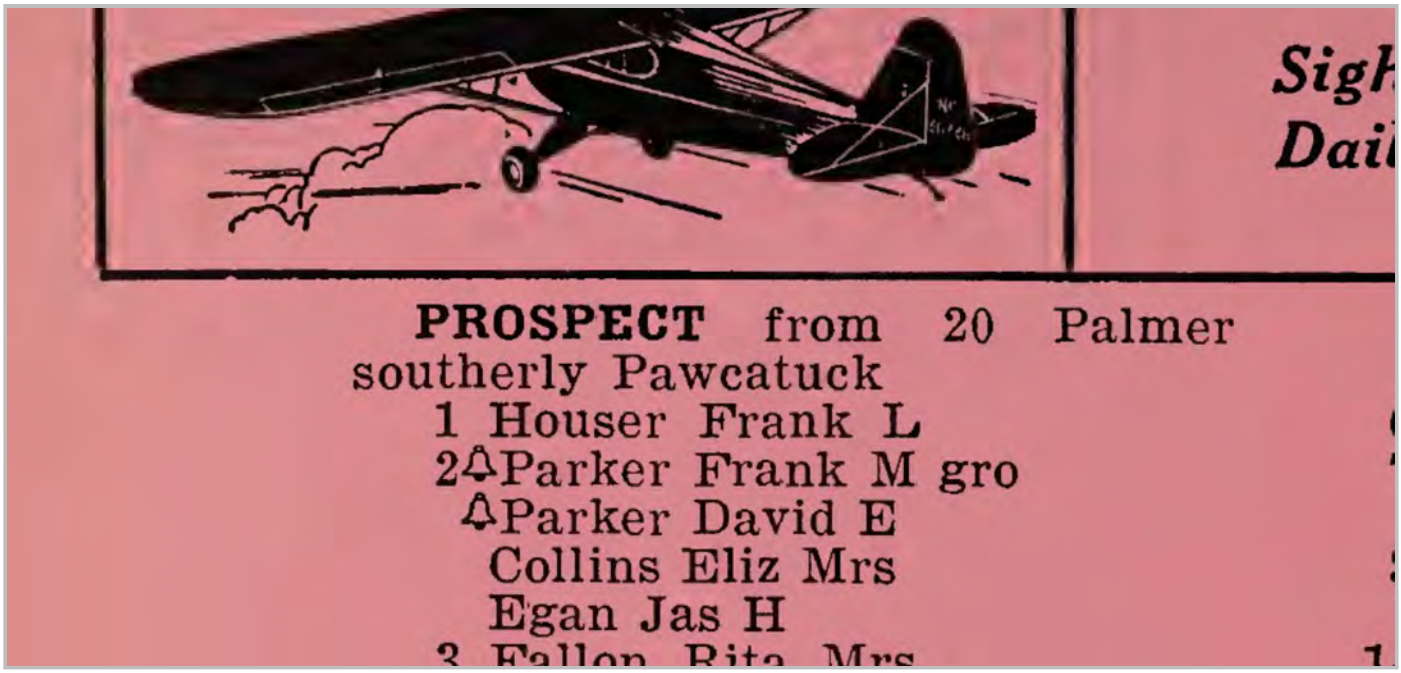


00 Dunn's Corner School House
00△Blue Moon Tea Room
Weekapaug rd begins
Old Bradford rd begins
Old Pound rd begins
00△Greene Lillian K Mrs ◎
00△Dunn's Corners Filling Station
00 Greene Edwin M ◎
Road to Woody Hill
00△Krebs Coffee Shop & Filling Station
00△Krebs Harriet M Mrs ◎
00 Vacant
00 Collings Wm J ◎
00 Sherman Robt ◎
00 Haversham Garage
00△Newton Richd E ◎
00 Haversham Filling Station
00 Newton Harold L ◎
00 Champlin Amos A ◎
00 Vacant
00 Vacant
00 Pendleton Rupert E ◎
00 Fletcher Christina Mrs
00△Gavitt Margt M Mrs ◎
00 Maxson John F souvenirs h ◎
00 Parker Henry F landscape gardnr
00 Vacant
00 Griffith Anna I ◎
Shore rd ends
00 Pendleton Olive E Mrs ◎
00 Vacant
00 Sullivan John E ◎
00△Barnes Harold M tourist home
00△Shelter Harbor Inn
Shelter Harbor Riding School
00△Heyder Richd ◎
△Gries Chas A
00 Gavitt Clara C Mrs ◎
00 Barber Arthur L
00 Vacant
00 Saunders Thos T ◎
00 James Edwin P ◎

POTTER HILL ROAD from end of High to Ashaway Town Line
00△State Board of Public Roads
Nichols Corner
00△Nichols Jessie M ◎
Knowles Amy W Mrs nurse
00 Vacant
Canal extension ends
00△Nichols John D ◎
Boombridge rd begins
00 Johnson Alphonso
△Turner W Vernon ◎
00△Brayman Geo H ◎
00 Carr Percy ◎
00△Pettigrew Margt
00△Lanphear Fred C ◎
00 Rittenhouse Elmer F ◎
00△Swan Clarence H mason h ◎
00△Hamilton Jas ◎
00 Ojala John ◎
00 Vetelino Jos ◎
00 Coon Frank J ◎
00△Savage Frederic R & Son cesspool cleaning and trucking
△Savage Frederic R ◎
00△Duguid Forbes B ◎
00 Nasi Wm ◎
00△Peckham Wm H ◎
00 Vacant
00 Maki Emil ◎
00 Gavitt Horace E ◎
00 Hayes Wm J ◎
00 Eronen Kalle ◎
Road to Hopkinton rd
00△Thompson Wm C Dr ◎
00 Duda Annie Mrs ◎
00 Haapanen Waino ◎
00 Jones Edw McK ◎
00 Smith Elson T ◎
00△Saunders Edna E Mrs ◎
00 Blackburn Wilfred
00△Brearley Walter ◎
00 Vacant
00 Finlay Jas C
00 Vacant
00 Thorp Ernest A
00△Smith Stephen W ◎
00△Andrews Susan E Mrs ◎
00 Morris Zilda
Road to Christian Hill
00 Lapinski John
00 Scott Owen
00 Burdick Frank
00 Labrecque Arthur L
00 Pendleton Annie Mrs
00 Church Lloyd L
00 Greene Dennis
00 Vacant
00 Stevens Chas
00 Pendleton Frank E ◎
00 Coon Julia Mrs
00 Phillips Frank
00 Collings M
00 Collins Alf D
00 Feidler Thos E
00 Potter Hill Hall
00 Circle Hall
00 Dumas Edw H
Hepworth Cora Mrs
Johnson Laura J Mrs
00△Barber Clifford T gro h ◎
△Potter Hill Post Office
00 Hunt Wm A ◎
00△Church Arthur ◎
00 Pendleton Karl ◎
00△Peckham Guy H truckmn h
00 Thorp Alice E Mrs ◎
00 Gotch Chester
00 Biddles Wilson H
00△Thorp Howard E ◎
00△Swift River Woolen Co Inc ◎
Pawcatuck River crosses

Target Street	Cross Street	Source
✓	-	Polk's City Directory

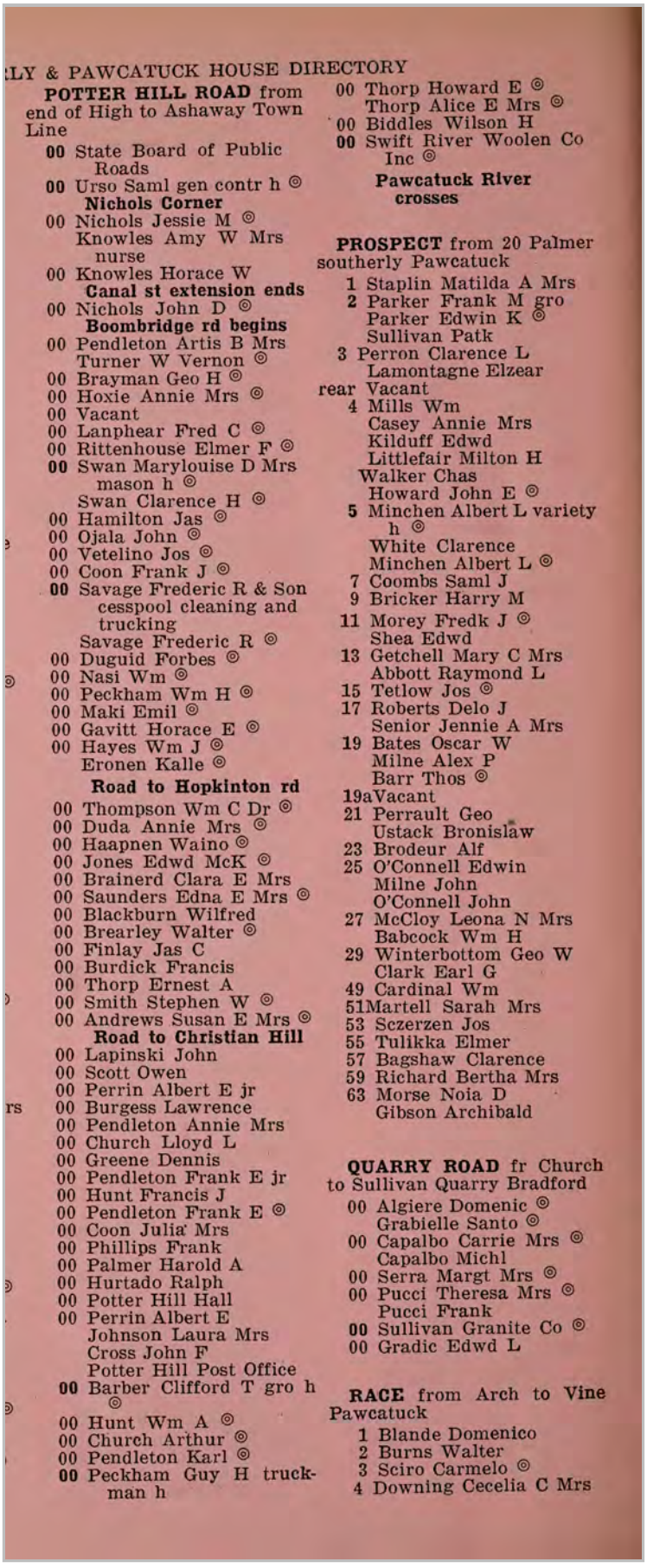
POTTER HILL RD 1941



PROSPECT from 20 Palmer
southerly Pawcatuck
1 Houser Frank L
2 Parker Frank M gro
Parker David E
Collins Eliz Mrs
Egan Jas H
3 Fallon Rita Mrs

Target Street	Cross Street	Source
✓	-	Sampson-Murdock City Directory

POTTER HILL RD 1938



LY & PAWCATUCK HOUSE DIRECTORY

POTTER HILL ROAD from end of High to Ashaway Town Line

00 State Board of Public Roads
00 Urso Saml gen contr h ◎
Nichols Corner
00 Nichols Jessie M ◎
Knowles Amy W Mrs nurse
00 Knowles Horace W
Canal st extension ends
00 Nichols John D ◎
Boombridge rd begins
00 Pendleton Artis B Mrs
Turner W Vernon ◎
00 Brayman Geo H ◎
00 Hoxie Annie Mrs ◎
00 Vacant
00 Lanphear Fred C ◎
00 Rittenhouse Elmer F ◎
00 Swan Marylouise D Mrs mason h ◎
Swan Clarence H ◎
00 Hamilton Jas ◎
00 Ojala John ◎
00 Vetelino Jos ◎
00 Coon Frank J ◎
00 Savage Frederic R & Son cesspool cleaning and trucking
Savage Frederic R ◎
00 Duguid Forbes ◎
00 Nasi Wm ◎
00 Peckham Wm H ◎
00 Maki Emil ◎
00 Gavitt Horace E ◎
00 Hayes Wm J ◎
Eronen Kalle ◎
Road to Hopkinton rd
00 Thompson Wm C Dr ◎
00 Duda Annie Mrs ◎
00 Haapnen Waino ◎
00 Jones Edwd McK ◎
00 Brainerd Clara E Mrs
00 Saunders Edna E Mrs ◎
00 Blackburn Wilfred
00 Brearley Walter ◎
00 Finlay Jas C
00 Burdick Francis
00 Thorp Ernest A
00 Smith Stephen W ◎
00 Andrews Susan E Mrs ◎
Road to Christian Hill
00 Lapinski John
00 Scott Owen
00 Perrin Albert E jr
00 Burgess Lawrence
00 Pendleton Annie Mrs
00 Church Lloyd L
00 Greene Dennis
00 Pendleton Frank E jr
00 Hunt Francis J
00 Pendleton Frank E ◎
00 Coon Julia Mrs
00 Phillips Frank
00 Palmer Harold A
00 Hurtado Ralph
00 Potter Hill Hall
00 Perrin Albert E
Johnson Laura Mrs
Cross John F
Potter Hill Post Office
00 Barber Clifford T gro h ◎
00 Hunt Wm A ◎
00 Church Arthur ◎
00 Pendleton Karl ◎
00 Peckham Guy H truckman h
00 Thorp Howard E ◎
Thorp Alice E Mrs ◎
00 Biddles Wilson H
00 Swift River Woolen Co Inc ◎
Pawcatuck River crosses

PROSPECT from 20 Palmer southerly Pawcatuck

1 Staplin Matilda A Mrs
2 Parker Frank M gro
Parker Edwin K ◎
Sullivan Patk
3 Perron Clarence L
Lamontagne Elzear rear Vacant
4 Mills Wm
Casey Annie Mrs
Kilduff Edwd
Littlefair Milton H
Walker Chas
Howard John E ◎
5 Minchen Albert L variety h ◎
White Clarence
Minchen Albert L ◎
7 Coombs Saml J
9 Bricker Harry M
11 Morey Fredk J ◎
Shea Edwd
13 Getchell Mary C Mrs
Abbott Raymond L
15 Tetlow Jos ◎
17 Roberts Delo J
Senior Jennie A Mrs
19 Bates Oscar W
Milne Alex P
Barr Thos ◎
19a Vacant
21 Perrault Geo
Ustack Bronislaw
23 Brodeur Alf
25 O'Connell Edwin
Milne John
O'Connell John
27 McCloy Leona N Mrs
Babcock Wm H
29 Winterbottom Geo W
Clark Earl G
49 Cardinal Wm
51 Martell Sarah Mrs
53 Sczerzen Jos
55 Tulikka Elmer
57 Bagshaw Clarence
59 Richard Bertha Mrs
63 Morse Noia D
Gibson Archibald

QUARRY ROAD fr Church to Sullivan Quarry Bradford

00 Algiere Domenic ◎
Grabielle Santo ◎
00 Capalbo Carrie Mrs ◎
Capalbo Michl
00 Serra Margt Mrs ◎
00 Pucci Theresa Mrs ◎
Pucci Frank
00 Sullivan Granite Co ◎
00 Gradic Edwd L

RACE from Arch to Vine Pawcatuck

1 Blande Domenico
2 Burns Walter
3 Sciro Carmelo ◎
4 Downing Cecelia C Mrs

Appendix C – Regulatory File Review

RECEIVED
D.E.M. / O.W.M.

2006 DEC -5 A 9:37

REPORT

Site Investigation Report –
198 Potter Hill Road,
Westerly, RI

Renewable Resources

PROJECT NO. 1009825

RECEIVED
D.E.M. / O.W.M.
2006 DEC -5 A 9:38

PROJECT NO. 1009825.

REPORT TO

Dr. Edward Carapezza
Renewable Resources
40 Shawomet Avenue
Warwick, RI 02889

ON

Site Investigation Report – 198 Potter Hill Road, Westerly, RI

November 28, 2006

Jacques Whitford
24 Albion Road, Suite 220
Lincoln, Rhode Island,
02865

Phone: 401-312-8005
Fax: 401-312-8010

www.jacqueswhitford.com

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SITE INVESTIGATION REPORT

1.0 Introduction

This report documents the activities and findings of a Site Investigation Report (SIR) prepared by Jacques Whitford Company, Inc. (Jacques Whitford) for Renewable Resources Inc. at the property located at 198 Potter Hill Road in Westerly, Rhode Island, hereinafter referred to as the subject property or site. The subject property is further identified on Westerly Tax Assessor's Plat Map 8, as Lot 23. The subject property is approximately 4.55 acres in size (see **Figures 1 and 2**). The subject property is currently zoned "RR-60", defined as Rural Residential with a minimal lot size of 60,000 square feet.

This report has been prepared for the exclusive use of Renewable Resources Inc. (the Client) solely for the purpose of an environmental evaluation of the subject property to comply with requirements of the Rhode Island Department of Environmental Management's (RIDEM) regulations, and more specifically, to complete an SIR in accordance with Section 7.00 of the Remediation Regulations. This SIR relies extensively on the findings of a previously completed Phase I Environmental Site Assessment (ESA) and a Phase II ESA. The Phase I ESA and Phase II ESA can be found in **Appendix A and B,** respectively. These investigations were completed to identify potential recognized environmental conditions (RECs) detected during the investigations. Based on the results of the Phase II ESA and in accordance with Sections 5.0 and 7.03B of the RIDEM's Remediation Regulations, a Release Notification Form was submitted to the RIDEM and is included in **Appendix C**.

The attached reports contain detailed information regarding the subject property history, and the environmental setting at the subject property and abutting properties. Although summarized herein, these reports should be read in their entirety in order to gain a thorough understanding of the subject property conditions.

1.1 Site Information

The Westerly Tax Assessor records did not contain any information on the buildings on the subject property. However, Jacques Whitford observed nine buildings, some of which were interconnected. Many of the buildings were in various states of disrepair. The roofs of many buildings were collapsed into the building. Additionally, foundations of several former buildings were observed on the subject property. The main building is a three story building made of granite block that is approximately 115 feet by 60 feet. There are two one story additions on the east side of the main building, one is 30 feet by 20 feet and made of brick and the other is 85 feet by 20 feet and made of brick and wood. A 100 foot by 70 foot building is connected to the main building to the south and is one story and made of brick. The former boiler building is 75 feet by 54 feet, is located to the north of the main building, and is two stories and made of brick. Another one story brick building is located to the north of the former boiler building. This building is 95 feet by 64 feet. Two wooden buildings are located north of this building and are 90 feet by 40 feet and 32 feet by 10 feet, respectively. One separate building was observed to the west of the former boiler building. This building is made of wood, is two stories high and 100 feet by 30 feet.

The subject property has been vacant for over 40 years and no utilities appear to be active at the subject property. Electricity and telephone service are available for the subject property. Municipal water is available in the area of the subject property. There were no records at the Westerly Water Department for the subject property. The subject property formerly relied on an

onsite well for water, which was stored in a storage tank tower on the site. There are no municipal sewers in the area of the subject property. The field property card from the Westerly Tax Assessor indicates that the subject property utilizes a septic system, however, the current site owner indicated that he believed that all wastewater was formerly discharged directly to the adjacent Pawcatuck River. The subject property buildings are not currently heated. The boilers remaining in the former boiler building appear to have been fueled by coal.

1.2 Site Setting

The site is located in a moderately developed area consisting of primarily residential and agricultural properties with some commercial and industrial properties nearby. The Pawcatuck River abuts the property to the east and north. Further east is undeveloped woodlands and further north are residential properties. Undeveloped woodlands abut the property to the south and residential and agricultural properties abut the property to the west. The subject property building is bound by Potter Hill Road to the south (see **Figure 2**). Potter Hill Road is a two-lane public road, which is maintained by the Town of Westerly.

1.3 Site History

According to the Westerly Tax Assessor's Office in Westerly Town Hall there have been many different deeds associated with the subject property. Records indicate that the subject property is currently owned by Renewable Resources Inc. Please refer to **Table 1** for a partial listing of reported previous property owners and dates of acquirement.

Table 1 – Previous Property Owners

Date	Owner	Book/Page
10/08/1992	Renewable Resources Inc.	432/53
8/15/1955	Helen E. Cottrell	74/354
5/6/1930	Swift River Woolen Co.	53/443
3/12/1930	Fredrick T. Lawrence	53/190

Based on the historical research conducted by Jacques Whitford, it appears as though the subject property was first developed approximately in the mid 1800s as a woolen mill. Available information indicates that the subject property was used for the production wool textiles until approximately the early 1960s. The property appears to have been vacant since that time. Entities that have operated at the subject property include Swift River Woolen Company, Westerly Woolen Company, Potter Hill Woolen Company, and Pawcatuck Woolen Mills.

2.0 Specific Objectives

The objectives of this SIR are to evaluate the location, extent, and characterization of potential sources of contamination. Specific objectives include assessing potential impacts to the site from former industrial uses at the subject property including coal storage.

3.0 Previous Environmental Investigations

Two previous investigations are relied upon in this SIR to fulfill the requirements of Section 7.00 of the RIDEM's Remediation Regulations. Jacques Whitford previously completed a Phase I

ESA and a Phase II ESA on the subject property. Copies of these reports are contained in **Appendix A** and **B,** respectively. The following section summarizes the results of these reports.

3.1 Phase I ESA

Jacques Whitford completed a Phase I ESA for the site, dated March 14, 2006. Based on the Phase I ESA completed in accordance with American Standards Testing Materials (ASTM) standards, several RECs and business risks were found, and were identified as follows:

- Asbestos containing materials may exist in the buildings.
- Painted surfaces were observed to be in poor condition and may contain lead based paint.
- The subject property is not served by municipal sewers. Records available from The Town of Westerly indicate that the subject property utilizes a septic system. However according to the current property owner, all wastewater was believed to be directly discharged to the adjacent Pawcatuck River.
- Coal may have been used for fuel on the subject property.
- An area of dumping was observed in the north western part of the subject property. Miscellaneous debris was observed including several rusted 55 gallon drums. None of the drums contained any liquid and were rusted.
- Former buildings at the subject property appear to have been demolished on the subject property.
- Significant water damage was observed on the ceiling and floors of the majority of the buildings.
- Electrical equipment is present in at least one building that potentially contains PCBs and/or mercury.

The Phase I ESA recommended that a Phase II ESA be completed to assess whether the identified RECs at the subject property have impacted soil and/or groundwater at the subject property.

The Phase I ESA contains a discussion of the historical uses of the site and past owners. At the time of the Phase I and II ESAs, the site was vacant.

3.2 Phase II ESA

As part of the Phase II ESA, a Conceptual Site Model (CSM) was developed for the site, based on the RECs identified in the Phase I ESA. The following section discusses the developed CSM.

3.2.1 Substances of Concern (SOCs)

Coal may have been used for fuel on the subject property. Metals and polynuclear aromatic hydrocarbons are typical SOCs associated with coal. An area of dumping was observed in the north western part of the subject property. Miscellaneous debris was observed including several rusted 55 gallon drums. None of the drums contained any liquid and were rusted. Various materials could have been buried in this are including chemical containing volatile organic compounds (VOCs), metals, and/or coal/coal ash.

3.2.2 Conceptual Site Model

A Conceptual Site Model includes identifying Areas of Concern (AOC), SOCs from each AOC, potential release mechanisms from each AOC, potential media impacted by each AOC, and potential migration pathways from each AOC. During the Phase I ESA, Jacques Whitford identified two potential AOCs requiring further investigation, which are summarized in the following bulleted paragraphs:

AOC #1 – Northwestern Debris Area: A mound of buried debris was observed in the northwestern portion of the site. Drums were observed near the debris pile. The unlabelled drums all were rusted and did not contain any liquids. Some drums were intact and some were not. No odors or other evidence of a release was observed in the area of the drums.

AOC #2 – Potential Former Coal Storage: The site likely stored coal for use as fuel in the boilers that still exist on the site. Jacques Whitford reviewed aerial photographs dating back to 1939 to assess exterior areas that could have been used for coal storage. Based on a review of the aerial photographs, the only area that appears to been able to be used for coal storage is west of the building near the former boiler building.

Table 2 provides a description of each AOC, the associated SOCs, potential release mechanisms, potential impacted media, and potential migration pathways. The Scope of Work in Section 3.0 provides the methods to assess each of the AOCs.

Table 2 – Summary of Conceptual Site Model

Area of Concern	Substances of Concern	Potential Release Mechanism	Potentially Impacted Media	Potential Migration Pathways
Northwestern Debris Area	VOCs/Metals/PAHs	Miscellaneous materials buried including drums that could have rusted and leaked contents.	Soils and groundwater	SOCs can be adsorbed onto subsurface soils and/or released to groundwater
Potential Former Coal Storage	Metals/PAHs	Coal stored on unpaved areas could result in coal being mingled with soils.	Soil beneath former coal piles. Coal typically does not result in groundwater contamination.	SOCs can be adsorbed onto subsurface soils but are typically do not impact groundwater.

In order to assess whether a release has occurred from the AOCs, the following subsurface investigation was completed.

3.2.3 Test Pits and Soil Sampling

The objective of the investigation was to assess potential impacts from the AOCs. On Monday, April 3, 2006, a Case 580K rubber tired backhoe, contracted by the Client, was utilized to complete six test pits (TP-1 through TP-6) at the site. Refer to **Figure 2** for test pit locations. Test pits TP-1 through TP-3 were completed in the buried debris pile on the northwest area of

the site. Test pits TP-4 through TP-6 were completed west of the site building near the former boiler building.

Soil samples were collected from each of the test pits for lithologic classification and profiling of potential impacts. The test pits were advanced to approximately 6 feet below ground surface (bgs). Test pit logs are presented in Appendix A of the Phase II ESA in **Appendix B**. All collected soil samples were assessed for evidence of impacts by visual and olfactory examination. Debris and possible ash were observed in some of the test pits, however no olfactory evidence of impacts were observed. Soil samples were also field-screened for the presence of volatile organic compounds (VOCs) using a HNu Model 101 photoionization detector (PID) equipped with a 10.6 eV bulb and an organic vapor detection range of 0.1 to 10,000 parts-per-million (ppm). No VOCs were detected in any of the soil samples collected.

Two soil samples were collected for laboratory analysis. One soil sample was collected from TP-3 and one from TP-5. TP-3 contained a large amount of debris including possible burnt wood material. TP-3 contained more debris and more various materials than the other test pits in the buried debris area. A soil sample was also collected from TP-5. TP-5 contained what appeared to be cloth material and/or coal ash. None of the other test pits completed west of the building appeared to contain these materials. The soil samples collected were submitted to Spectrum Analytical, Inc. (Spectrum Analytical) laboratory in Agawam, Massachusetts, for analysis of Priority Pollutant 13 Metals by USEPA Method 200.7/7471A and PAHs by USEPA Method 8270.

4.0 Additional Investigation

As discussed further in Section 4.0, arsenic was detected in the soil sample obtained near the former boiler building at concentrations greater than RIDEM's Residential Direct Exposure Criteria (RDEC). In order to assess the extent of the elevated arsenic in soils near the former boiler building, additional investigation was completed.

4.1 Soil Sampling

To assess the extent of soils impacted near the former boiler building, an additional twenty six surface soil samples were collected from the area near test pit TP-5 on September 5, 2006, October 23, 2006, and November 20, 2006. The soil samples were collected in a radial pattern around the location of TP-5, as shown on **Figure 3**. The samples collected on October 23, 2006 and November 20, 2006 were collected utilizing a hand auger that was decontaminated in between samples. The samples collected on October 23, 2003 were collected using a Geoprobe that was used to install the monitoring wells, as discussed in Section 3.2.3. All twenty six soil samples were submitted to the laboratory for analysis of arsenic. Six of the samples were submitted for analysis of RCRA 8 metals and three samples were submitted for analysis of PAHs. Samples were collected in laboratory prepared containers. The samples were labeled and prepared for storage and transportation to Spectrum Analytical. To retard volatilization and biodegradation, the samples were cooled to less than 4°C and stored until laboratory pickup. Chain-of-Custody (COC) protocols were followed for the transfer of samples to the laboratory. Laboratory certificates of analysis for the wells located on the site are contained **Appendix D**.

4.2 Soil Borings and Monitoring Well Installation

On Monday, October 23, 2006, a track-mounted Geoprobe 6600 unit, operated by Aquifer Drilling and Testing of Bloomfield, CT, was utilized to advance two borings (B-1 and B-2) at the site. The soil samples were collected in 1.5-inch inner diameter (ID) polyethylene tubes inside a 2.25-inch outer diameter (OD) sample barrel and sampling was conducted continuously from the surface to 15 feet below ground surface (bgs). Refer to **Figure 2** for soil boring locations. The borings were completed in the adjacent to the former boiler building.

Continuous soil samples were collected at five foot intervals for lithologic classification and profiling of potential impacts. Groundwater was encountered in both borings at a depth of approximately 5 feet bgs. Refusal was not encountered in any of the borings. All retrieved samples were assessed for evidence of impacts by visual and olfactory examination. No odors were detected in any soil samples from the borings. The samples were also field-screened for the presence of volatile organic compounds (VOCs) using a HNu photoionization detector (PID) equipped with a 10.6 eV bulb and an organic vapor detection range of 0.1 to 10,000 parts-per-million (ppm). No VOCs were detected in any of the soil samples.

A 1-inch groundwater monitoring well was installed in borings B-1 and B-2 at depths of approximately 15 feet bgs. The wells consist of 1-inch (in) inside diameter (ID), PVC with 10 feet of 0.010-in slotted screen. The screen was set at a depth that allowed it to intercept the apparent water table, which was encountered approximately 9 feet bgs in both of the monitoring wells. The wells were then sandpacked with clean #1 Morie sand to approximately two feet above the top of the screen. A one foot bentonite seal was placed on top of the sandpack and then non-impacted soil cuttings from the boring were used to fill the hole to approximately six inches bgs. A flush mounted road box was installed on each of the wells.

4.3 Groundwater Sampling

On October 26, 2006, Jacques Whitford collected groundwater samples from monitoring wells MW-1 and MW-2, which are identified on **Figure 2**. The groundwater samples were collected following standard *ASTM Designation D: 4448-85A* protocols utilizing a peristaltic pump and new dedicated silicone pump head tubing. This silicone tubing was attached to new, dedicated, ¼" O.D. polyethylene tubing, which extended down the well to approximately the midpoint of the screen. Samples were collected in laboratory prepared containers. The samples were labeled and prepared for storage and transportation to Spectrum Analytical for analysis of RCRA 8 metals and PAHs. To retard volatilization and biodegradation, the samples were cooled to less than 4°C and stored until laboratory pickup. Chain-of-Custody (COC) protocols were followed for the transfer of samples to the laboratory. Laboratory certificates of analysis for the wells located on the site are contained **Appendix D**.

4.4 Groundwater Flow Direction

The Pawcatuck River abuts the property to the east and north. The river flows in a northerly direction to the east of the property and to the west to the north of the property. Therefore, groundwater flow at the property is estimated to be in an easterly/northeasterly direction.

5.0 Results

The results of the analytical testing for soil and groundwater samples are summarized in **Tables 3 and 4**. As can be seen on the tables, arsenic, beryllium, and lead were detected in at least one soil sample at concentrations greater than RIDEM criteria. Beryllium and lead were detected at concentrations slightly greater than the RDEC in one sample each. Beryllium was detected in sample TP5/S1 at a concentration of 0.405 ppm. RIDEM's RDEC for beryllium is 0.4 ppm. Lead was detected in sample SS20 at a concentration of 156 ppm. RIDEM's RDEC for lead is 150 ppm. Arsenic was detected in twenty five of the twenty eight soil samples analyzed. Detected concentrations ranged from 1.71 ppm to 58.9 ppm. Sixteen of the soil samples had arsenic concentrations greater than the RIDEC of 7 ppm.

Several PAHs were detected in the soil samples analyzed, however, none were detected at concentrations greater than the applicable RDEC. No PAHs were detected in the groundwater samples. One metal, barium, was detected in both groundwater samples, however, at concentrations less than the RIDEM GA Groundwater Objective.

Table 3 – Summary of Soil Analytical Results

Parameter	RIDEM RDEC	TP3/S1	TP5/S1	SS1	SS2	SS3	SS4	SS5	SS6	SS7
PAHs										
Acenaphthene	43	ND	ND	NT	NT	NT	NT	NT	NT	NT
Anthracene	35	ND	ND	NT	NT	NT	NT	NT	NT	NT
Benzo(a)anthracene	0.9	ND	0.240	NT	NT	NT	NT	NT	NT	NT
Benzo(a)pyrene	0.4	ND	0.232	NT	NT	NT	NT	NT	NT	NT
Benzo(b)fluoranthene	0.9	ND	0.299	NT	NT	NT	NT	NT	NT	NT
Benzo(g,h,i)perylene	0.8	ND	0.203	NT	NT	NT	NT	NT	NT	NT
Benzo(k)fluoranthene	0.9	ND	ND	NT	NT	NT	NT	NT	NT	NT
Chrysene	0.4	ND	0.357	NT	NT	NT	NT	NT	NT	NT
Dibenzo(a,h)anthracene	0.4	ND	ND	NT	NT	NT	NT	NT	NT	NT
Fluoranthene	20	ND	0.566	NT	NT	NT	NT	NT	NT	NT
Fluorene	28	ND	ND	NT	NT	NT	NT	NT	NT	NT
Indeno(1,2,3-cd)pyrene	0.9	ND	ND	NT	NT	NT	NT	NT	NT	NT
Phenanthrene	40	ND	0.322	NT	NT	NT	NT	NT	NT	NT
Pyrene	13	ND	0.424	NT	NT	NT	NT	NT	NT	NT
Metals										
Antimony	10	ND	ND	NT	NT	NT	NT	NT	NT	NT
Arsenic	7	4.9	**10.4**	1.71	ND	**18.9**	**19.4**	**58.9**	**22.5**	**14.7**
Beryllium	0.4	0.375	0.405	NT	NT	NT	NT	NT	NT	NT
Cadmium	39	0.618	0.503	NT	NT	NT	NT	NT	NT	NT
Chromium	390	46.7	0.280	NT	NT	NT	NT	NT	NT	NT
Copper	3,100	73.6	23.6	NT	NT	NT	NT	NT	NT	NT
Lead	150	134	101	NT	NT	NT	NT	NT	NT	NT
Mercury	23	0.621	ND	NT	NT	NT	NT	NT	NT	NT
Nickel	1,000	6.06	9.39	NT	NT	NT	NT	NT	NT	NT
Selenium	390	ND	ND	NT	NT	NT	NT	NT	NT	NT
Silver	200	ND	ND	NT	NT	NT	NT	NT	NT	NT
Thallium	5.5	ND	ND	NT	NT	NT	NT	NT	NT	NT
Zinc	6,000	81.8	127	NT	NT	NT	NT	NT	NT	NT

Table 3 Continued

Parameter	RIDEM RDEC	SS8	SS9	SS10	SS11	SS12	SS13	SS14	SS15	SS16
PAHs										
Acenaphthene	43	NT	NT	NT	NT	NT	NT	NT	NT	NT
Anthracene	35	NT	NT	NT	NT	NT	NT	NT	NT	NT
Benzo(a)anthracene	0.9	NT	NT	NT	NT	NT	NT	NT	NT	NT
Benzo(a)pyrene	0.4	NT	NT	NT	NT	NT	NT	NT	NT	NT
Benzo(b)fluoranthene	0.9	NT	NT	NT	NT	NT	NT	NT	NT	NT
Benzo(g,h,i)perylene	0.8	NT	NT	NT	NT	NT	NT	NT	NT	NT
Benzo(k)fluoranthene	0.9	NT	NT	NT	NT	NT	NT	NT	NT	NT
Chrysene	0.4	NT	NT	NT	NT	NT	NT	NT	NT	NT
Dibenzo(a,h)anthracene	0.4	NT	NT	NT	NT	NT	NT	NT	NT	NT
Fluoranthene	20	NT	NT	NT	NT	NT	NT	NT	NT	NT
Fluorene	28	NT	NT	NT	NT	NT	NT	NT	NT	NT
Indeno(1,2,3-cd)pyrene	0.9	NT	NT	NT	NT	NT	NT	NT	NT	NT
Phenanthrene	40	NT	NT	NT	NT	NT	NT	NT	NT	NT
Pyrene	13	NT	NT	NT	NT	NT	NT	NT	NT	NT
Metals										
Antimony	10	NT	NT	NT	NT	NT	NT	NT	NT	NT
Arsenic	7	**8.54**	ND	ND	**14.0**	4.01	3.22	3.57	**7.71**	**13.1**
Beryllium	0.4	NT	NT	NT	NT	NT	NT	NT	NT	NT
Cadmium	39	NT	NT	NT	NT	NT	NT	NT	NT	NT
Chromium	390	NT	NT	NT	NT	NT	NT	NT	NT	NT
Copper	3,100	NT	NT	NT	NT	NT	NT	NT	NT	NT
Lead	150	NT	NT	NT	NT	NT	NT	NT	NT	NT
Mercury	23	NT	NT	NT	NT	NT	NT	NT	NT	NT
Nickel	1,000	NT	NT	NT	NT	NT	NT	NT	NT	NT
Selenium	390	NT	NT	NT	NT	NT	NT	NT	NT	NT
Silver	200	NT	NT	NT	NT	NT	NT	NT	NT	NT
Thallium	5.5	NT	NT	NT	NT	NT	NT	NT	NT	NT
Zinc	6,000	NT	NT	NT	NT	NT	NT	NT	NT	NT

Table 3 – Continued

Parameter	RIDEM RDEC	SS17	SS18	SS19	SS20	SS21	SS22	SS23	SS24	SS25	SS26
PAHs											
Acenaphthene	43	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Anthracene	35	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Benzo(a)anthracene	0.9	NT	ND	ND	0.224	NT	NT	NT	NT	NT	NT
Benzo(a)pyrene	0.4	NT	0.186	ND	0.215	NT	NT	NT	NT	NT	NT
Benzo(b)fluoranthene	0.9	NT	0.249	ND	0.228	NT	NT	NT	NT	NT	NT
Benzo(g,h,i)perylene	0.8	NT	ND	ND	ND	NT	NT	NT	NT	NT	NT
Benzo(k)fluoranthene	0.9	NT	0.254	0.179	0.218	NT	NT	NT	NT	NT	NT
Chrysene	0.4	NT	0.230	0.231	0.266	NT	NT	NT	NT	NT	NT
Dibenzo(a,h)anthracene	0.4	NT	ND	ND	ND	NT	NT	NT	NT	NT	NT
Fluoranthene	20	NT	0.397	0.387	0.413	NT	NT	NT	NT	NT	NT

Parameter	RIDEM RDEC	SS17	SS18	SS19	SS20	SS21	SS22	SS23	SS24	SS25	SS26
Fluorene	28	NT	ND	ND	ND	NT	NT	NT	NT	NT	NT
Indeno(1,2,3-cd)pyrene	0.9	NT	ND	ND	ND	NT	NT	NT	NT	NT	NT
Phenanthrene	40	NT	0.325	0.262	0.319	NT	NT	NT	NT	NT	NT
Pyrene	13	NT	0.334	0.312	0.424	NT	NT	NT	NT	NT	NT
Metals											
Antimony	10	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Arsenic	7	4.88	**10.3**	**25.8**	**21.8**	**13.5**	**20.5**	6.05	ND	**16.6**	ND
Barium	5,500	NT	60.5	68.1	116	88.8	83.8	83.9	NT	NT	NT
Beryllium	0.4	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Cadmium	39	NT	0.441	ND	0.325	0.341	0.417	0.428	NT	NT	NT
Chromium	390	NT	12.9	8.71	18.6	9.73	11.7	128	NT	NT	NT
Copper	3,100	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Lead	150	NT	39.6	28.1	**156**	45.2	69.8	150	NT	NT	NT
Mercury	23	NT	ND	0.0507	0.152	0.154	0.0512	0.516	NT	NT	NT
Nickel	1,000	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Selenium	390	NT	2.42	3.91	3.00	ND	2.08	ND	NT	NT	NT
Silver	200	NT	NT	ND	ND	3.08	ND	1.16	NT	NT	NT
Thallium	5.5	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Zinc	6,000	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT

Notes: * RIDEM Standards from *"Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases"*
RDEC – Residential Direct Exposure Criteria
All results are in ppm
ND – Not Detected above laboratory detection limits
NT – Not Tested

Table 4 – Summary of Groundwater Analytical Results

Parameter	GA Groundwater Objective	MW-1	MW-2
PAHS		ND	ND
Metals			
Arsenic	NE	ND	ND
Barium	2.0	0.0200	0.0166
Cadmium	0.005	ND	ND
Chromium	0.1	ND	ND
Lead	0.015	ND	ND
Mercury	0.002	ND	ND
Selenium	0.05	ND	ND
Silver	NE	ND	ND

Notes:
GA Groundwater Objectives from *"Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases"*
ND – Not detected
NE – None established
All results are in mg/L

6.0 Summary of Environmental Data

Based on the results from this investigation, it appears that an area of soils near the former boiler building appears to have been impacted by historic coal storage and use at the site.

Arsenic, barium, and lead were detected at concentrations greater than the RDEC. Test pit TP-5 was completed in an apparent mounded area and contained what appeared to be coal ash and slag. Based on the soil sampling and analysis completed, the area impacted by the mounded ash and slag appears to be approximately 9,750 square feet. The impacted soils do not appear to be impacting the groundwater at the site. Therefore, the only environmental concern at the site is the soils impacted by the coal ash and slag.

6.1 Quality Assurance and Quality Control (QA/QC)

All soil samples were collected in pre-cleaned, laboratory supplied containers containing the appropriate preservative for the analysis conducted. The samples were labeled and prepared for storage and transportation to the laboratory. To retard volatilization and biodegradation, the samples were cooled to less than 4°C and stored until laboratory pickup. Chain-of-Custody (COC) protocols were followed for the transfer of samples to the laboratory. As part of their standard QA/QC procedures, Spectrum Analytical completed method blanks, duplicates, matrix spikes and matrix spike duplicates. Based on a review of the available data and QA/QC results, it is Jacques Whitford's opinion that the quantity and quality of the data meets the objectives of the investigation.

7.0 Physical Setting

As required by Section 7.03 of the Remediation Regulations, the physical setting of the subject property and surrounding area must be assessed. the average elevation of the subject property is approximately 30 feet above mean sea level. The area of the subject property has a topography that is hilly, with significant hills located to the southeast and southwest.

Jacques Whitford reviewed a United States Department of Agriculture Soil Conservation Service Soil Survey for Rhode Island. Based on a review of this survey, the northern portion of the subject property contains soils that are classified as "RU", defined as Rumney fine sandy loam. This nearly level, poorly drained soil is on flood plains. Slopes range from 0 to 3 percent but are dominantly less than 2 percent. Areas are long and narrow and range mostly from 5 to 30 acres. Typically, the surface layer is very dark grayish brown fine sandy loam about 5 inches thick. The subsoil is dark grayish brown, mottled fine sandy loam 17 inches thick. The substratum is gray and dark grayish brown sand to a depth of 60 inches or more. The permeability of this soil is moderately rapid in the surface layer and subsoil and rapid to very rapid in the substratum. Available water capacity is moderate, and runoff is slow. The soil has a seasonal high water table at a depth of about 6 inches from late fall through spring and is subject to frequent flooding. The soil is very strongly acid through slightly acid.

The southern portion of the subject property contains soils that are classified as "CeC", defined as Canton and Charlton fine sandy loams, very rocky, 3 to 15 percent slopes. These gently sloping to sloping, well drained soils are on side slopes and crests of glacial upland hills and ridges. Stones and boulders cover 2 to 10 percent of the surface, and rock outcrops cover up to 10 percent. Areas are irregular in shape and mostly range from 3 to 250 acres. The mapped acreage of this unit is approximately 50 percent Canton soils, 30 percent Charlton soils, and 20 percent other soils. The areas of this unit consist of either Canton soils or Charlton soils or both. The soils were mapped together because they have no major differences in use and management.

Typically, the Canton soils have a surface layer of very dark grayish brown fine sandy loam about 3 inches thick. The subsoil is dark yellowish brown, yellowish brown, and light olive brown fine sandy loam 19 inches thick. The substratum is olive gray gravelly loamy sand to a depth of 60 inches or more. Typically, the Charlton soils have a surface layer of very dark

brown fine sandy loam about 2 inches thick. The subsoil is 25 inches thick. The upper 15 inches is dark yellowish brown fine sandy loam, and the lower 10 inches is yellowish brown gravelly sandy loam. The substratum is light brownish gray gravelly sandy loam to a depth of 60 inches or more.

Included with these soils in mapping are small areas of somewhat excessively drained Gloucester soils, well drained Paxton and Narragansett soils, and moderately well drained Sutton soils. Also included are small areas of soils that have slopes of more than 15 percent, small areas of soils where more than 10 percent of the surface is stony, and areas where bedrock is less than 40 inches from the surface.

The permeability of the Canton soils is moderately rapid in the surface layer and subsoil and rapid in the substratum. Available water capacity is moderate, and runoff is medium. This soil is extremely acid through strongly acid. The permeability of the Charlton soils is moderate to moderately rapid. Available water capacity is moderate, and runoff is medium. This soil is very strongly acid through medium acid.

Most areas of these soils are in woodland, and the soil is suited to trees. A small acreage is cleared and used for pasture. These soils are suitable for community development but are limited by stoniness, bedrock outcrops, and slope. Onsite sewage disposal systems need careful design and installation to prevent effluent from seeping to the surface. Stones and boulders need to be removed for landscaping. The use of straw bale sediment barriers, siltation basins, and temporary diversions and quickly establishing plant cover help to control erosion during construction. Stones and rock outcrops make these soils unsuitable for cultivated crops and severely hinder the use of farming equipment.

According to the Bedrock Geologic Map of Rhode Island, Rhode Island Map Series No. 1, dated 1994, the area of the subject property lies within the rocks that are part of the Sterling Igneous Suite, and mapped as "Zsgg", which is defined as granite gneiss. This consists of pale-pink to gray medium-grained granite gneiss commonly with small porphyroclasts of microcline/orthoclase. Similar to alaskite gneiss, but with more than 3 % dark minerals. Compositions range from quartz monzonite to granite. Composed of sodic plagioclase quartz microline, biotite, opaque minerals; minor muscovite common; garnet more rare; accessory apatite and zircon; sphene present in some rocks; secondary chlorite. Typically is compositionally homogeneous, with strong foliation and locally well developed lineation defined by major minerals. Includes some rock mapped formerly as Ten Rod Granite Gneiss, Hope Valley Alaskite Gneiss, Potter Hill Granite Gneiss, and Scituate Granite Gneiss.

Review of the RIDEM Groundwater Zoning Map reveals that the subject property's area is located in a "GA" groundwater classification zone. This classification of groundwater is defined as "groundwater that may be suitable for public or private drinking water without treatment".

Review of the RIDEM's Groundwater Wellhead Protection Area Map reveals that the subject property is not located within a wellhead protection area. The closest wellhead protection area is located approximately 250 feet to the northeast of the subject property.

Based on visual observations, the depth to groundwater in the area of the subject property is estimated to be 10 to 15 feet below grade. Groundwater flow direction is expected to be towards the Pawcatuck River, although this can only be verified by conducting a subsurface investigation and associated hydrological survey.

The closest surface water body to the subject property is the Pawcatuck River that abuts the subject property to the east and north.

According to the FEMA Flood Insurance Map for Westerly, Rhode Island, Community Panel Number 4400240010B, dated January 2, 1981, most of the subject property is located in a Zone A flood zone, defined as areas located within the 100-year flood plain. The Zone A flood zone is associated with the Pawcatuck River.

According to the RIDEM database, the subject property is not located within a habitat of rare species.

8.0 Conclusions

Based on the previously completed investigations and subsequent investigation, the following are Jacques Whitford's conclusions regarding the subject property:

- The subject property is currently vacant but was used for textile manufacturing, specifically a woolen mill.
- Groundwater at the subject property is a GA resource. Groundwater at the subject property flows in a easterly/northeasterly direction.
- The subject property and surrounding area are serviced by municipal water and sewer.
- Coal was used and stored at the property.
- Metals and PAHs exist in surface soils at concentrations greater than RIDEM's RDEC. The impacted soils appear to be limited to an area near a mound containing coal ash and slag.
- No impacts from the coal ash and slag to groundwater were detected.

9.0 Development of Remedial Alternatives

The proposed future development of the site may include residential and commercial uses. Potential future exposures at the site include direct exposure to the soils in the area of the mound that contains coal ash and slag soils. The following section provides remedial alternatives for controlling the risks associated with these exposures.

9.1 Remedial Alternatives

Pursuant to the Remediation Regulations, the following three remedial alternatives were developed in order to achieve compliance with the regulations:

1. The first remedial alternative considered is "no further action" at the subject property. The "no further action" alternative assumes that there will be no restrictions on future development or soil movement at the subject property. Since metals were detected in soils above the RIDEM's RDEC "no further action" cannot be considered a viable remedial alternative.
2. The second alternative considered is capping the impacted soils at the site with an engineered cap, and implementation of an Environmental Land Use Restriction (ELUR) with the purpose of maintaining the cap and requiring proper management of the impacted soils during future excavation activities. This remedial alternative will eliminate direct exposure to the impacted soils. The ELUR will protect future constructions workers from exposure to the impacted soils and ensure that the impacted soils are managed properly. This remedial alternative controls the potential exposures and

results in compliance with RIDEM regulations and therefore can be considered a viable remedial alternative.

3. The third alternative considered is the excavation of the impacted soils and disposing of them at a licensed facility. The area of impacted soils measures approximately 9,750 square feet. Assuming that approximately two feet of soil will need to be excavated, a total of 722 cubic yards will require disposal. Assuming a soil density of 1.3 tons per cubic yard results in 938 tons of soil. At a cost of $75/ton for disposal, the total disposal cost will be approximately $70,350. It is currently planned that the area of the impacted soils will be capped with an asphalt parking area as part of the property redevelopment. Therefore, the increased cost to excavate, transport, and disposal of the soils is not warranted since direct exposure to the impacted soils will be eliminated as part of the redevelopment.

9.2 Recommended Remedial Alternatives

Based on the results of this and the previous investigations, the preferred remedial alternative is remedial alternative No. 2. Once a Remedial Decision Letter is issued by the RIDEM, a RAWP will be submitted to the RIDEM for review. The RAWP will include how the impacted soils will be capped and a draft ELUR.

10.0 Certification

The information contained in the report is accurate to the best of knowledge known by the undersigned preparer of this report.

Joseph T. Unsworth, P.E. — Date 12/05/06

The undersigned owner/operator, responsible for the preparation and submittal of the report, certifies that the report is a complete and accurate representation, and that it includes all known facts about the discharge or release that has resulted, or may result, in the exceedance of a groundwater quality standard promulgated pursuant to RIGL 46-13.1 and 46-12.

Dr. Edward Carapezza — Date 12/05/06

11.0 Limitations

Information obtained from the Client, public agencies, site inspection, limited sampling, and laboratory chemical analysis were used to characterize the subject property. Although the services provided are extensive, findings and conclusions are limited to and by the qualitative and quantitative information obtained. Further subsurface investigation methods are available that could further define the subject property soil and groundwater conditions. If information becomes available concerning the subject property that was not included in this report, it should be made available to Jacques Whitford so that conclusions and/or recommendations can be re-examined and modified, where applicable.

No attempt was made to determine the compliance of present or former owners or operators of the subject property with Federal, State, or Municipal environmental or land use laws or regulations.

Because geological formations are inherently heterogeneous in nature, the professional services and opinions provided by Jacques Whitford under this agreement are not guaranteed to be a representation of complete subject property conditions.

Events occurring on the subject property after November 20, 2006 (the last date Jacques Whitford Personnel visited the subject property) are beyond the scope of this report. Jacques Whitford makes no expressed or implied representations or warranties regarding any changes in condition of the premises after this date.

Jacques Whitford has retained a copy of this report. No additions or deletions are permitted without the written consent of Jacques Whitford and the Client. Use of this report in whole or in part by parties other than those authorized by Jacques Whitford and the Client is prohibited.

12.0 References

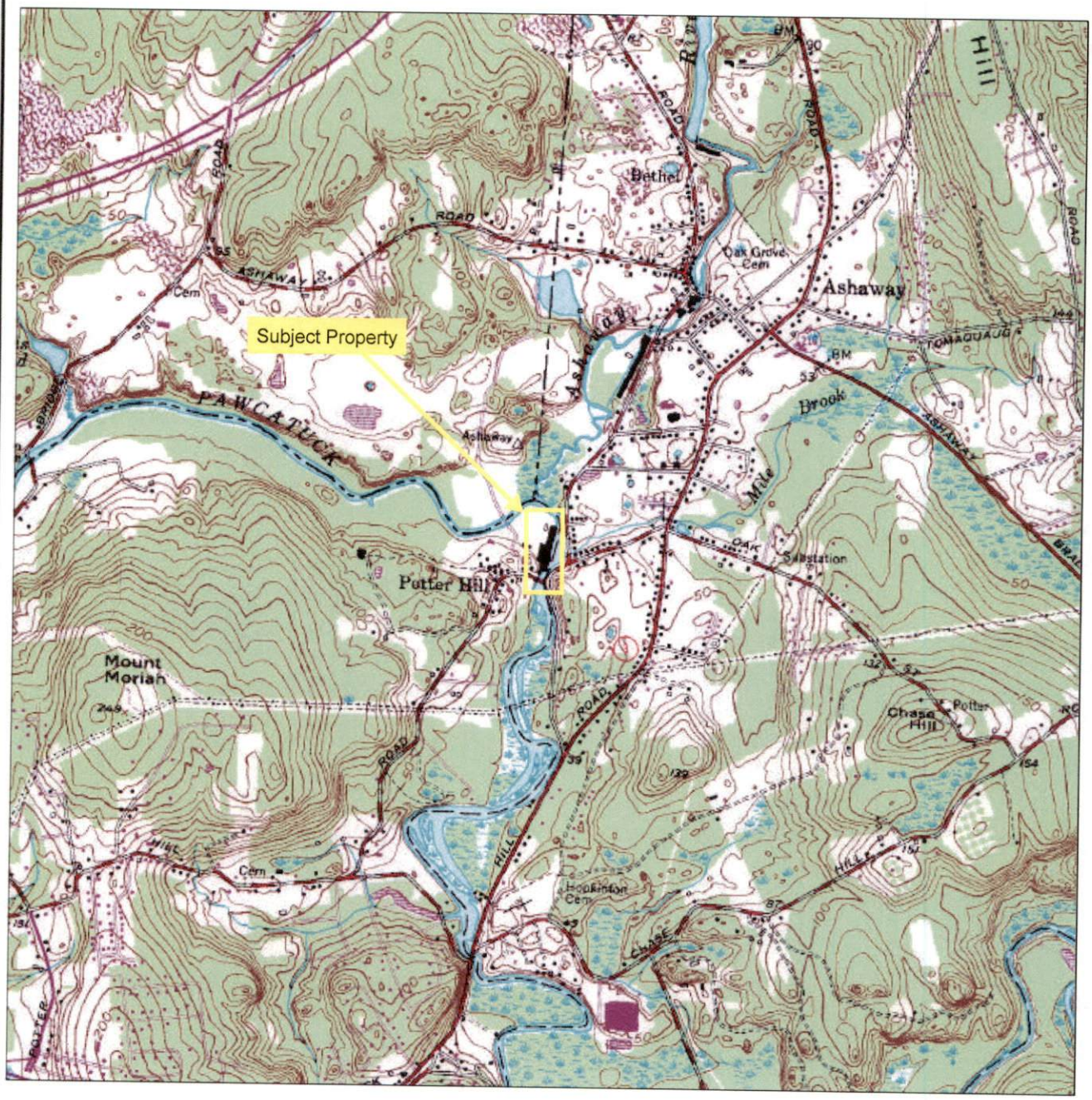
Providence, Rhode Island Quadrangle Topographic Map developed by the United States Geologic Survey

Groundwater Classification Areas developed by the Rhode Island Department of Environmental Management

Phase II Environmental Site Assessment, by Jacques Whitford Company, Inc., April 26, 2006

Phase I Environmental Site Assessment, by Jacques Whitford Company, Inc., March 14, 2006

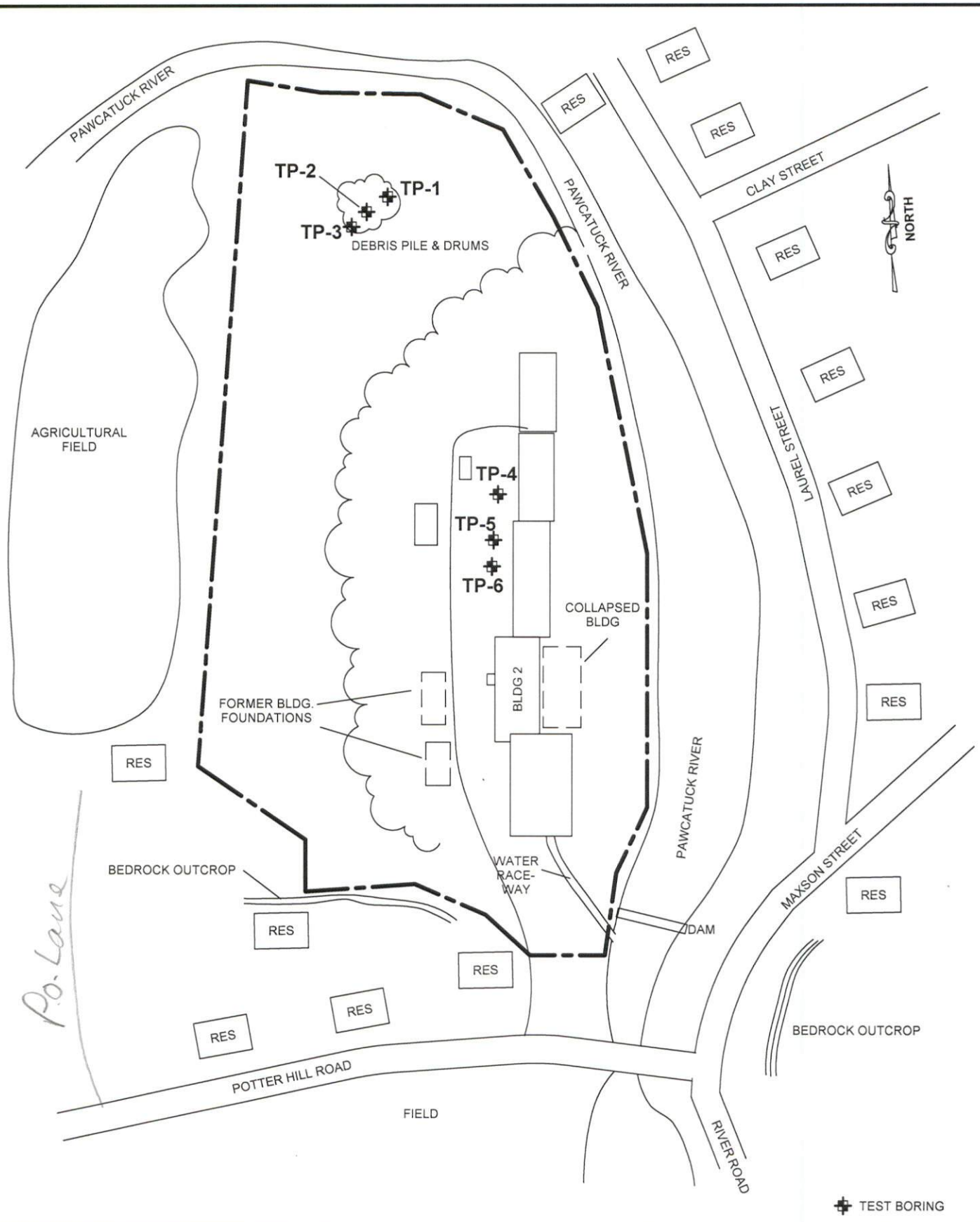
Rhode Island Department of Environmental Management, Soil Database, Bedrock Database, Groundwater Classification Database, FIRM Database, Watershed Database, and Rare Species Database



SOURCE: USGS TOPOGRAPHIC MAP 1984

Jacques Whitford Company, Inc.

JACQUES WHITFORD LOCATION: LINCOLN, RI	BASEMAP SOURCE: ASHAWAY QUAD	NORTH	DRAWING TITLE: SITE LOCATION MAP POTTER HILL ROAD WESTERLY, RI
DATE PREPARED: 2-14-06 / PREPARED BY: MJB	APPROXIMATE SCALE: 1:24,000		
PROJECT NAME/FILE NAME: MILL BLDG./LOCUS	PROJECT NUMBER/PHASE: 1009825.		PREPARED FOR: RENEWABLE RESOURCES / FIGURE NO. 1



Jacques Whitford Company, Inc.

JACQUES WHITFORD LOCATION: 24 ALBION ROAD, SUITE 220, LINCOLN, RI				
DATE PREPARED: 3-8-06	DESIGNED BY: JTU	DRAWN BY: WL	CHECKED BY: VLJ	REVIEWED BY: JTU
REVISION DATE:	REVISION NO:	DRAWN BY:	CHECKED BY:	REVIEWED BY:
PROJECT NAME/FILE NAME: 198 POTTER HILL	PROJECT NUMBER/PHASE: 1009825	SCALE: NTS		

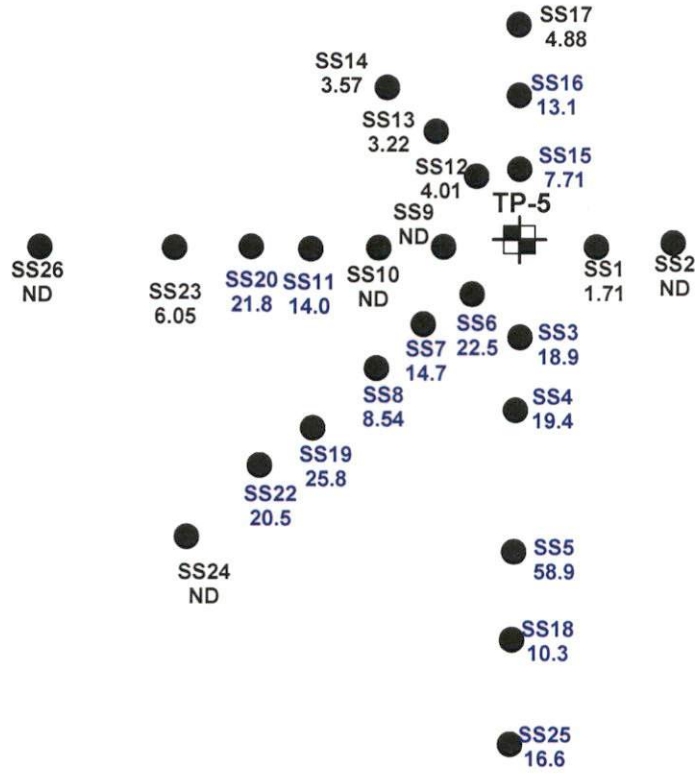
DRAWING TITLE:

SITE PLAN

198 POTTER HILL ROAD
WESTERLY, RI

PREPARED FOR: Renewable Resources Inc.

FIGURE NO. 2



SS25 16.6 Soil Borng Location
Arsenic Concentration (ppm)
Blue Indicates Exceedance of RIDEM RDEC

Test Pit

Jacques Whitford Company, Inc.

JACQUES WHITFORD LOCATION: 24 ALBION ROAD, SUITE 220, LINCOLN, RI					DRAWING TITLE: **Soil Sample Locations**
DATE PREPARED: 3-8-06	DESIGNED BY: JTU	DRAWN BY: WL	CHECKED BY: VLJ	REVIEWED BY: JTU	198 POTTER HILL ROAD WESTERLY, RI
REVISION DATE:	REVISION NO:	DRAWN BY:	CHECKED BY:	REVIEWED BY:	
PROJECT NAME/FILE NAME: 198 POTTER HILL		PROJECT NUMBER/PHASE: 1009825		SCALE: 1" = 35'	PREPARED FOR: Renewable Resources Inc.

FIGURE NO. 3

APPENDIX A

Phase I ESA

REPORT

Phase I Environmental Site Assessment –
198 Potter Hill Road
Westerly, RI

Prepared for:

Renewable Resources

PROJECT NO. 1009825

PROJECT NO. 1009825

REPORT TO

Renewable Resources Inc.
C/O Dr. Edward Carapezza
900 North Strafford, Suite 2428
Arlington, VA 22203

ON

Phase I Environmental Site Assessment –
198 Potter Hill Road, Westerly, RI

March 14, 2006

Jacques Whitford
24 Albion Road, Suite 220
Lincoln, Rhode Island,
02865

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Fax: 401-312-8010

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Joseph T. Unsworth, P.E. Project Manager	Vincent L. Jacques, P.E. Senior Reviewer

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PHASE I ENVIRONMENTAL SITE ASSESSMENT

1.0 EXECUTIVE SUMMARY

Jacques Whitford Company, Inc. (Jacques Whitford) has performed a Phase I Environmental Site Assessment (ESA) in accordance with the American Society of Testing and Materials (ASTM) Standard Practice Designation E 1527-00 on the property located at 198 Potter Hill Road in Westerly, RI, hereinafter referred to as the subject property. Based upon our assessment, the following paragraphs summarize noteworthy site information and environmental issues, if applicable.

Subject Property Information

LAND AREAS: According to records on file at the Westerly Tax Assessor's office, the subject property consists of one land parcel identified on Westerly Tax Assessor's Plat Map Plat Map 8, as Lot 23. The Lot 23 contains approximately 4.55 acres.

IMPROVEMENTS: The Westerly Tax Assessor records did not contain any information on the buildings on the subject property. However, Jacques Whitford observed nine buildings, some of which were interconnected. Many of the buildings were in various states of disrepair. The roofs of many buildings were collapsed into the building. Additionally, foundations of several former buildings were observed on the subject property. The main building is a three story building made of granite block that is approximately 115 feet by 60 feet. There are two one story additions on the east side of the main building, one is 30 feet by 20 feet and made of brick and the other is 85 feet by 20 feet and made of brick and wood. A 100 foot by 70 foot building is connected to the main building to the south and is one story and made of brick. The former boiler building is 75 feet by 54 feet, is located to the north of the main building, and is two stories and made of brick. Another one story brick building is located to the north of the former boiler building. This building is 95 feet by 64 feet. Two wooden buildings are located north of this building and are 90 feet by 40 feet and 32 feet by 10 feet, respectively. One separate building was observed to the west of the former boiler building. This building is made of wood, is two stories high and 100 feet by 30 feet.

UTILITIES: The subject property has been vacant for over 40 years and no utilities appear to be active at the subject property. Electricity and telephone service are available for the subject property. Municipal water is available in the area of the subject property. There were no records at the Westerly Water Department for the subject property. The subject property formerly relied on an onsite well for water, which was stored in a storage tank tower on the site. There are no municipal sewers in the area of the subject property. The field property card from the Westerly Tax Assessor indicates that the subject property utilizes a septic system, however, the current site owner indicated that he believed that all wastewater was formerly discharge directly to the adjacent Pawcatuck River. The subject property buildings are not currently heated. The boilers remaining in the former boiler building appear to have been fueled by coal.

CURRENT USAGE: The subject property is currently vacant and reportedly has been for over forty years.

HISTORICAL USAGE: Based on the historical research conducted by Jacques Whitford, it appears as though the subject property was first developed in the mid 1800s as a woolen mill. Available information indicates that the mill was a woolen mill until the mid 1900s. Several of the machines used in the woolen operations remain in the buildings.

Conclusions

Jacques Whitford has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527-00 on the property located at 198 Potter Hill Road in Westerly, Rhode Island. Any exceptions to, or deletions from, this practice is described in Sections 2.3 and 2.4 of this report. Jacques Whitford has discovered potential recognized environmental conditions and environmental business risks, which are summarized in the following bulleted paragraphs:

- Asbestos containing materials may exist in the buildings.
- Painted surfaces were observed to be in poor condition and may contain lead based paint.
- The subject property is not served by municipal sewers. Records available from The Town of Westerly indicate that the subject property utilizes a septic system. However according to the current property owner, all wastewater was believed to be directly discharged to the adjacent Pawcatuck River.
- Coal may have been used for fuel on the subject property.
- An area of dumping was observed in the north western part of the subject property. Miscellaneous debris was observed including several rusted 55 gallon drums. None of the drums contained any liquid and were rusted.
- Former buildings at the subject property appear to have been demolished on the subject property.
- Significant water damage was observed on ceiling and floors of the majority of the buildings.
- Electrical equipment is present in at least one building that potentially contains PCBs and/or mercury.

Based on the noted recognized environmental conditions, Jacques Whitford believes there is a **Low to Moderate** risk of potential liability associated with the subject property.

Based on the noted Findings and Opinions obtained and developed for this report, Jacques Whitford believes that further environmental investigation is warranted on the subject property. Based on the information obtained as part of the Phase I ESA and observations made during the investigation, the following are recommended:

- Completion of a Phase II ESA to assess the extent of impacts to soil and groundwater at the subject property. The Phase II ESA should include the completion of test pits in the area of the observed dumping and areas of potential coal storage. Also, unless it can be determined that a septic system did not exist at the subject property, soils borings should be completed and monitoring wells installed to assess impacts from the potential septic system.
- Prior to any demolition and/or renovations, an asbestos survey and pain chip sampling should be completed for all buildings on the subject property.
- A hazardous material disposal contractor should be hired to remove and dispose of all PCB and mercury containing materials (if any) in the buildings.
- All debris piles should be removed from the subject property and disposed of at appropriate disposal facilities.

- Since the buildings will required either demolition or extensive rehabilitations, Jacques Whitford does not recommend a mold survey at this time.

2.0 INTRODUCTION

Jacques Whitford Company, Inc. (Jacques Whitford) has performed a Phase I Environmental Site Assessment (ESA) on the property located at 198 Potter Hill Road in Westerly, Rhode Island, hereinafter referred to as the subject property.

Joseph T. Unsworth, P.E. and Robert Snyder, Jacques Whitford Project Manager and Engineer, respectively, performed the site inspection on Monday, February 27, 2006. Mr. Unsworth also performed records research, inquiries, and other tasks associated with this ESA and with the preparation of this report. Mr. Vincent L. Jacques, P.E., Jacques Whitford Senior Reviewer, has reviewed the stated summary of Findings and concurs with the stated Conclusions and Recommendations.

2.1 Purpose

As per Section 1.1 of the American Society of Testing and Materials (ASTM) Standard Practice Designation E 1527-00, the purpose of this assessment is to identify recognized environmental conditions, as defined in Section 3.3.31 of the same Standard Practice; that is "the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, ground water, or surface water of the property". This practice is intended to permit a user to satisfy one of the requirements to qualify for the innocent landowner defense to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA); that is, the practices that constitute "all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice" as defined in 42 USC § 9601(35)(B).

2.2 Detailed Scope of Services

Jacques Whitford has performed a Phase I ESA in accordance with the ASTM Standard Practice Designation E 1527-00 on the property located at 198 Potter Hill Road in Westerly, Rhode Island and further identified on Westerly Tax Assessor's Plat Map 8 as Lot 23. This report has been prepared for the exclusive use of Renewable Resources (Client), by the authority of Dr. Edward Carapezza.

Jacques Whitford obtained information to characterize the subject property and to compile a site-specific environmental assessment through the review of reasonably ascertainable public records, a surficial site inspection, and historical research of previous owners and operations of the subject property. Reasonably ascertainable information is defined by ASTM E 1527-00 as publicly available information obtainable from a source within reasonable time and cost constraints, which is also practically reviewable.

The intention of Jacques Whitford's review of reasonably ascertainable public records was to obtain and review records, which could identify recognized environmental conditions in connection with the subject property. Such public records includes records on file at the local Tax Assessor's office regarding the subject property's Plat Map, Block, and Lot location, land and property improvements and dimensions, current and historical utilization, as well as the Zoning designation(s) of the area in which the subject property is located. The legal description of the subject property, as well as information concerning previous land transfers and ownership, is also included in this report. Furthermore, public records concerning the subject property, as well as additional properties within

appropriate minimum search distances as defined in Section 7.2.1.1 of ASTM E 1527-00, are also reviewed for the preparation of this report. Said records include both Federal and State Environmental listings.

A component of the site assessment is Jacques Whitford's site visit and surficial inspection of the subject property and improvements, in an attempt to identify recognized environmental conditions on or in the immediate vicinity of the subject property. Joseph T. Unsworth, P.E. and Robert Snyder, of Jacques Whitford, conducted this visual reconnaissance of interior and exterior portions of the subject property on Monday, February 27, 2006. Observations of adjoining properties to the subject property were made from the subject property, as well as from easily accessible public rights-of-way. A Site Plan sketch was created based on the observations of the subject property's characteristics noted at the time of the conducted inspections.

2.3 Significant Assumptions

It is assumed that this investigation is being conducted to identify recognized environmental conditions concerning the subject property, and to permit the user to satisfy one of the requirements to qualify for the innocent landowner defense to CERCLA liability. This investigation may mention but does not fully address non-scope considerations such as, but not limited to, asbestos containing materials (ACM), radon, lead-based paint (LBP), lead in drinking water, mold, wetlands, regulatory compliance, cultural and historical resources, industrial hygiene, health and safety, ecological resources, endangered species, indoor air quality, and/or high voltage power lines, although, one or more may be mentioned in the report as a business environmental risk concern.

2.4 Limitations and Exceptions of Assessment

This report has been prepared for the exclusive use of the Client and should not be reproduced or disseminated without the written approval of Jacques Whitford and the Client. Jacques Whitford has retained a copy of this report. No additions or deletions are permitted without the express written consent of Jacques Whitford. Use of this report in whole or in part by parties other than the Client is prohibited.

Information obtained from public records review, the site inspection, and interviews were used to characterize the subject property. Although the services provided are extensive, findings and conclusions are limited to and by the information obtained. If information becomes available concerning the subject property that was not included in this report, it should be made available to Jacques Whitford so that the conclusions and/or recommendations can be re-examined and modified, if applicable. Further non-intrusive and intrusive investigations and assessment methods are available that could further characterize the subject property's building materials as well as the subsurface soil and groundwater conditions.

Due to the collapsed roofs and structurally unsafe floors, portions of some of the buildings could not be observed.

The Site Plan is a sketch of the subject property, which identifies observations of site characteristics of significance. These plans are not drawn to scale and should not be relied upon as an engineering plan.

Jacques Whitford's interviews are limited by the quality and completeness of answers provided to the proposed questions during the interview(s).

The extent of historical research performed by Jacques Whitford is limited to availability, cost, and timeliness of utilizing various resources such as aerial photographs, historical Sanborn Maps, Land Evidence Records (deeds pertaining to historical site ownership), and local directories, all of which

may indicate the historical utilization of the subject property. It should be noted that while the chain-of-ownership research and information provided should be accurate, it should in no way be construed as an actual Title search and should not be utilized or relied upon for any legal purposes. As indicated in the ASTM E 1527-00 Standard, the user should check or engage a title company or title professional to check reasonably ascertainable recorded land title records for environmental liens or activity and use limitations currently recorded against the subject property.

Events occurring on the subject property after February 27, 2006, the date of the inspection, are beyond the scope of this report. Jacques Whitford makes no expressed or implied representations or warranties regarding any changes in condition of the premises after this date.

No environmental site assessment can wholly eliminate uncertainty regarding the potential for recognized environmental conditions in connection with a property. Performance of this Phase I ESA is intended to reduce, but not eliminate uncertainty regarding the potential for recognized environmental conditions in connection with a property, and the ASTM E 1527-00 Standard recognizes reasonable limits of time and cost.

This report does not document compliance by present or past subject property owners (or tenants) with Federal, State, or Local laws and regulations, nor does it claim or imply that all environmental problems past, present or potential have been detected on or nearby the subject property. Although this cannot be considered an exhaustive or all encompassing study, this investigation was performed consistent with customary practice and standards. No warranty expressed or implied is made concerning the accuracy and completeness of the information and conclusions in this report.

2.5 Special Terms and Conditions

The following is a list of terminology that is used throughout this report and therefore should be defined.

Abutting:	Any property that is physically bounded by the subject property.
Actual Knowledge:	The knowledge actually possessed by an individual who is a real person, rather than an entity.
Adjacent:	Any property that is separated from the subject property by an easement or roadway.
Adjoining:	Any property that is considered to be abutting or adjacent to the subject property.
Asbestos Containing Material (ACM):	Any material or product that contains more than 1% asbestos.
Business Environmental Risk:	A risk which can have a material environmental or environmentally-driven impact on the business associated with the current or planned use of a parcel of commercial real estate, not necessarily limited to those environmental issues required to be investigated in the E 1527-00 practice.
Due Diligence:	The process of inquiring into the environmental characteristics of a parcel of commercial real estate or other conditions in connection with a property transaction.
Environmental Professional:	A person possessing sufficient training and experience necessary to conduct a subject property reconnaissance, interviews, and other activities in accordance with the E 1527-00 practice.
Hazardous Substance:	A substance defined as a hazardous substance pursuant to CERCLA

42 USC 9601 (14), as interpreted by USEPA regulations and the courts.

Historical Recognized Environmental Condition: Environmental conditions which in the past would have been considered a recognized environmental condition, but which may or may not be currently considered a recognized environmental condition.

Obvious: That which is plain or evident; a condition or fact that could not be ignored or overlooked by a reasonable observer while visually or physically observing the subject property.

Occupants: Those tenants, subtenants, or other persons or entities using the property or a portion of the subject property.

Owner: Generally the fee owner of record of the subject property.

Practically Reviewable: Information that is practically reviewable means that the information is provided by the source in a manner and in a form that, upon examination, yields information relevant to the subject property without the need for extraordinary analysis of irrelevant data.

Preparer: The person preparing the transaction screen questionnaire pursuant to Practice E 1528.

Reasonable Ascertainable: Information that is (1) publicly available, (2) obtainable from its source within reasonable time and cost constraints, and (3) practically reviewable.

Recognized Environmental Conditions: The presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property.

Subject Property: The real property that is the subject of this ESA.

User: The party seeking to use Practice E 1527 to perform an environmental site assessment of the subject property.

2.6 User Reliance

According to Section 6.5.2.1 of E 1527-00, "An environmental professional is not required to verify independently the information provided but may rely on information provided unless he or she has actual knowledge that certain information is incorrect based on other information obtained in the Phase I Environmental Site Assessment or otherwise actually known to the environmental professional." Jacques Whitford was not provided with any contradictory information from the Client regarding any information gathered during the investigation. As a result, Jacques Whitford has relied on the information gathered without independent verification and has complied this report with the assumptions, limitations, and exceptions noted in Sections 2.3 and 2.4 of this report.

3.0 SITE DESCRIPTION

In order to describe the subject property, records were reviewed and/or obtained from the various sources cited in Section 16.0, References.

Joseph T. Unsworth, P.E., of Jacques Whitford, completed an ASTM Environmental Transaction Screen Questionnaire for the subject property, which can be found in **Appendix D**. Photographs taken during the inspection are presented in **Appendix A**.

3.1 Location and Legal Description

According to records on file at the Westerly Tax Assessor's office, the subject property consists of one land parcel identified on Westerly Tax Assessor's Plat Map Plat Map 8, as Lot 23. Lot 23 contains approximately 4.55 acres (see **Figures 1 and 2**).

Legal descriptions for the various lots of the subject property were discovered on the most recent deeds issued for the subject property, found at the Westerly Clerk's office at the Westerly Town Hall, in Deed Book 432, beginning on Page 53. A copy of the deed can be found in **Appendix E** of this report.

The location of the subject property is depicted on **Figure 1**, which was developed from the *Ashaway, Rhode Island USGS Topographical Quadrangle Map*. **Figure 2** is a not-to-scale Site Plan depicting the entire subject property and adjoining properties to the subject property.

3.2 Site and Vicinity General Characteristics

Jacques Whitford conducted a site visit to visually and physically observe the subject property as well as any structure(s) present on the subject property, on Monday, February 27, 2006. Based on Town records and visual observations, the subject property consists of one parcel of land. Lot 23 is not bound by any roads. Access to the subject property is from Potter Hill Road via a driveway that runs across the southeastern part of Lot 24 and onto the southern part of the subject property. Properties abutting the subject property are residential and agricultural properties to the west, the Pawcatuck River to the east and north, and residential properties further east and north. Jacques Whitford attempted to observe the land and improvements of adjoining properties to the subject property, from the subject property and from accessible public rights-of-way. Based on these observations, it is apparent that the general area of the subject property is a moderately developed area in the north central portion of Westerly, with Hopkinton, RI abutting the subject property to the east, and North Stonington, CT abutting the subject property to the northwest. The subject property is located in a moderately developed area with predominately residential, agricultural, and some commercial properties. According to the most recent Westerly Zoning Map, Lots 23 is located in an area zoned "RR-60", defined as Rural Residential with a minimal lot size of 60,000 square feet.

3.3 Current Uses of the Subject Property

Lots 23 is currently vacant and reportedly has been for over forty years.

3.4 Descriptions of Structures, Roads, and Other Improvements

Descriptions of Structures on the Subject Property: The Westerly Tax Assessor records did not contain any information on the buildings on the subject property. However, Jacques Whitford observed nine buildings, some of which were interconnected. Many of the buildings were in various states of disrepair. The roofs of many buildings were collapsed into the building. Additionally, foundations of several former buildings were observed on the subject property. The main building is a three story building made of granite block that is approximately 115 feet by 60 feet. There are

two one story additions on the east side of the main building, one is 30 feet by 20 feet and made of brick and the other is 85 feet by 20 feet and made of brick and wood. A 100 foot by 70 foot building is connected to the main building to the south and is one story and made of brick. The former boiler building is 75 feet by 54 feet, is located to the north of the main building, and is two stories and made of brick. Another one story brick building is located to the north of the former boiler building. This building is 95 feet by 64 feet. Two wooden buildings are located north of this building and are 90 feet by 40 feet and 32 feet by 10 feet, respectively. One separate buildings was observed to the west of the former boiler building. This building is made of wood, is two stories high and 100 feet by 30 feet.

Descriptions of Roads: Lot 23 is not bound by any roads. Access to the subject property is from Potter Hill Road via a driveway that runs across the southeastern part of Lot 24 and onto the southern part of the subject property (see **Figure 2**). Potter Hill Road is a two-laned, two-directional road maintained by the Town of Westerly.

Utilities: The subject property has been vacant for over 40 years and no utilities appear to be active at the subject property. Electricity and telephone service are available for the subject property. Municipal water is available in the area of the subject property. There were no records at the Westerly Water Department for the subject property. The subject property formerly relied on an onsite well for water and was stored in a storage tank tower on the subject property. The storage tank tower is no longer present on the subject property. This water system reportedly was used for a fire suppression system. Valves and hydrant types equipment were observed near the buildings. There are no municipal sewers in the area of the subject property. The field property card from the Westerly Tax Assessor indicates that the subject property utilizes a septic system, however, the current site owner indicated that he believed that all wastewater was formerly discharge directly to the adjacent Pawcatuck River.

Heating System: The subject property buildings are not currently heated. The boilers remaining in the former boiler building appear to have been fueled by coal.

Sewage Disposal: The field property card from the Westerly Tax Assessor indicates that the subject property utilizes a septic system, however, the current site owner indicated that he believed that all wastewater was formerly discharge directly to the adjacent Pawcatuck River. There was no file available for the subject property at the Westerly Water/Sewer Department.

Source of Potable Water Supply: The subject property is connected to the public drinking water system. Drinking water is supplied to the subject property by The Westerly Water Department, which obtains their water from ten gravel wells located in six well fields that draw water from aquifers or groundwater reservoirs located in the Pawcatuck River Aquifer Region.

3.5 Current Uses of Adjoining Properties

Jacques Whitford attempted to observe the land and improvements of adjoining properties to the subject property from the subject property and from accessible public rights-of-way. Based on research and observations, it is apparent that the adjoining properties to the north, east, and west are residential, and agricultural. Properties to the south of the subject property include one residential lot beyond which is undeveloped land. The Pawcatuck River abuts the subject property to the east and north. Please refer to the appended **Table 2** for a listing of adjoining properties.

4.0 USER PROVIDED INFORMATION

4.1 Title Records

Jacques Whitford was not provided with any information from the Client regarding title and/or ownership records pertaining to the subject property. However, Jacques Whitford reviewed reasonably ascertainable land evidence records at the Westerly Clerk's Office located at Westerly Town Hall in Westerly, RI. Please refer to the appended **Table 1** for a partial listing of chain of ownership/title records.

4.2 Environmental Liens or Activity and Use Limitations

The Client did not provide Jacques Whitford with any information pertaining to any environmental liens, government notifications, or any activity and use limitations involving the subject property. While Standard E 1527-00 does not require the environmental professional to conduct a title search of recorded environmental liens or activity and use restrictions on the subject property, Jacques Whitford did review several, but not all, deeds for the subject property and did not note any environmental liens and/or activity or use limitations on the reviewed deeds that are currently recorded for the subject property.

4.3 Specialized Knowledge

According to Section 5.3 of Standard E 1527-00, if the user is aware of, or has any specialized knowledge or experience pertaining to recognized environmental conditions pertaining to the subject property, or the general area surrounding the subject property, they should make such information available to the environmental professional prior to the on-set of the site reconnaissance activities. The Client did not provide Jacques Whitford with any information pertaining to any specialized knowledge regarding recognized environmental conditions existing at the subject property.

4.4 Valuation Reduction for Environmental Issues

In accordance with Section 5.4 of Standard E 1527-00, if the Client or user has actual knowledge that the purchase price of the subject property is significantly less than the purchase price of comparable properties, the user and/or Client should try to identify an explanation for the lower price and to make written record of such explanation. The Client did not provide Jacques Whitford with any information pertaining to any purchase price or collateral value reduction.

4.5 Owner, Property Manager, and Occupant Information

Based on research conducted during this investigation, the current owner of Lot 23 is listed as Renewable Resources Inc., which reportedly acquired the subject property in 1992. At the time of Jacques Whitford's inspection, Lot 23 was vacant. Lot 23 has been vacant for over forty years and is not believed to have been "managed" during that time.

4.6 Reason for Performing Phase I ESA

According to information provided by the Client, this Phase I ESA is being conducted to assess if there are any environmental issues associated with the property that the owner will need to address as the property is developed.

4.7 Other Information

Jacques Whitford was not provided with any other additional information from the Client and/or the owner of the subject property.

5.0 RECORDS REVIEW

5.1 Standard Federal Environmental Record Sources

Using software produced and maintained by FirstSearch Technology Corporation (FirstSearch) of Norwood, MA, Jacques Whitford obtained an Environmental FirstSearch™ Report, Jacques Whitford obtained an FirstSearch™ Report, which searches various federal databases, which are presented in the following paragraphs. The FirstSearch™ Report can be found in **Appendix C** of this report.

5.1.1 NPL (National Priority List)

According to the database search results, the subject property is not listed on this database. Furthermore, no properties located within a 1.0-mile radius of the subject property are listed on this database.

5.1.2 CERCLIS (Comprehensive Environmental Response, Compensation, and Liability Information System – Active)

According to the database search results, the subject property is not listed on this database. Furthermore, no properties located within a 0.50-mile radius of the subject property are listed on this database.

5.1.3 CERCLIS-NFRAP (Comprehensive Environmental Response, Compensation, and Liability Information System – No Further Remedial Action Planned)

According to the database search results, the subject property is not listed on this database. Furthermore, no adjoining property to the subject property is listed on this database.

5.1.4 RCRA CORRACTS (Resource Conservation and Recovery Act - Corrective Action Report)

According to the database search results, the subject property is not listed on this database. Furthermore, no properties located within a 1.0-mile radius of the subject property are listed on this database.

5.1.5 RCRIS-TSD (Resource Conservation and Recovery Information System – Treatment, Storage, and Disposal Facilities)

According to the database search results, the subject property is not listed on this database. Furthermore, no properties located within a 0.50-mile radius of the subject property are listed on this database.

5.1.6 RCRIS – LQG and SQG (Resource Conservation and Recovery Information System – Large Quantity Generator and Small Quantity Generator)

According to the database search results, the subject property is not listed on this database. Furthermore, no adjoining property to the subject property is listed on this database.

5.1.7 ERNS (Emergency Response Notification System)

According to the database search results, the subject property is not identified on this database.

5.2 Standard State Environmental Record Sources

Using software produced and maintained by FirstSearch, Jacques Whitford obtained an Environmental FirstSearch™ Report, which searches various state databases, which are presented in the following paragraphs. The Environmental FirstSearch™ Report can be found in **Appendix C** of this report. Where deemed necessary, additional information was obtained from the RIDEM and is notated in the following sections.

5.2.1 SHWS (State Hazardous Waste Sites)

According to the database search results, the subject property is not listed on this database. Furthermore, no properties located within a 1-mile radius of the subject property are listed on this database.

5.2.3 SWF/LF (Solid Waste Facilities/Landfill Sites)

According to the database search results, the subject property is not listed on this database. Furthermore, no properties located within a 0.50-mile radius of the subject property are listed on this database.

5.2.4 LUST (Leaking Underground Storage Tank Facilities)

According to the database search results, the subject property is not listed on this database. Three properties located within a 0.50-mile radius of the subject property are listed on this database. Two of the sites are listed as "SRO- Soil Removal Only" and the other site is listed as inactive. All three sites are located at locations that are not considered upgradeint of the subject property and, therefore, would likely not impact the subject property.

5.2.5 UST (Registered Underground Storage Tank Facilities)

According to the database search results, the subject property is not listed on this database. Furthermore, no adjoining property to the subject property is listed on this database.

5.2.6 SPILLS (Oil & Hazardous Material Response Log/Spill Report)

According to the database search results, the subject property is not listed on this database.

5.3 Database Search Unmappable Properties

Unmappable properties are located in the general vicinity of the subject property. However, due to inaccurate or missing information provided to the database search contractor, from the appropriate governmental/state agency, these properties could not be definitively plotted. Jacques Whitford reviewed the list of unmappable properties in the FirstSearch™ Report, and was able to determine that the subject property was not identified on this unmappable list. Please refer to **Appendix C** to review the FirstSearch™ Report.

5.4 Previous Environmental Site Assessments

Jacques Whitford was not provided with, nor discovered, any previous environmental site assessments conducted at the subject property.

6.0 HISTORICAL USE INFOMRATION ON THE SUBJECT PROPERTY

Jacques Whitford researched historical usage of the subject property by reviewing records from the sources specified in Section 16, conducting interviews of people knowledgeable of the subject property, and conducting a site inspection of interior and exterior portions of the subject property. Pertinent information obtained from the review of these resources is presented in the paragraphs that follow:

6.1 Former Property Owners

Jacques Whitford was not provided with any information from the Client regarding title or ownership records pertaining to the subject property. However, Jacques Whitford reviewed reasonably ascertainable land evidence records at the Westerly Clerk's Office in Westerly Town Hall. Based on a review of these records, it is apparent that there have been many different deeds associated with the subject property. Records indicate that the current owner of Lot 23 is listed as Renewable Resources Inc., which reportedly acquired the subject property in 1992. Please refer to the appended **Table 1** for a listing of reported previous property owners and dates of acquirement, if available.

6.2 Historical Property Usage/Operations

Based on the historical research conducted by Jacques Whitford, it appears as though the subject property was first developed approximately in the mid 1800s as a woolen mill. Available information indicates that the subject property was used for the production wool textiles until approximately the early 1960s. The property appears to have been vacant since that time. Entities that have operated at the subject property include Swift River Woolen Company, Westerly Woolen Company, Potter Hill Woolen Company, and Pawcatuck Woolen Mills

6.3 Historical Use Information on the Adjoining Properties

In an attempt to discover the historical usage of adjoining properties, which may indicate the presence of adverse environmental conditions on, or in close proximity to, the subject property, Jacques Whitford expanded research and review of historical information sources to include suspect adjoining properties. Such tools include, but are not limited to Aerial Photographs, Cole/Polk City Directories, and personal knowledge provided through various conducted interviews.

In summary, it appears that the adjoining properties to the north and northwest have been used for residential uses since at least 1939. Other surrounding properties appear to have been used for agricultural uses until approximately 1962, when the land was allowed to revert to undeveloped woodlands or developed generally for residential uses.

7.0 PHYSICAL SETTING

The location of the subject property is depicted on **Figure 1,** which was developed from the *Ashaway, RI Quadrangle Map.* As can be seen, the average elevation of the subject property is approximately 30 feet above mean sea level. The area of the subject property has a topography that is hilly, with significant hills located to the southeast and southwest.

Jacques Whitford reviewed a United States Department of Agriculture Soil Conservation Service Soil Survey for Rhode Island. Based on a review of this survey, the northern portion of the subject property contains soils that are classified as "RU", defined as Rumney fine sandy loam. This nearly level, poorly drained soil is on flood plains. Slopes range from 0 to 3 percent but are dominantly less than 2 percent. Areas are long and narrow and range mostly from 5 to 30 acres. Typically, the surface layer is very dark grayish brown fine sandy loam about 5 inches thick. The subsoil is dark grayish brown, mottled fine sandy loam 17 inches thick. The substratum is gray and dark grayish brown sand to a depth of 60 inches or more. The permeability of this soil is moderately rapid in the surface layer and subsoil and rapid to very rapid in the substratum. Available water capacity is moderate, and runoff is slow. The soil has a seasonal high water table at a depth of about 6 inches from late fall through spring and is subject to frequent flooding. The soil is very strongly acid through slightly acid.

The southern portion of the subject property contains soils that are classified as "CeC", defined as Canton and Charlton fine sandy loams, very rocky, 3 to 15 percent slopes. These gently sloping to sloping, well drained soils are on side slopes and crests of glacial upland hills and ridges. Stones and boulders cover 2 to 10 percent of the surface, and rock outcrops cover up to 10 percent. Areas are irregular in shape and mostly range from 3 to 250 acres. The mapped acreage of this unit is approximately 50 percent Canton soils, 30 percent Charlton soils, and 20 percent other soils. The areas of this unit consist of either Canton soils or Charlton soils or both. The soils were mapped together because they have no major differences in use and management.

Typically, the Canton soils have a surface layer of very dark grayish brown fine sandy loam about 3 inches thick. The subsoil is dark yellowish brown, yellowish brown, and light olive brown fine sandy loam 19 inches thick. The substratum is olive gray gravelly loamy sand to a depth of 60 inches or more. Typically, the Charlton soils have a surface layer of very dark brown fine sandy loam about 2 inches thick. The subsoil is 25 inches thick. The upper 15 inches is dark yellowish brown fine sandy loam, and the lower 10 inches is yellowish brown gravelly sandy loam. The substratum is light brownish gray gravelly sandy loam to a depth of 60 inches or more.

Included with these soils in mapping are small areas of somewhat excessively drained Gloucester soils, well drained Paxton and Narragansett soils, and moderately well drained Sutton soils. Also included are small areas of soils that have slopes of more than 15 percent, small areas of soils where more than 10 percent of the surface is stony, and areas where bedrock is less than 40 inches from the surface.

The permeability of the Canton soils is moderately rapid in the surface layer and subsoil and rapid in the substratum. Available water capacity is moderate, and runoff is medium. This soil is extremely acid through strongly acid. The permeability of the Charlton soils is moderate to moderately rapid. Available water capacity is moderate, and runoff is medium. This soil is very strongly acid through medium acid.

Most areas of these soils are in woodland, and the soil is suited to trees. A small acreage is cleared and used for pasture. These soils are suitable for community development but are limited by stoniness, bedrock outcrops, and slope. Onsite sewage disposal systems need careful design and installation to prevent effluent from seeping to the surface. Stones and boulders need to be removed for landscaping. The use of straw bale sediment barriers, siltation basins, and temporary

diversions and quickly establishing plant cover help to control erosion during construction. Stones and rock outcrops make these soils unsuitable for cultivated crops and severely hinder the use of farming equipment.

According to the Bedrock Geologic Map of Rhode Island, Rhode Island Map Series No. 1, dated 1994, the area of the subject property lies within the rocks that are part of the Sterling Igneous Suite, and mapped as "Zsgg", which is defined as granite gneiss. This consists of pale-pink to gray medium-grained granite gneiss commonly with small porphyroclasts of microcline/orthoclase. Similar to alaskite gneiss, but with more than 3 % dark minerals. Compositions range from quartz monzonite to granite. Composed of sodic plagioclase quartz microline, biotite, opaque minerals; minor muscovite common; garnet more rare; accessory apatite and zircon; sphene present in some rocks; secondary chlorite. Typically is compositionally homogeneous, with strong foliation and locally well developed lineation defined by major minerals. Includes some rock mapped formerly as Ten Rod Granite Gneiss, Hope Valley Alaskite Gneiss, Potter Hill Granite Gneiss, and Scituate Granite Gneiss.

Review of the RIDEM Groundwater Zoning Map reveals that the subject property's area is located in a "GA" groundwater classification zone. This classification of groundwater is defined as "groundwater that may be suitable for public or private drinking water without treatment".

Review of the RIDEM's Groundwater Wellhead Protection Area Map reveals that the subject property is not located within a wellhead protection area. The closest wellhead protection area is located approximately 250 feet to the northeast of the subject property.

Based on visual observations, the depth to groundwater in the area of the subject property is estimated to be 10 to 15 feet below grade. Groundwater flow direction is expected to be towards the Pawcatuck River, although this can only be verified by conducting a subsurface investigation and associated hydrological survey.

The closest surface water body to the subject property is the Pawcatuck River that abuts the subject property to the east and north.

According to the FEMA Flood Insurance Map for Westerly, Rhode Island, Community Panel Number 4400240010B, dated January 2, 1981, most of the subject property is located in a Zone A flood zone, defined as areas located within the 100-year flood plain. The Zone A flood zone is associated with the Pawcatuck River.

8.0 SITE RECONNAISSANCE

The objective of the site reconnaissance was to identify recognized environmental conditions at, or in the immediate vicinity of, the subject property by means of a visual surficial inspection. Joseph T. Unsworth, P.E. and Robert Snyder conducted this visual reconnaissance of exterior portions of the subject property on Monday, February 27, 2006. Jacques Whitford's reconnaissance consisted of a systematic traverse of the subject property to provide a view of improvements, facilities, and grounds on the subject property. Photographs taken during the site inspection are presented in **Appendix 1**.

8.1 Methodology and Limiting Conditions

The methodology used to perform this ESA is consistent with those specified in the ASTM Designation: *E 1527-00, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process.* Information obtained and presented in this report from interviews conducted by Jacques Whitford of individuals listed in Section 8.0, is limited by the

quality, accuracy, and depth of responses give to Jacques Whitford. Furthermore, Jacques Whitford's visual and physical inspection of exterior characteristics of the subject property is limited, in some instances, by physical obstructions such as parked vehicles, leaves, snow, stored equipment, and other immovable objects. Other assumptions, limitations, and/or exclusions are documented in Sections 2.3 and 2.4.

8.2 General Site Setting

Based on Town records and visual observations, the subject property consists of one lot (see **Figures 1**). The area of the subject property has a topography that is hilly, with significant hills to the southeast and southwest. Lot 23 is not bound by any roads. Access to the subject property is from Potter Hill Road via a driveway that runs across the southeastern part of Lot 24 and onto the southern part of the subject property (see **Figure 2**). Potter Hill Road is a two-laned, two-directional roads maintained by the Town of Westerly. Jacques Whitford attempted to observe the land and improvements of adjoining properties to the subject property, from the subject property and from accessible public rights-of-way. Based on these observations, it is apparent that the general area of the subject property is a moderately developed area in the north central portion of Westerly, with Hopkinton, RI abutting the subject property to the east, and North Stonington, CT abutting the subject property to the northwest. The subject property is located in a moderately developed area with predominately residential, agricultural, and some commercial properties. According to the most recent Westerly Zoning Map, Lots 23 is located in an area zoned "RR-60", defined as Rural Residential with a minimal lot size of 60,000 square feet. **Figure 2** is a Site Plan sketch based on the observations made during the site visit.

8.3 Exterior Observations

Jacques Whitford conducted a visual and olfactory inspection of the exterior areas of the subject property by traversing the subject property in a grid-like pattern to cover the entire area of the subject property. The following paragraphs describe the observations made during the exterior inspection. It should be noted that because of the report format structure of this report, observations made in the following paragraphs actually might pertain to interior observations, which will be indicated, if applicable.

8.3.1 Aboveground Storage Tanks (ASTs)

One potential AST was observed in the in the northwest corner of the subject property. The potential AST appeared to be steel and rusted. The potential AST was located on the ground on the western property boundary. There were no liquids in the potential AST. There was no evidence of a release from the potential AST. A photograph of the potential AST is contained in **Appendix A**.

8.3.2 Underground Storage Tanks (USTs)

No evidence of USTs was observed on the subject property.

8.3.3 Indications of Solid Waste Disposal

Jacques Whitford did observe several areas of debris. Debris was located near the western side of the building near the foundations of former site buildings and other various areas. One pile of debris was observed in the northwest part of the subject property. The debris near the former foundations consisted primarily of wood and metal. Most of the debris pile was covered with soil. Observed debris included metal, wood, and steel drums. Refer to the pictures contained in

Appendix A for photographs of some of the debris observed. Also, an abandoned automobile was observed near the former boiler building.

8.3.4 Hazardous Substances in Connection with Identified Uses

The only containers observed on the exterior of the subject property by Jacques Whitford were the steel drums near the debris pile in the northwestern portion of the subject property. The unlabelled drums all were rusted and did not contain any liquids. Some drums were intact and some were not. No odors or other evidence of a release was observed from any of the drums. Approximately five automobile batteries were observed on the ground next to the building located west of the former boiler building. The batteries appeared to be intact with no evidence of a release observed.

8.3.5 Stressed Vegetation

Jacques Whitford did not observe any areas of stressed vegetation at the subject property.

8.3.6 Stained Soil or Pavement

No stained soil or pavement was observed on the subject property.

8.3.7 Pits, Ponds, or Lagoons

Jacques Whitford did not observe any pits, ponds, or lagoons associated with the subject property.

8.3.8 Odors

Jacques Whitford did not encounter any unusual odors during the site inspection of the subject property.

8.3.9 Pools of Liquid

Jacques Whitford did not visually observe any unidentified pools of the liquid on the subject property.

8.4 Interior Observations

Jacques Whitford conducted a visual and olfactory inspection of portions of the interior areas of the subject property. Several areas of the subject property could not be observed due to debris from collapsed roofs and/or unsafe floors due to deterioration and damage. The following paragraphs describe the observations made during the interior inspection. It should be noted that because of the report format structure of this report, observations made in the following paragraphs actually might pertain to exterior observations, which will be indicated, if applicable.

8.4.1 Unidentified Substance Containers

Jacques Whitford did not observe any unidentified substance containers during the inspection.

8.4.2 Discharge Features

The only discharge feature observed by Jacques Whitford was a pit in the floor of the building to the north of the former boiling building. Based on an observed hole in the side of the of the pit, this pit appears to discharge directly to the Pawcatuck River. No odors or staining were observed in the pit.

8.4.3 Polychlorinated Biphenyls (PCBs)

PCBs are a family of man-made chemicals that contain 209 individual compounds with varying toxicity. Commercial formulations of PCBs enter the environment as mixtures consisting of a variety of PCBs and impurities. Some commercial PCB mixtures are known in the United States by their industrial trade name, Aroclor. Due to their insulating and nonflammable properties, PCBs have been used widely as coolants and lubricants in transformers, capacitors, and other electrical equipment. PCBs have also been found in window caulking and other building applications. The manufacture of PCBs stopped in the United States in October 1977 because of evidence that PCBs accumulate in the environment and may cause health hazards for humans. Jacques Whitford did not observe any potential PCB containing equipment with the exception of the electrical panel associated with the elevator in the main building.

8.4.4 Asbestos Containing Materials (ACM)

Asbestos is the name for a group of naturally-occurring silicate minerals that can be separated into fibers. The fibers are strong, durable, and resistant to heat and fire. They are also long, thin, and flexible, so that they can even be woven into cloth. Due to these qualities, asbestos has been used in thousands of consumer, industrial, maritime, automotive, scientific, and building products. During the twentieth century, some 30 million tons of asbestos have been used in industrial sites, homes, schools, shipyards, and commercial buildings in the United States. Common ACMs included pipe-covering, insulating cement, insulating block, refractory and boiler insulation materials, transite board, fireproofing spray, joint compound, vinyl floor tile, ceiling tile, mastics (glue), roofing products, and duct insulation for HVAC applications. Inhalation of asbestos fibers can result in deleterious health effects.

For buildings constructed prior to 1980, the year ACM were banned, interested parties should assume that building materials such as vinyl floor tiling and mastics, acoustical ceiling tiles, roofing materials, cove-base molding, joint and window compounds, flexible fabric ductwork connectors, fire doors, electrical cable coverings, etc. contain asbestos unless proven by laboratory analysis or otherwise. Due to age of the buildings, it is possible that ACM exist in the buildings.

8.4.5 Lead-Based Paint (LBP)

Many houses, apartments, and other buildings built before 1978 have paint that contains lead (called lead-based paint). Lead from paint, chips, and dust can pose serious health hazards if not taken care of properly. Lead exposure is one of the most common preventable poisonings of childhood. It is estimated that one out of every six children in the United States, or a total of over three million children, have blood levels in the toxic range. Lead is a potent poison that can affect individuals at any age. Children with developing bodies are especially vulnerable because their rapidly developing nervous systems are particularly sensitive to the effects of lead.

Due to the age of the subject property buildings, it is possible that lead-based paint was utilized within the buildings. Jacques Whitford observed the majority of painted surfaces to be in very poor condition.

9.0 INTERVIEWS

9.1 Interview with Owner

Dr. Edward Caprapezza, current property owner, was present during Jacques Whitford's site reconnaissance. Comments considered noteworthy by Dr. Caprapezza have been included in the relevant sections of this report. In summary Dr. Carapezza stated that the site has been vacant since the 1960s, was serviced by an onsite well, and discharged all waste to the Pawcatuck River.

9.2 Interview with Manager of the Subject Property

The subject property is vacant and there was no manager of the subject property.

9.3 Interview with Occupants

The subject property is vacant and therefore, there are no occupants.

9.4 Interview with Local Government Officials

Interviews with local government officials included personnel of the Westerly Tax Assessor's Office, the Westerly Fire Department, and the Westerly Building Department. Comments considered noteworthy by these individuals have been included in the relevant sections of this report.

9.5 Interview with Others

No other individuals were interviewed during the course of this investigation.

10.0 FINDINGS

Based on Jacques Whitford's research and observations of the subject property and its surrounding area, Jacques Whitford has discovered potential recognized environmental conditions and/or environmental business risks, which are summarized in the following bulleted paragraphs:

- Asbestos containing materials may exist in the buildings.
- Painted surfaces were observed to be in poor condition and may contain lead based paint.
- The subject property is not served by municipal sewers. Records available from the Town of Westerly indicate that the subject property utilizes a septic system. However, according to the current property owner, all wastewater was believed to be discharged directly to the adjacent Pawcatuck River.
- Coal may have been used for fuel on the subject property.
- An area of dumping was observed in the north western part of the subject property. Miscellaneous debris was observed, including several rusted and unlabelled 55 gallon drums. None of the drums contained any liquid and were rusted.
- Former buildings at the subject property appear to have been demolished on the subject property.
- Significant water damage was observed on ceiling and floors of a majority of thethe buildings.

11.0 OPINION

Based on the noted recognized environmental conditions, Jacques Whitford believes there is a **Low** to **Moderate** risk of potential liability associated with the subject property. This opinion is based on observations and historic information indicate that the subject property has been used for industrial uses. An onsite septic system may have been used for the disposal of sanitary waste and process wastewater. Additionally, the there may be asbestos and lead based paint in the buildings. Other potential liabilities include PCB and/or mercury containing materials and mold growth resulting from the extensive water intrusion. Soils and groundwater at the subject property may have been impacted from improper disposal of hazardous materials and/or petroleum products, demolition of former structures, and the use and storage of coal.

12.0 CONCLUSIONS

Jacques Whitford has performed a Phase I ESA in conformance with the scope and limitations of ASTM Practice E 1527-00, on the property located and identified as Lot 23 on Westerly Tax Assessor's Plat Map 8. Any exceptions to, or deletions from, this practice is described in Sections 2.3 and 2.4 of this report. This assessment has revealed recognized environmental conditions in connection with the subject property, as listed in **Section 9, Findings**, of this report. Based on the noted recognized environmental conditions, Jacques Whitford has formulated the opinion stated in **Section 10.0, Opinion**, of this report.

Based on the noted Findings and Opinions obtained and developed for this report, Jacques Whitford believes that further environmental investigation is warranted on the subject property. Based on the information obtained as part of the Phase I ESA and observations made during the investigation, additional investigations are recommended. Specifically, the following are recommended:

- Completion of a Phase II ESA to assess the extent of impacts to soil and groundwater at the subject property. The Phase II ESA should include the completion of test pits in the area of the observed dumping and areas of potential coal storage. Also, unless it can be determined that a septic system did not exist at the subject property, soils borings should be completed and monitoring wells installed to assess impacts from the potential septic system.

- Prior to any demolition and/or renovations, an asbestos survey and pain chip sampling should be completed for all buildings on the subject property.

- A hazardous material disposal contractor should be hired to remove and dispose of all PCB and mercury containing materials (if any) in the buildings.

- All debris piles should be removed from the subject property and disposed of at appropriate disposal facilities.

- Since the buildings will required either demolition or extensive rehabilitations, Jacques Whitford does not recommend a mold survey at this time.

13.0 DEVIATIONS

All deletions, deviations, and/or additions from the Standard Practice E 1527-00 pertaining to this subject property and associated report, are described in Sections 2.2.3 and 2.2.4 of this report.

14.0 ADDITIONAL SERVICES

No other additional services were requested by the Client and are therefore not provided as part of this Phase I ESA report.

15.0 SIGNATURE(S) OF ENVIRONMENTAL PROFESSIONAL(S)

Joseph T. Unsworth
Project Manager

Date

Vincent L. Jacques, P.E.
Senior Reviewer

Date

16.0 QUALIFICATION(S) OF ENVIRONMENTAL PROFESSIONAL(S)

Please see resume(s) contained in **Appendix 6**.

17.0 REFERENCES

Interviews

Westerly Tax Assessor Personnel, February 27, 2006

Westerly Building Department Personnel, February 27, 2006

Westerly Fire Department Personnel, February 27, 2006

Dr. Edward Carapezza, February 27, 2006

Resources Consulted

Federal Environmental Databases/Source

National Priority List (NPL), EPA

Comprehensive Environmental Response, Compensation, and Liability Information System – Active (CERCLIS), EPA

Comprehensive Environmental Response, Compensation, and Liability Information System – No Further Remedial Action Planned (CERCLIS-NFRAP), EPA

Resource Conservation and Recovery Act - Corrective Action Report (RCRA CORRACTS), EPA

Resource Conservation and Recovery Information System – Treatment, Storage, and Disposal Facilities (RCRIS-TSD), EPA

Resource Conservation and Recovery Information System – Large Quantity Generator and Small Quantity Generator (RCRIS – LQG and SQG), EPA

Emergency Response Notification System (ERNS), EPA

State Environmental Databases/Source/Last EDR Contact Date

State Hazardous Waste Sites (SHWS), RIDEM

Solid Waste Facilities/Landfill Sites (SWF/LF), RIDEM

Leaking Underground Storage Tank Facilities (LUST), RIDEM

Registered Underground Storage Tank Facilities (UST), RIDEM

Oil & Hazardous Material Response Log/Spill Report (SPILLS), RIDEM

Agencies Consulted

Rhode Island Department of Environmental Management (RIDEM), Providence, Rhode Island

Westerly Library, Westerly, Rhode Island

Other Resources

Ashaway, Rhode Island Quadrangle Topographic Map developed by the United States Geologic Survey and retrieved from Topozone.com

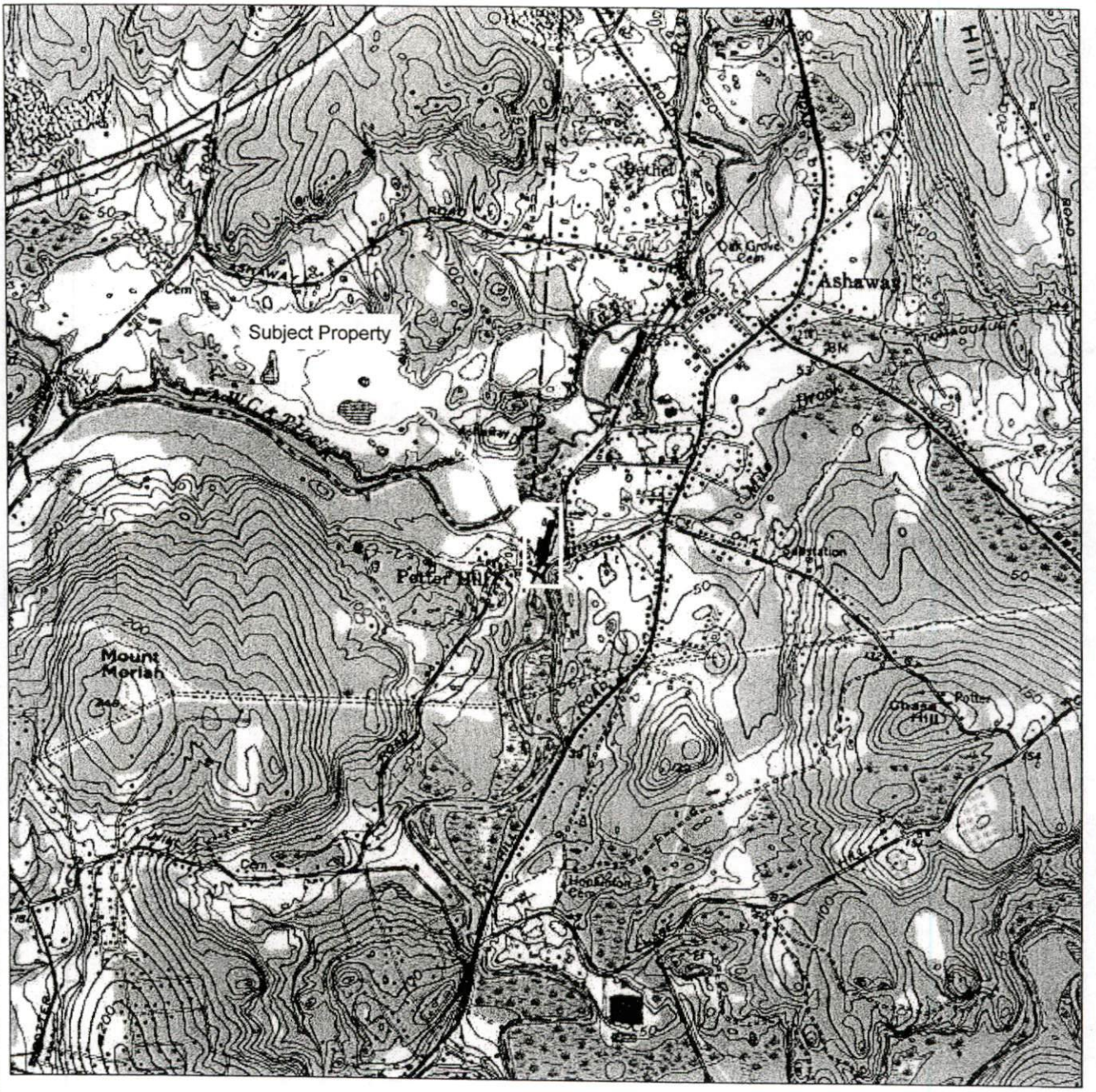
Soil Survey of Rhode Island developed by the United States Department of Agriculture Soil Conservation Service and the Rhode Island Agricultural Experiment Station, issued July 1981

Wellhead Protection Areas developed by the Rhode Island Department of Environmental Management, issued 1991

Groundwater Classification Areas developed by the Rhode Island Department of Environmental Management, issued 1991

Bedrock Geologic Map of Rhode Island, Rhode Island Map Series No. 1, compiled by O.D. Hermes, L.P. Gromet, D.P. Murray and Assisted by N.A. Hamidzada, issued 1994

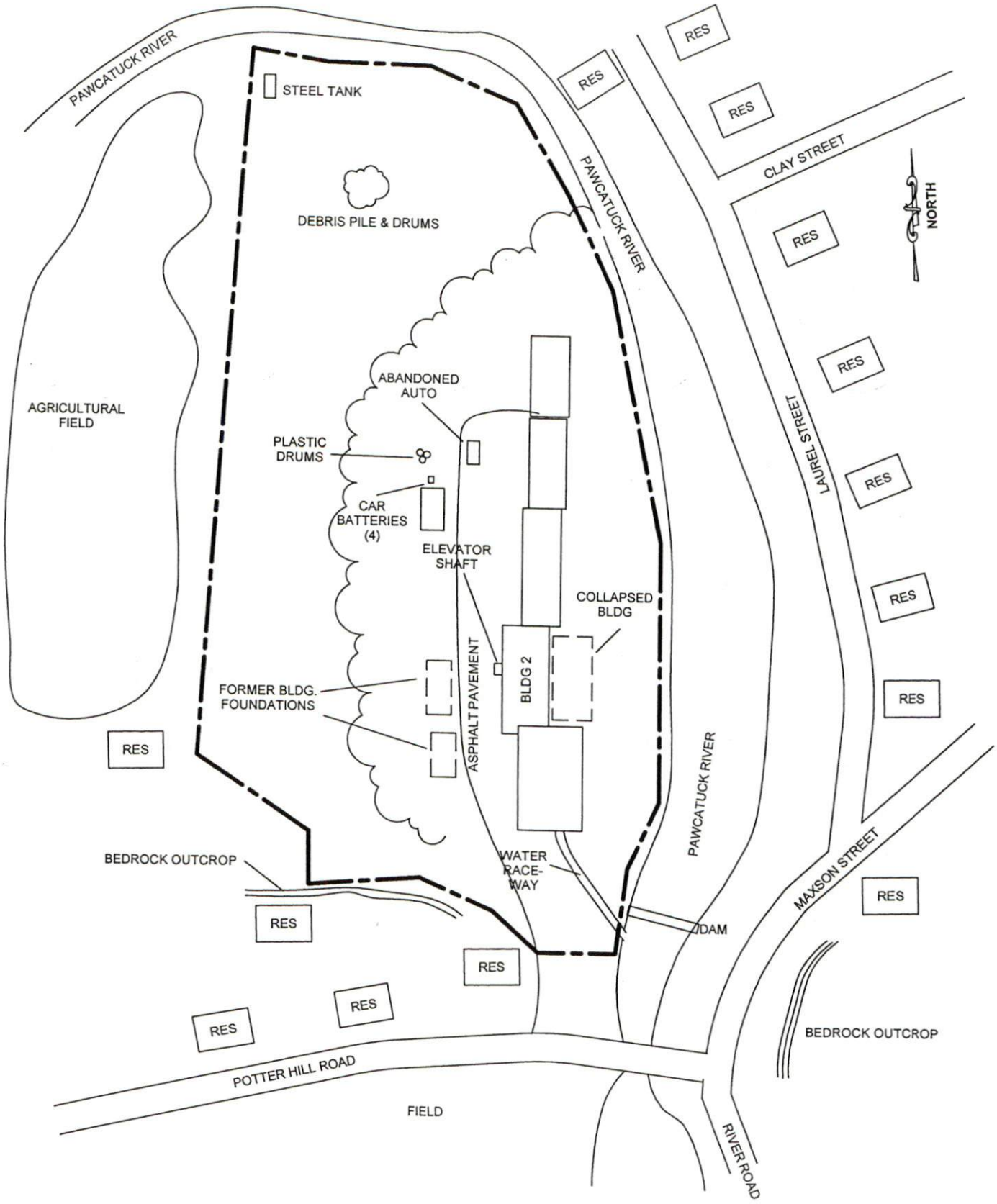
Flood Insurance Rate Map (FIRM) developed by the Federal Emergency Management Agency and the Federal Insurance Administration, dated 1982



SOURCE: USGS TOPOGRAPHIC MAP 1984

Jacques Whitford Company, Inc.

JACQUES WHITFORD LOCATION: LINCOLN, RI	BASEMAP SOURCE: ASHAWAY QUAD	NORTH	DRAWING TITLE: SITE LOCATION MAP POTTER HILL ROAD WESTERLY, RI
DATE PREPARED: 2-14-06 / PREPARED BY: MJB	APPROXIMATE SCALE: 1:24,000		
PROJECT NAME/FILE NAME: MILL BLDG./LOCUS	PROJECT NUMBER/PHASE: 1009825.		PREPARED FOR: RENEWABLE RESOURCES / FIGURE NO. 1



Jacques Whitford Company, Inc.

JACQUES WHITFORD LOCATION: 24 ALBION ROAD, SUITE 220, LINCOLN, RI				
DATE PREPARED: 3-8-06	DESIGNED BY: JTU	DRAWN BY: WL	CHECKED BY: VLJ	REVIEWED BY: JTU
REVISION DATE:	REVISION NO:	DRAWN BY:	CHECKED BY:	REVIEWED BY:
PROJECT NAME/FILE NAME: 198 POTTER HILL		PROJECT NUMBER/PHASE: 1009825	SCALE: NTS	

DRAWING TITLE:

SITE PLAN

198 POTTER HILL ROAD
WESTERLY, RI

PREPARED FOR: Renewable Resources Inc.

FIGURE NO. 2

Table 1: Chain-of-Ownership Summary

Date	Owner	Book/Page
Plat Map 8, Lot 23		
10/08/1992	Renewable Resources	432/53
8/15/1955	Helen E. Cottrell	74/354
5/6/1930	Swift River Woolen Co.	53/443
3/12/1930	Fredrick T. Lawrence	53/190

Table 2: Adjoining Properties Summary

Plat/Lot	Current Owner	Observed Usage/Occupants
8/24	Allison B. Goodsell	residential
8/18	Lloyd & Ann Baker	residential
8/22	Dale Ann Edwards	residential

APPENDIX A

Photographs

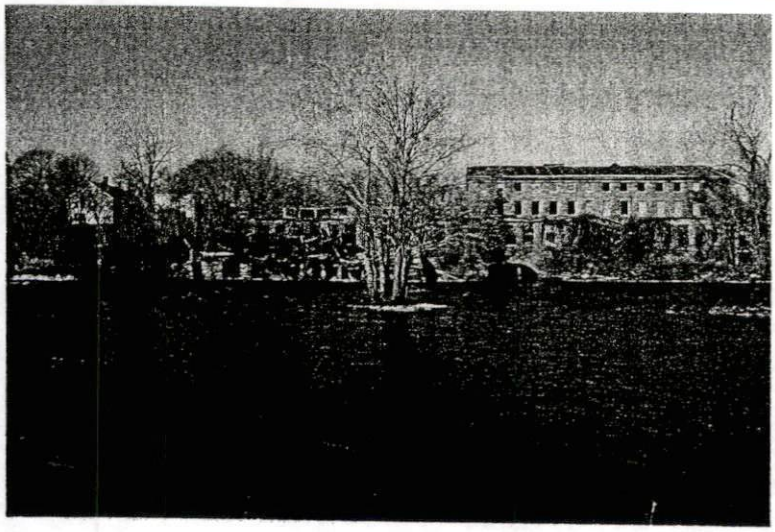


Photo 1
A view of the subject property building looking west from across the Pawcatuck River.

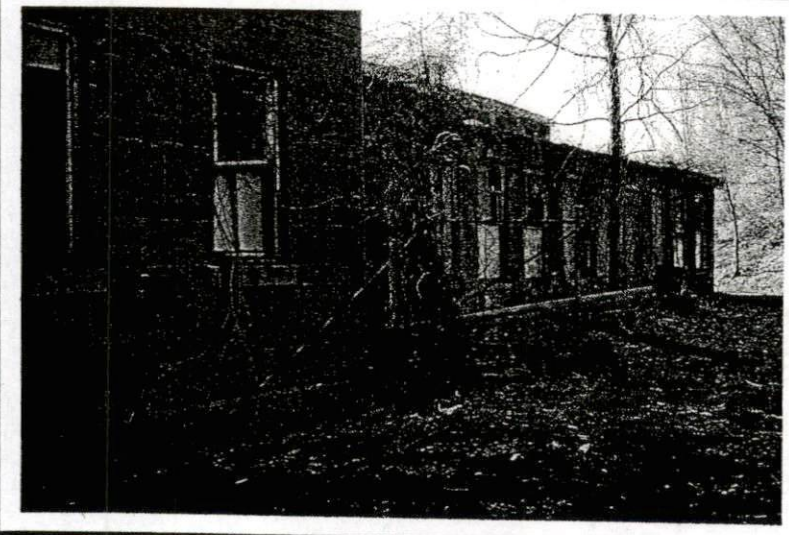


Photo 2
A view of the southwestern part of the subject property buildings.

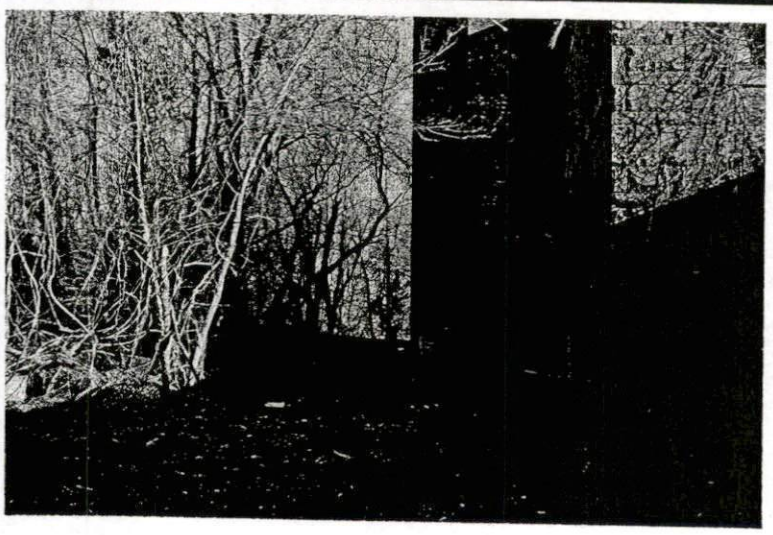


Photo 3
A view of the western side of the main building.

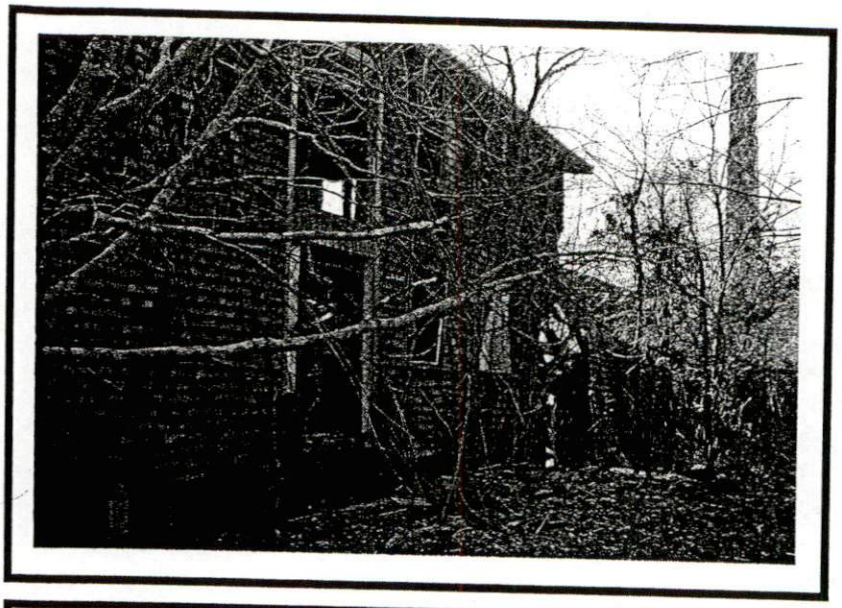


Photo 4
A view of the northwest part of the subject property buildings.

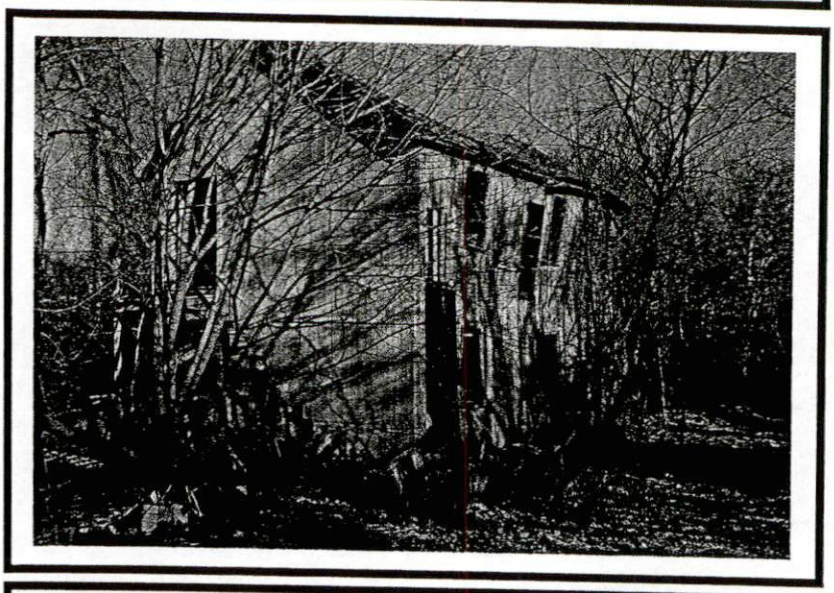


Photo 5
A view of the building located to the west of the former boiler building.

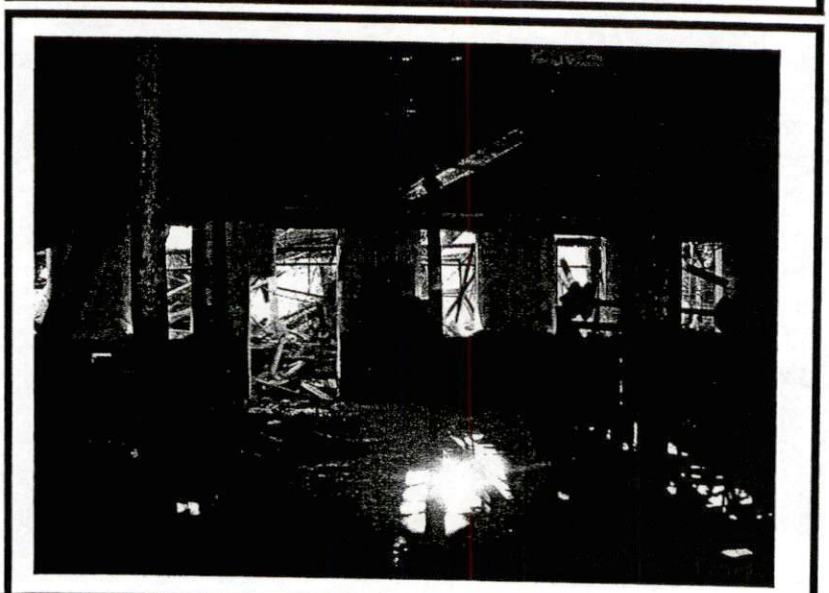


Photo 6
A view of first floor of main building.

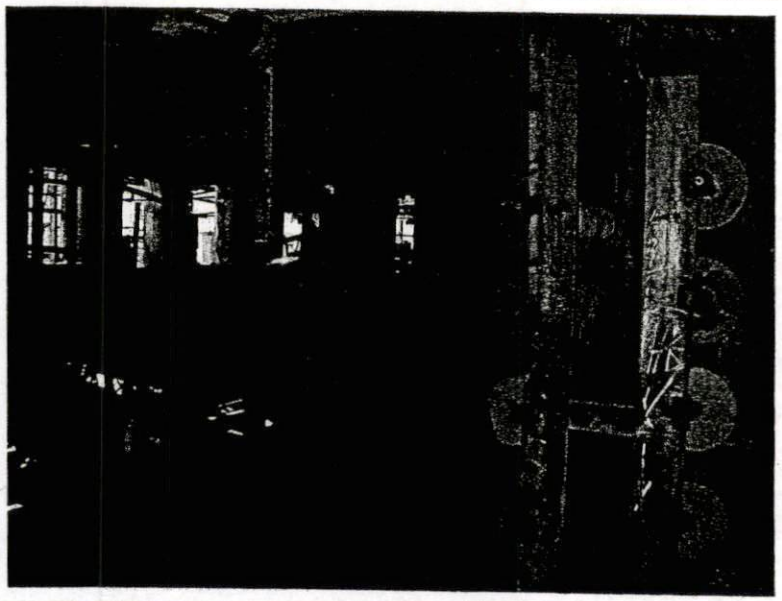


Photo 7
A view of second floor of main building.

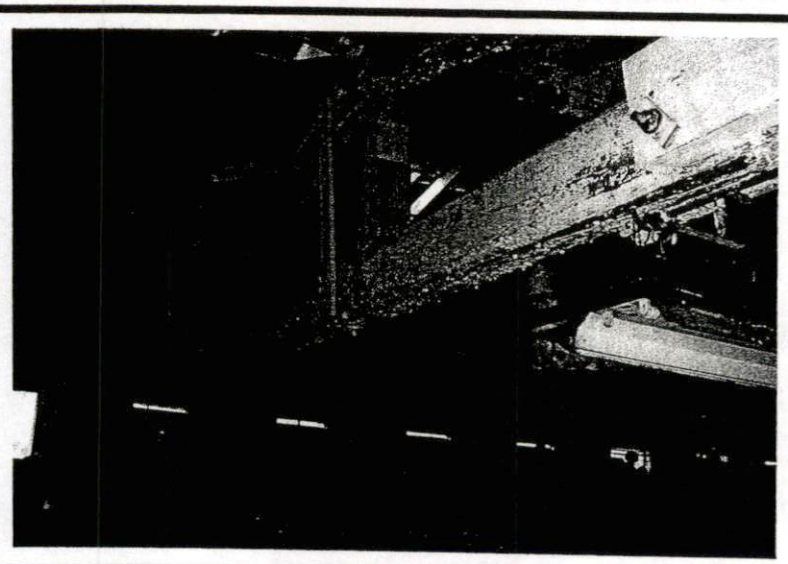


Photo 8
A view of the roof of main building.



Photo 9
A view of southern most building.

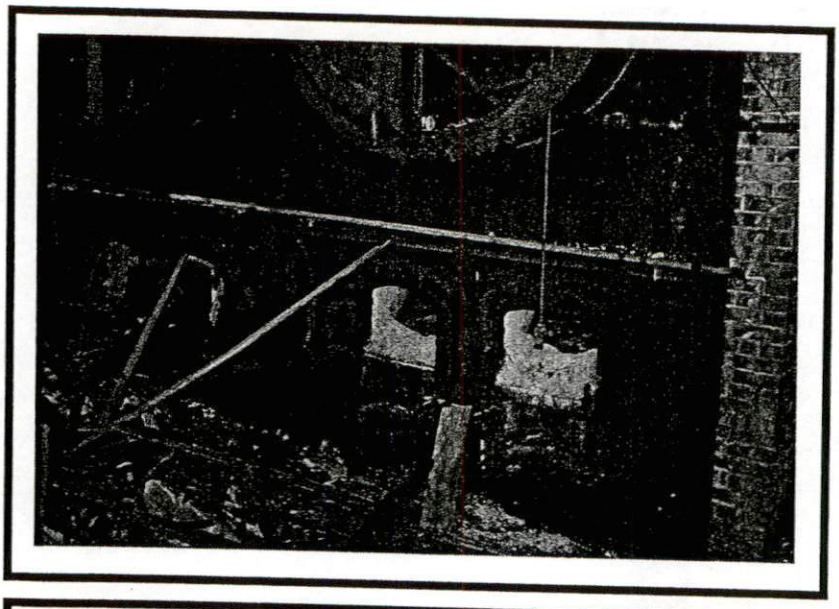


Photo 10
A view of boilers in former boiler building.

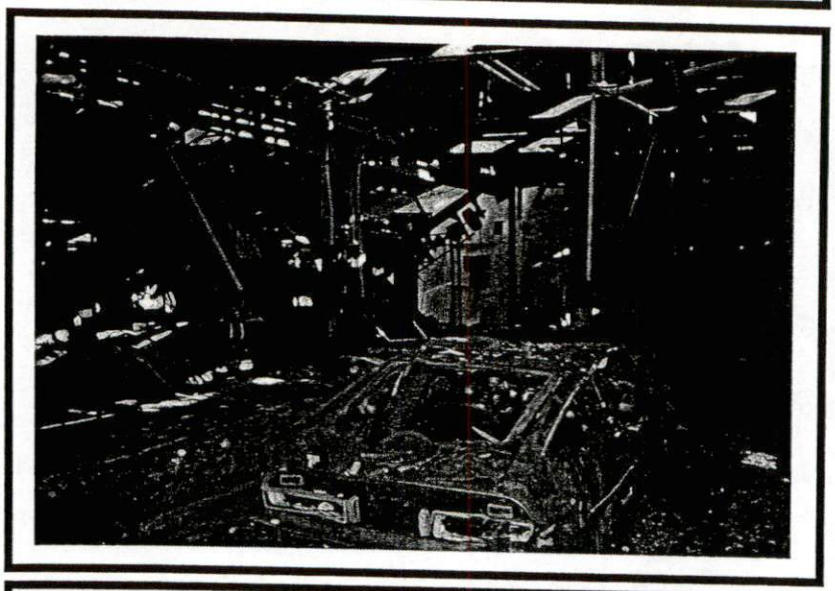


Photo 11
A view of the building north of the former boiler building.



Photo 12
A view of pit in floor of building north of the former boiler building.

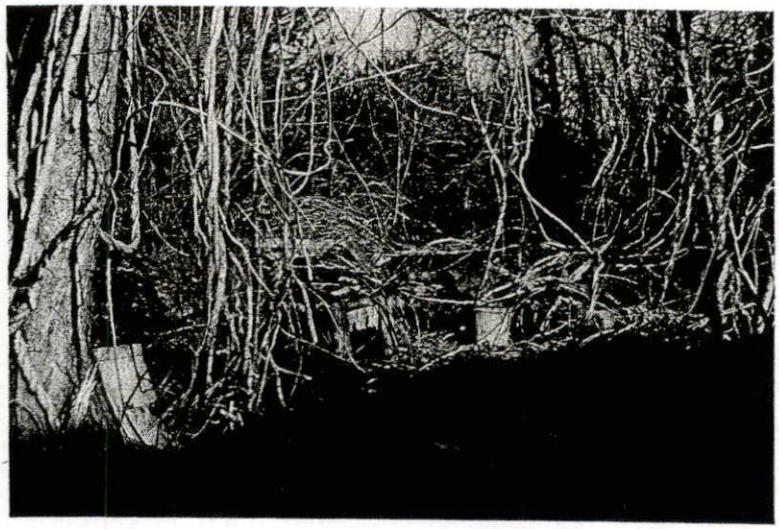


Photo 13
A view of debris on top of foundation of former building, west of main building.

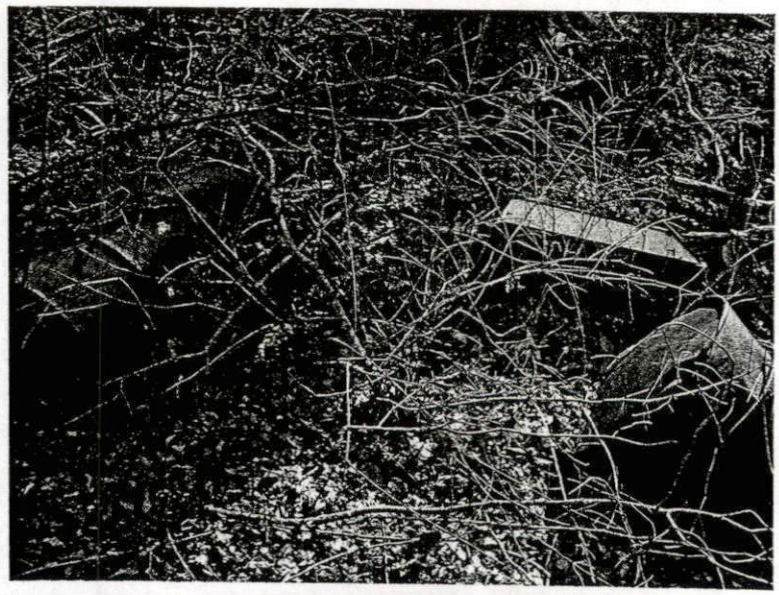


Photo 14
A view of the buried debris and drums in the northwest part of the subject property.

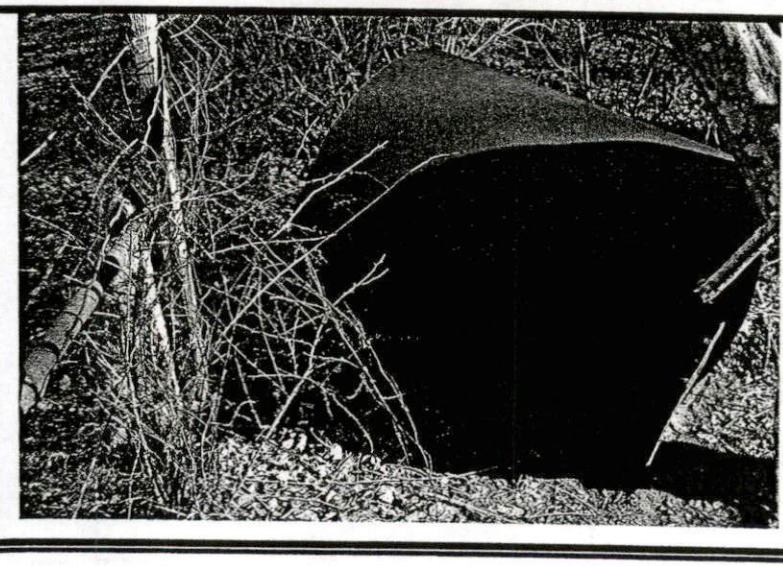


Photo 15
Potential tank located on the northwestern subject property boundary.



Photo 16
A view of cut plastic drums.

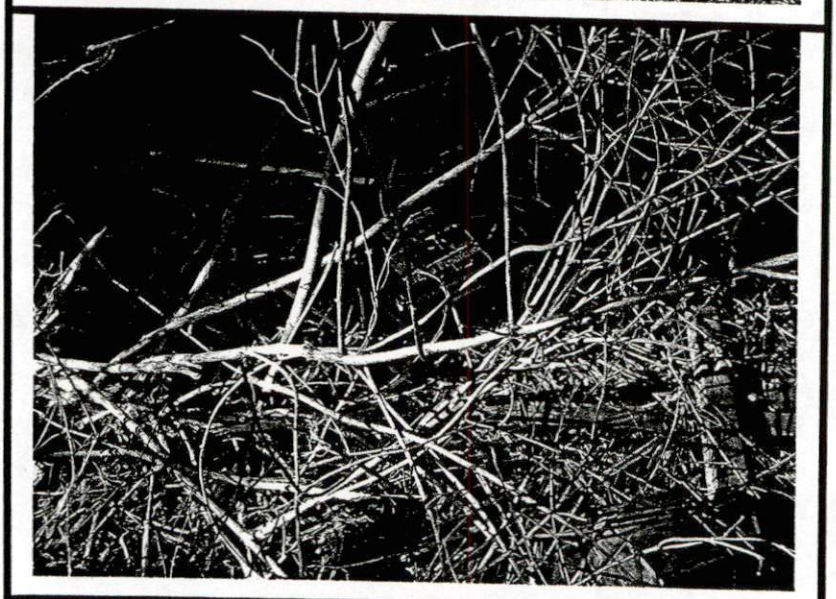


Photo 17
A view of automobile batteries adjacent to building located west of former boiler building.

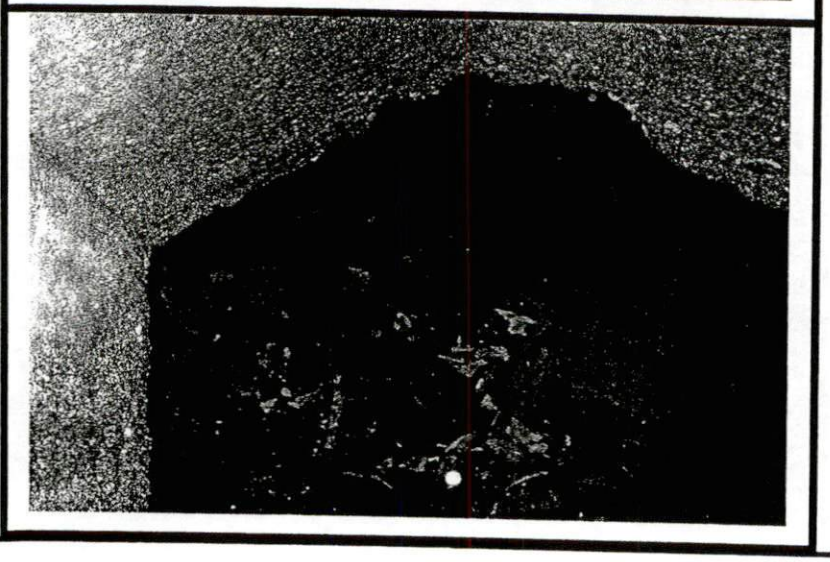


Photo 18
A view of valve in ground (typical).

APPENDIX B

Historical Research Documentation

EDR® Environmental Data Resources Inc

"Linking Technology with Tradition"®

Sanborn® Map Report

Ship To: Melissa Jacques-Bibeault
Jacques Whitford, Inc.
24 Albion Road
lincoln, RI 02865

Order Date: 2/13/2006 **Completion Date:** 2/15/2006
Inquiry #: 1612788.1s
P.O. #: na
Site Name: Potter Hill Road
Address: Potter Hill Road
City/State: Westerly, RI 02891
Cross Streets:

Customer Project:

1012696EDR 781-551-0470

This document reports that the largest and most complete collection of Sanborn fire insurance maps has been reviewed based on client supplied information, and fire insurance maps depicting the target property at the specified address were not identified.

NO COVERAGE

NOTE: The reseller MUST deliver this report in its entirety to its client.

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT. Purchaser accepts this Report AS IS. Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

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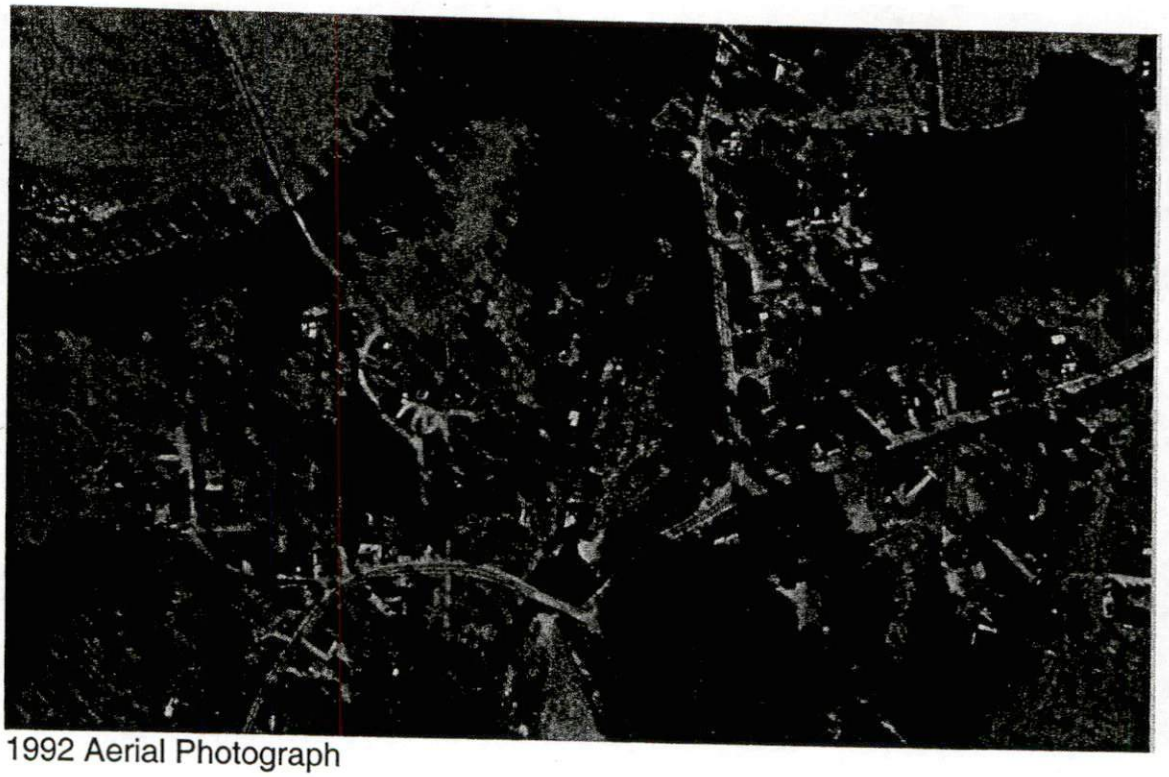
2003 Aerial Photograph


1997 Aerial Photograph



1992 Aerial Photograph



1988 Aerial Photograph



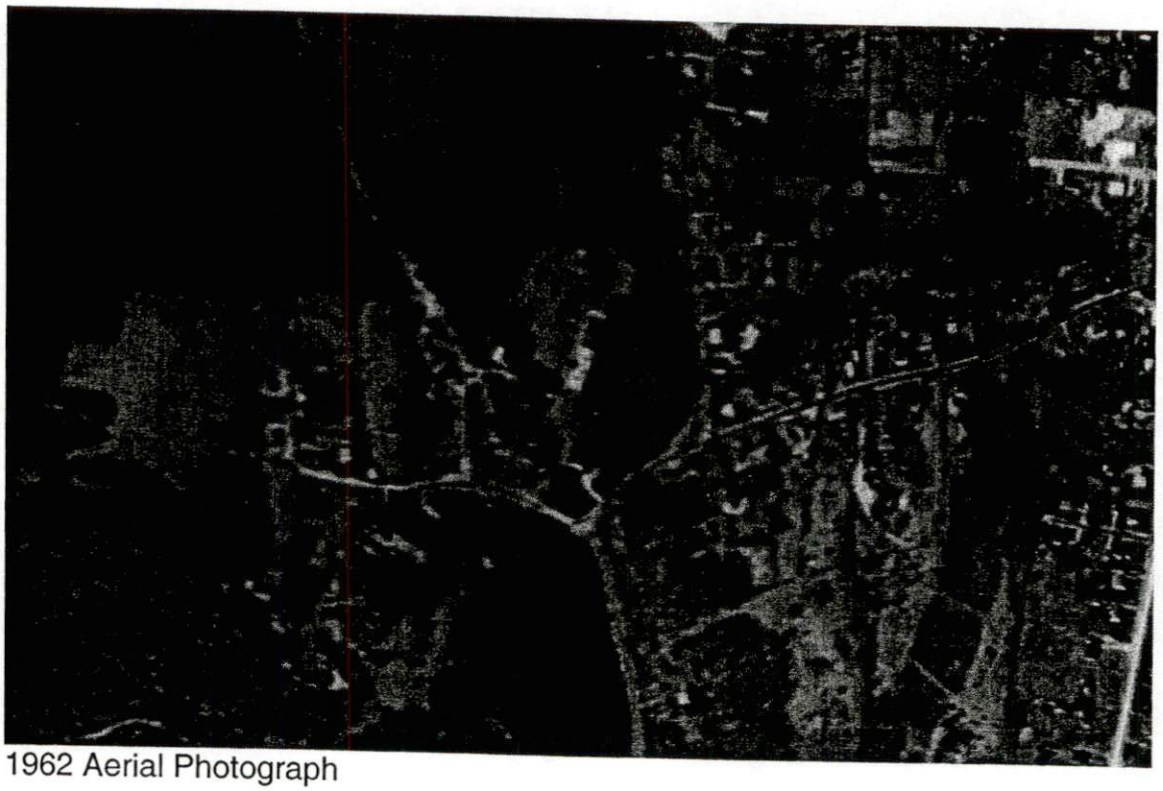
1981 Aerial Photograph



1976 Aerial Photograph



1972 Aerial Photograph



1962 Aerial Photograph



1951-52 Aerial Photograph



1939 Aerial Photograph

APPENDIX C

Regualatory Records Documentation

FirstSearch Technology Corporation

Environmental FirstSearch™ Report

TARGET PROPERTY:

POTTER HILL ROAD

WESTERLY RI 02891

Job Number: 1009825.

PREPARED FOR:

Jacques Whitford, Inc.

24 Albion Road, Suite 220

Lincoln, RI 02865

02-10-06

Tel: (781) 551-0470

Fax: (781) 551-0471

Environmental FirstSearch is a registered trademark of FirstSearch Technology Corporation. All rights reserved.

Environmental FirstSearch
Search Summary Report

Target Site: POTTER HILL ROAD
WESTERLY RI 02891

FirstSearch Summary

Database	Sel	Updated	Radius	Site	1/8	1/4	1/2	1/2>	ZIP	TOTALS
NPL	Y	01-13-06	1.00	0	0	0	0	0	0	0
CERCLIS	Y	01-13-06	0.50	0	0	0	0	-	1	1
NFRAP	Y	08-01-05	0.25	0	0	0	-	-	0	0
RCRA TSD	Y	09-22-05	0.50	0	0	0	0	-	0	0
RCRA COR	Y	12-10-05	1.00	0	0	0	0	0	0	0
RCRA GEN	Y	12-10-05	0.25	0	0	0	-	-	2	2
ERNS	Y	12-31-05	0.25	0	0	1	-	-	5	6
FINDS	Y	09-12-05	0.25	0	0	0	-	-	36	36
State Sites	Y	10-04-05	1.00	0	0	0	0	0	4	4
Spills-1990	Y	01-04-01	0.25	0	0	1	-	-	92	93
SWL	Y	04-06-05	0.50	0	0	0	0	-	1	1
REG UST/AST	Y	11-28-05	0.25	0	0	0	-	-	10	10
Leaking UST	Y	10-04-05	0.50	0	0	0	3	-	7	10
- TOTALS -				0	0	2	3	0	158	163

Notice of Disclaimer

Due to the limitations, constraints, inaccuracies and incompleteness of government information and computer mapping data currently available to FirstSearch Technology Corp., certain conventions have been utilized in preparing the locations of all federal, state and local agency sites residing in FirstSearch Technology Corp.'s databases. All EPA NPL and state landfill sites are depicted by a rectangle approximating their location and size. The boundaries of the rectangles represent the eastern and western most longitudes; the northern and southern most latitudes. As such, the mapped areas may exceed the actual areas and do not represent the actual boundaries of these properties. All other sites are depicted by a point representing their approximate address location and make no attempt to represent the actual areas of the associated property. Actual boundaries and locations of individual properties can be found in the files residing at the agency responsible for such information.

Waiver of Liability

Although FirstSearch Technology Corp. uses its best efforts to research the actual location of each site, FirstSearch Technology Corp. does not and can not warrant the accuracy of these sites with regard to exact location and size. All authorized users of FirstSearch Technology Corp.'s services proceeding are signifying an understanding of FirstSearch Technology Corp.'s searching and mapping conventions, and agree to waive any and all liability claims associated with search and map results showing incomplete and or inaccurate site locations.

Environmental FirstSearch
Site Information Report

Request Date:	02-10-06	**Search Type:**	COORD
Requestor Name:	Melissa Jacques-Bibeault	**Job Number:**	1009825.
Standard:	ASTM		

TARGET ADDRESS: POTTER HILL ROAD
WESTERLY RI 02891

Demographics

Sites:	163	**Non-Geocoded:**	158	**Population:**	NA
Radon:	0.7 - 7.7 PCI/L				

Site Location

	Degrees (Decimal)	**Degrees (Min/Sec)**		**UTMs**
Longitude:	-71.797	-71:47:49	**Easting:**	266230.455
Latitude:	41.4147	41:24:53	**Northing:**	4588357.863
			Zone:	19

Comment

Comment:FORMER PAWCATUCK WOOLEN MILLS

Additional Requests/Services

Adjacent ZIP Codes: 1 Mile(s)

ZIP Code	City Name	ST	Dist/Dir	Sel
02804	ASHAWAY	RI	0.00 --	Y
06359	NORTH STONINGTON	CT	0.14 NW	Y

Services:

	Requested?	Date
Sanborns	Yes	02-10-06
Aerial Photographs	No	
Historical Topos	No	
City Directories	No	
Title Search	No	
Municipal Reports	No	
Online Topos	No	

Environmental FirstSearch
Sites Summary Report

TARGET SITE: POTTER HILL ROAD
WESTERLY RI 02891

JOB: 1009825.
FORMER PAWCATUCK WOOLEN MILLS

TOTAL: 163 **GEOCODED:** 5 **NON GEOCODED:** 158 **SELECTED:** 0

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	Page No.
1	ERNS	H30743/FIX FAC	70A LAUREL DR. ASHWAY RI 02804	0.17 NE	1
3	SPILLS	64 LAUREL ST 00-078	64 LAUREL ST HOPKINTON RI 02833	0.23 NE	1
4	LUST	KENYON S VARIETY 1402-LS/SRO - SOIL REMOVAL O	ROUTE 3 AND MAXON ST. HOPKINTON RI 02833	0.32 NE	2
5	LUST	IMPERIAL HOME D+COR 1414-LS/SRO - SOIL REMOVAL O	50 CHASE HILL ROAD HOPKINTON RI 02833	0.35 NE	2
2	LUST	HENDEL CHEVRON 1401-LS/I - INACTIVE	ROUTE 3 POLE 867 HOPKINTON RI 02832	0.36 SE	2

Environmental FirstSearch
Sites Summary Report

TARGET SITE: POTTER HILL ROAD
WESTERLY RI 02891

JOB: 1009825.
FORMER PAWCATUCK WOOLEN MILLS

TOTAL: 163 **GEOCODED:** 5 **NON GEOCODED:** 158 **SELECTED:** 0

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	Page No.
	CERCLIS	WESTERLY DRUMS RI0690390026/NOT PROPOSED	WESTERLY RI 02891	NON GC	N/A
	ERNS	UNKNOWN 224058/UNKNOWN (NRC)	PAWCATUCK RIVER WESTERLY RI 02891	NON GC	N/A
	ERNS	442632/UNKNOWN	BRADFORD FISHING AREA RTE 2 WESTERLY RI 02891	NON GC	N/A
	ERNS	UNKNOWN 424845/MARINE VESSEL (EPA R	NEAR THE CHARLESTOWN BEACH WESTERLY RI 02891	NON GC	N/A
	ERNS	UNKNOWN 153996/FIXED FACILITY	WHITE ROCK ROAD WESTERLY RI 02891	NON GC	N/A
	ERNS	D41256/UNKNOWN	WESTERLY RI 02891	NON GC	N/A
	FINDS	MICROSONICS INC CTD980669600	TECHNOLOGY PK NORTH STONINGT CT 06359	NON GC	N/A
	FINDS	WESTERLY DRUMS 110009321992/FRS	WESTERLY RI 02891	NON GC	N/A
	FINDS	WESTERLY HIGH SCHOOL 110017887795/FRS	23 WARD STREET WESTERLY RI 02891	NON GC	N/A
	FINDS	WESTERLY WATER DEPARTMENT 110012958781/FRS	68 WHITE ROCK RD WESTERLY RI 02891	NON GC	N/A
	FINDS	ASHAWAY ELEMENTARY 110011759098/FRS	12 HILLSIDE AVENUE ASHAWAY RI 02804	NON GC	N/A
	FINDS	ASHAWAY ELEMENTARY SCHOOL 110021651372/FRS	12A HILLSIDE AVENUE ASHAWAY RI 02804	NON GC	N/A
	FINDS	ASHAWAY LINE & TWINE MFG CO 110014362590/FRS	9 LAUREL ST HOPKINTON RI 02804	NON GC	N/A
	FINDS	C & A WALLCOVERINGS 110010364774/FRS	CHASE HILL ROAD ASHAWAY RI 02804	NON GC	N/A
	FINDS	WHEELER MIDDLE SCHOOL 110021679806/FRS	298 NORWICH/WESTERLY ROAD NORTH STONINGT CT 06359	NON GC	N/A
	FINDS	M H GARDEN PARK 110013188264/FRS	20 PROVIDENCE/NEW LONDON TU NORTH STONINGT CT 06359	NON GC	N/A
	FINDS	NORTH STONINGTON TRANSFER STATION 110015768267/FRS	215 WINTERHOG HILL RD NORTH STONINGT CT 06359	NON GC	N/A
	FINDS	NORTH STONINGTON BOARD OF EDUCATIO 110011780661/FRS	P.O. BOX 6001 NORTH STONINGT CT 06359	NON GC	N/A
	FINDS	WHEELER MIDDLE 110011760399/FRS	311 NORWICH/WESTERLY RD NORTH STONINGT CT 06359	NON GC	N/A
	FINDS	US COAST GUARD WESTERLY DRUMS SITE RI0690390026	LAT 41 22.5 N LONG 71 50.0 WESTERLY RI 02891	NON GC	N/A

Environmental FirstSearch
Sites Summary Report

TARGET SITE: POTTER HILL ROAD
WESTERLY RI 02891

JOB: 1009825.
FORMER PAWCATUCK WOOLEN MILLS

TOTAL: 163 **GEOCODED:** 5 **NON GEOCODED:** 158 **SELECTED:** 0

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	Page No.
	FINDS	WHEELER HIGH SCHOOL 110021637308/FRS	298 NORWICH/WESTERLY ROAD NORTH STONINGT CT 06359	NON GC	N/A
	FINDS	BETHEL VILLAGE WATER ASSOCIATION 110012958727/FRS	LYNN LANE HOPKINTON RI 02804	NON GC	N/A
	FINDS	SCWA, NORTH STONINGTON DIVISION (N 110013188255/FRS	ADDRESS NOT IN SDWIS NORTH STONINGT CT 06359	NON GC	N/A
	FINDS	NORTH STONINGTON DPW GARAGE 110015766571/FRS	11 WYASSUP RD NORTH STONINGT CT 06359	NON GC	N/A
	FINDS	NORTH STONINGTON ELEMENTARY 110011760406/FRS	311 NORWICH/WESTERLY RD NORTH STONINGT CT 06359	NON GC	N/A
	FINDS	SCWA, CEDAR RIDGE DIVISION 110013188246/FRS	ADDRESS NOT IN SDWIS NORTH STONINGT CT 06359	NON GC	N/A
	FINDS	HOMEBOUND 110021637344/FRS	297 NORWICH/WESTERLY ROAD NORTH STONINGT CT 06359	NON GC	N/A
	FINDS	GRISWOLD TEXTILE PRINT 110007176849/FRS	WHITE ROCK WESTERLY RI 02891	NON GC	N/A
	FINDS	TOWER STREET SCHOOL 110021688431/FRS	93 TOWER STREET WESTERLY RI 02891	NON GC	N/A
	FINDS	BRANCATOS WESTERLY SANITATION INC RID062304985	POTTER HILL RD WESTERLY RI 02891	NON GC	N/A
	FINDS	BRANCATOS WESTERLY SANITATION INC 110007824818/FRS	POTTER HILL RD WESTERLY RI 02891	NON GC	N/A
	FINDS	CONNECTOR TECHNOLOGY CORP RID981885866	AIRPORT RD WESTERLY RI 02891	NON GC	N/A
	FINDS	DUNN S CORNERS SCHOOL 110021688388/FRS	PLATEAU ROAD WESTERLY RI 02891	NON GC	N/A
	FINDS	CEDAR RIDGE WATER ASSOC 110022521617/FRS	7 POND STREET NORTH STONINGT CT 06359	NON GC	N/A
	FINDS	RITEWAY AUTO SERVICE INC 110007826166/FRS	BRADFORD RD WESTERLY RI 02891	NON GC	N/A
	FINDS	RITEWAY AUTO SVC INC RID981889488	BRADFORD RD WESTERLY RI 02891	NON GC	N/A
	FINDS	RITEWAY AUTO SVC INC RID982746737	BRADFORD RD WESTERLY RI 02891	NON GC	N/A
	FINDS	SPIKES GARAGE RID981898166	WILSON ST WESTERLY RI 02891	NON GC	N/A
	FINDS	SPIKES GARAGE 110007826282/FRS	WILSON ST WESTERLY RI 02891	NON GC	N/A
	FINDS	SPRINGBROOK ELEMENTARY SCHOOL 110021485454/FRS	39 SPRING BROOK ROAD WESTERLY RI 02891	NON GC	N/A

Environmental FirstSearch
Sites Summary Report

TARGET SITE: POTTER HILL ROAD
WESTERLY RI 02891

JOB: 1009825.
FORMER PAWCATUCK WOOLEN MILLS

TOTAL: 163 **GEOCODED:** 5 **NON GEOCODED:** 158 **SELECTED:** 0

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	Page No.
	FINDS	STATE STREET SCHOOL 110021485515/FRS	STATE STREET WESTERLY RI 02891	NON GC	N/A
	FINDS	CONNECTOR TECHNOLOGY CORP 110007826102/FRS	AIRPORT RD WESTERLY RI 02891	NON GC	N/A
	LUST	HENDEL S SUNOCO 3807-LS/I - INACTIVE	ROUTE 2 @ ROUTE 49 WESTERLY RI 02891	NON GC	N/A
	LUST	WESTERLY DOT 3835-LS/I - INACTIVE	COMMERCE ST WESTERLY RI 02891	NON GC	N/A
	LUST	FORMER SHELL FACILITY #136349 45717/1	NORTH STONINGT CT 06359	NON GC	N/A
	LUST	ARLINGTON ACRES 29172/4	151 STEPHENS DR. NORTH STONINGT CT 06359	NON GC	N/A
	LUST	ARLINGTON ACRES 2064/YES	151 STEPHENS DR NORTH STONINGT CT 06359	NON GC	N/A
	LUST	TEXACO STATION 3815-LS/I - INACTIVE	ROUTE 2/ IN CONNECTICUT WESTERLY RI 02891	NON GC	N/A
	LUST	WERI 3836-LS/SRO - SOIL REMOVAL O	ASHAWAY ROAD WESTERLY RI 02891	NON GC	N/A
	RCRAGN	SPIKES GARAGE RID981898166/SGN	WILSON ST WESTERLY RI 02891	NON GC	N/A
	RCRAGN	ASHAWAY LINE AND TWINE 9 LAUREL RIR000502815/LGN	9 LAUREL ST. HOPKINTON RI 02804	NON GC	N/A
	SPILLS	98-556	WESTERLY RI 02891	NON GC	N/A
	SPILLS	ROUTE 1 97-255	ROUTE 1 WESTERLY RI 02891	NON GC	N/A
	SPILLS	STATE BEACH 93-038	STATE BEACH WESTERLY RI 02891	NON GC	N/A
	SPILLS	TRANSFORMER 94-517	POLE 17 OLD HOPKINTON ROAD WESTERLY RI 02891	NON GC	N/A
	SPILLS	WHITE ROCKS ROAD 00-045	WHITE ROCKS ROAD WESTERLY RI 02891	NON GC	N/A
	SPILLS	12097	SHORE ROAD WESTERLY RI	NON GC	N/A
	SPILLS	10801	SHORE RD WESTERLY RI	NON GC	N/A
	SPILLS	98-326	WESTERLY RI 02891	NON GC	N/A
	SPILLS	RAILROAD AVE 97-227	RAILROAD AVE WESTERLY RI 02891	NON GC	N/A

Environmental FirstSearch
Sites Summary Report

TARGET SITE: POTTER HILL ROAD
WESTERLY RI 02891

JOB: 1009825.
FORMER PAWCATUCK WOOLEN MILLS

TOTAL: 163 **GEOCODED:** 5 **NON GEOCODED:** 158 **SELECTED:** 0

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	Page No.
	SPILLS	99-057	WESTERLY RI 02891	NON GC	N/A
	SPILLS	98-697	WESTERLY RI 02891	NON GC	N/A
	SPILLS	AIRPORT ROAD 98-223	AIRPORT ROAD WESTERLY RI 02891	NON GC	N/A
	SPILLS	12214	19 PARK ST WESTERLY RI	NON GC	N/A
	SPILLS	POTTERHILL RD 97-320	POTTERHILL RD WESTERLY RI 02891	NON GC	N/A
	SPILLS	ON BEACH @ MISQUAMICUTT 98-425	ON BEACH @ MISQUAMICUTT WESTERLY RI 02891	NON GC	N/A
	SPILLS	MISQUAMICUT BEACH PARKING 96-171	MISQUAMICUT BEACH PARKING WESTERLY RI 02891	NON GC	N/A
	SPILLS	MAIN ST 97-226	MAIN ST WESTERLY RI 02891	NON GC	N/A
	SPILLS	LUST 94-563	SHORE DRIVE WESTERLY RI 02891	NON GC	N/A
	SPILLS	JOHN STREET 97-380	JOHN STREET WESTERLY RI 02891	NON GC	N/A
	SPILLS	GRANITE ST 98-383	GRANITE ST WESTERLY RI 02891	NON GC	N/A
	SPILLS	END OF QUARRY RD 99-482	END OF QUARRY RD WESTERLY RI 02891	NON GC	N/A
	SPILLS	DUMPSTERS 94-415	MJ MURPHY WESTERLY RI 02891	NON GC	N/A
	SPILLS	CANAL STREET 99-652	CANAL STREET WESTERLY RI 02891	NON GC	N/A
	SPILLS	BOX 418 96-182	49 EAST MAIN ST WESTERLY RI 02891	NON GC	N/A
	SPILLS	2110 PLAINFIELD PIKE 98-334	2110 PLAINFIELD PIKE WESTERLY RI 02891	NON GC	N/A
	SPILLS	11270	MOUNTAIN AVE WESTERLY RI 02891	NON GC	N/A
	SPILLS	CANAL ST 96-526	CANAL ST WESTERLY RI 02891	NON GC	N/A
	SPILLS	9804292/CLOSED	CLARK FALLS NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	SAA 9807522/CLOSED	INTERSECTION RT2 OLD SAYBRO NORTH STONINGT CT 06359	NON GC	N/A

Environmental FirstSearch
Sites Summary Report

TARGET SITE: POTTER HILL ROAD
WESTERLY RI 02891

JOB: 1009825.
FORMER PAWCATUCK WOOLEN MILLS

TOTAL: 163 **GEOCODED:** 5 **NON GEOCODED:** 158 **SELECTED:** 0

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	Page No.
	SPILLS	9705507/CLOSED	WAMPHASSUC CROSSING NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	9605938/CLOSED	WINTECHUG HILL ROAD NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	955650/CLOSED	RT 2 NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	942824/CLOSED	PATRICIA AVE/ANDERSON POND NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	9701646/CLOSED	391 RT 2 IN FRONT OF HOLLY NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	200501447/CLOSED	RTE 2 NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	9702102/CLOSED	823 TENDLETON ROAD NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	200408030/CLOSED	ROUTE 2 NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	11958	HIGH ST WESTERLY RI 02891	NON GC	N/A
	SPILLS	95921/CLOSED	YAWBUX VALLEY RD NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	12853	PIERCE ST WESTERLY RI 02891	NON GC	N/A
	SPILLS	WHITES SEPTIC SERVICE 9802851/CLOSED	ROUTE # 2 NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	UNKNOWN 200108624/CLOSED	ASSEKONK SWAMP NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	UNKNOWN 9802386/CLOSED	LONG POND, OFF ROUTE 184 NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	9605754/CLOSED	RT 617 ACCESS ROAD TO ROTAR NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	200003628/CLOSED	RT 2 NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	945259/CLOSED	I-95 N/B OVERPASS/GREEN FAL NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	944655/CLOSED	PENELTON RD NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	944243/CLOSED	RT 2/RANDALL NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	943479/CLOSED	ACCESS RD/RT 2/RT 49 NORTH STONINGT CT 06359	NON GC	N/A

Environmental FirstSearch
Sites Summary Report

TARGET SITE: POTTER HILL ROAD
WESTERLY RI 02891

JOB: 1009825.
FORMER PAWCATUCK WOOLEN MILLS

TOTAL: 163 **GEOCODED:** 5 **NON GEOCODED:** 158 **SELECTED:** 0

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	Page No.
	SPILLS	946087/CLOSED	RT 2 ROCKY ST NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	915275/CLOSED	RT 2 NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	9705439/CLOSED	WAMPHASSUC CROSSING NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	9906353/CLOSED	COLE PIT ROAD/RT 202 NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	923620/CLOSED	LAKESIDE DR NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	200004985/CLOSED	ROUTE 2 KLANTERN HILL ROAD/ NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	200006804/CLOSED	TRUCK STOP OFF OF I - 95 NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	957191/CLOSED	PENDLETON HILL RD NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	200200659/CLOSED	MECHANIC ST & CLARK ST NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	200401695/CLOSED	RT2 AND MAIN NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	200405047/CLOSED	MYSTIC ROAD NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	9606389/CLOSED	I-84 BETWEEN STILLMAN AND R NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	99-145	WESTERLY RI 02891	NON GC	N/A
	SPILLS	98-189	WESTERLY RI 02891	NON GC	N/A
	SPILLS	98-682	WESTERLY RI 02891	NON GC	N/A
	SPILLS	99-035	WESTERLY RI 02891	NON GC	N/A
	SPILLS	SAA 200005414/CLOSED	DENNISON HILL ROAD NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	99-094	WESTERLY RI 02891	NON GC	N/A
	SPILLS	9604727/CLOSED	CLARK FALLS ROAD POLE # 558 NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	97-300	WESTERLY RI 02891	NON GC	N/A

Environmental FirstSearch
Sites Summary Report

TARGET SITE: POTTER HILL ROAD
WESTERLY RI 02891

JOB: 1009825.
FORMER PAWCATUCK WOOLEN MILLS

TOTAL: 163 **GEOCODED:** 5 **NON GEOCODED:** 158 **SELECTED:** 0

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	Page No.
	SPILLS	99-140	WESTERLY RI 02891	NON GC	N/A
	SPILLS	99-080	WESTERLY RI 02891	NON GC	N/A
	SPILLS	99-221	WESTERLY RI 02891	NON GC	N/A
	SPILLS	99-597	WESTERLY RI 02891	NON GC	N/A
	SPILLS	00-053	WESTERLY RI 02891	NON GC	N/A
	SPILLS	11007	FRANKLIN ST WESTERLY RI 02891	NON GC	N/A
	SPILLS	11271	MOUNTAIN AVE WESTERLY RI 02891	NON GC	N/A
	SPILLS	11152	OAK ST WESTERLY RI 02891	NON GC	N/A
	SPILLS	99-129	WESTERLY RI 02891	NON GC	N/A
	SPILLS	NORTHEAST UTILITIES 914379/CLOSED	FOWLER RD NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	NORTHEAST UTILITIES 954574/CLOSED	NORTH ANGUILLA NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	99-128	WESTERLY RI 02891	NON GC	N/A
	SPILLS	NORTHEAST UTILITIES 94984/CLOSED	RT 2 NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	96-395	WESTERLY RI 02891	NON GC	N/A
	SPILLS	NORTHEAST UTILITIES 914383/CLOSED	REUTMANN RD NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	NORTHEAST UTILITIES 914380/CLOSED	REUTMANN RD NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	RT 216 99-500	RT 216 ASHAWAY RI 02804	NON GC	N/A
	SPILLS	NORTHEAST UTILITIES 951257/CLOSED	RUETEMANN RD NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	12632	JUNCTION OF RTE 1 AND R WESTERLY RI	NON GC	N/A
	SPILLS	AS ABOVE 9704754/CLOSED	PATRICIA AVE. POLE # 1230 NORTH STONINGT CT 06359	NON GC	N/A

Environmental FirstSearch
Sites Summary Report

TARGET SITE: POTTER HILL ROAD
WESTERLY RI 02891

JOB: 1009825.
FORMER PAWCATUCK WOOLEN MILLS

TOTAL: 163 **GEOCODED:** 5 **NON GEOCODED:** 158 **SELECTED:** 0

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	Page No.
	SPILLS	JTL TRUCKING 200403819/CLOSED	ROUTE 95 NORTH OF EXIT 92 NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	NORTHEAST UTILITIES 924238/CLOSED	LANTERN HILL RD NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	12480	JUNCTION OF RTE 1 AND R WESTERLY RI	NON GC	N/A
	STATE	WINNAPAUG WATER STORAGE TANK WINA-HWM/ACTIVE	WINNAPAUG ROAD WESTERLY RI	NON GC	N/A
	STATE	NARR ELECTRIC-WESTERLY MGP NECI-HWM/ACTIVE	INDUSTRIAL DRIVE WESTERLY RI 02891	NON GC	N/A
	STATE	BRAINARD ASSOCIATES 2530/SUSPECTED	ROUTE 184 NORTH STONINGT CT 06359	NON GC	N/A
	STATE	BOWLING LANE PLAYGROUND BLPG-HWM/ACTIVE	BOWLING LANE (PLAT 23, LOT WESTERLY RI	NON GC	N/A
	SWL	WESTERLY SANITARY LANDFILL RISW-2/INACTIVE	OAK STREET WESTERLY RI 02891	NON GC	N/A
	UST	TOWN OF WESTERLY - VACANT LOT 19182	310-312 ATLANTIC AVE WESTERLY RI	NON GC	N/A
	UST	WHITE & COMPANY 16767	AIRPORT RD WESTERLY RI 02891	NON GC	N/A
	UST	WERI RADIO 18562	MARGIN ST WESTERLY RI 02891	NON GC	N/A
	UST	WERI RADIO 18563	ASHAWAY RD WESTERLY RI 02891	NON GC	N/A
	UST	TECHNOLOGY INVESTORS COMPANY 15744	AIRPORT RD WESTERLY RI 02891	NON GC	N/A
	UST	OLD CANAL SEWER PUMPING STATION 03387	CANAL ST WESTERLY RI 02891	NON GC	N/A
	UST	NEW CANAL SEWER PUMPING STATION 03384	CANAL ST WESTERLY RI 02891	NON GC	N/A
	UST	CITGO STATION/FRANKLIN PLAZA 00885	FRANKLIN ST WESTERLY RI 02891	NON GC	N/A
	UST	BEACH STREET SEWER PUMPING STATION 03383	BEACH ST WESTERLY RI 02891	NON GC	N/A
	UST	BRADFORD ROAD SEWER PUMPING STATIO 03382	WESTERLY BRADFORD RD WESTERLY RI 02891	NON GC	N/A

Environmental FirstSearch
Site Detail Report

TARGET SITE: POTTER HILL ROAD
WESTERLY RI 02891

JOB: 1009825.
FORMER PAWCATUCK WOOLEN MILLS

EMERGENCY RESPONSE NOTIFICATION SITE

SEARCH ID: 1 **DIST/DIR:** 0.17 NE **MAP ID:** 1

NAME:
ADDRESS: 70A LAUREL DR.
ASHWAY RI 02804
CONTACT: DRISCOLL JIM

REV: 12-13-93
ID1: H30743
ID2:
STATUS: FIX FAC
PHONE:

CERCLIS (Y/N):

MAT: PAINTING CHEMICALS, THINNERS ETC **QUANT:** 1.00 UNKNOWN

LOCATION: 70A LAUREL DR.
CITY: ASHAWAY RI **REPORTED:** 19930406

SOURCE: FIX FAC **MEDIUM:** WATER
DUMPING PAINT THINNER INTO WOODS
CAUSE: DUMPING
PAINTING AND STORING CHEMICALS WITHOUT PERMIT

ACT: NONE
BY:

STATE SPILLS SITE

SEARCH ID: 2 **DIST/DIR:** 0.23 NE **MAP ID:** 3

NAME: 64 LAUREL ST
ADDRESS: 64 LAUREL ST
HOPKINTON RI 02833
CONTACT:

REV: 4/10/00
ID1: 00-078
ID2:
STATUS:
PHONE:

SPILL DATE: 02-16-00 **SPILL NOTIFIER:**
STAFF:

MATERIAL SPILLED: WASTE OIL/AUTO PRODS
SPILL AMOUNT REPORTED:
INCIDENT: ABANDONED **SOURCE OF SPILL:** CONTAINERS

LUST?: **SOIL CONTAMINATED?:**
PCB LEVEL:

Environmental FirstSearch
Site Detail Report

TARGET SITE: POTTER HILL ROAD
WESTERLY RI 02891

JOB: 1009825.
FORMER PAWCATUCK WOOLEN MILLS

LEAKING UNDERGROUND STORAGE TANKS

SEARCH ID: 5 **DIST/DIR:** 0.32 NE **MAP ID:** 4

NAME: KENYON S VARIETY
ADDRESS: ROUTE 3 AND MAXON ST.
HOPKINTON RI

CONTACT:

REV: 10/4/05
ID1: 1402-LS
ID2:
STATUS: SRO - SOIL REMOVAL ONLY
PHONE:

PROJECT DATE: 6/7/1988

LEAKING UNDERGROUND STORAGE TANKS

SEARCH ID: 4 **DIST/DIR:** 0.35 NE **MAP ID:** 5

NAME: IMPERIAL HOME D+COR
ADDRESS: 50 CHASE HILL ROAD
HOPKINTON RI

CONTACT:

REV: 10/4/05
ID1: 1414-LS
ID2:
STATUS: SRO - SOIL REMOVAL ONLY
PHONE:

PROJECT DATE: 7/19/1999

LEAKING UNDERGROUND STORAGE TANKS

SEARCH ID: 3 **DIST/DIR:** 0.36 SE **MAP ID:** 2

NAME: HENDEL CHEVRON
ADDRESS: ROUTE 3 POLE 867
HOPKINTON RI

CONTACT:

REV: 10/4/05
ID1: 1401-LS
ID2:
STATUS: I - INACTIVE
PHONE:

PROJECT DATE: 8/30/1986

Environmental FirstSearch
Street Name Report for Streets within .25 Mile(s) of Target Property

TARGET SITE: POTTER HILL ROAD
WESTERLY RI 02891

JOB: 1009825.
FORMER PAWCATUCK WOOLEN MILLS

Street Name	Dist/Dir	Street Name	Dist/Dir
Christian Hill Rd	0.13 SW		
Church St	0.24 NE		
Clay St	0.09 NE		
Laurel St	0.04 NE		
Maxson St	0.05 SE		
Pequot Ln	0.22 SE		
Post Office Ln	0.10 SW		
Potter Hill Rd	0.03 SE		
River Rd	0.08 SE		

Environmental FirstSearch Database Descriptions

NPL: ***EPA*** NATIONAL PRIORITY LIST - Database of confirmed, proposed or deleted Superfund sites.

CERCLIS: ***EPA*** COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY INFORMATION SYSTEM - Database of current and potential Superfund sites currently or previously under investigation.

NFRAP: ***EPA*** COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY INFORMATION SYSTEM ARCHIVED SITES - database of Archive designated CERCLA sites that, to the best of EPA's knowledge, assessment has been completed and has determined no further steps will be taken to list this site on the National Priorities List (NPL). This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

RCRA TSD: ***EPA*** RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM TREATMENT, STORAGE, and DISPOSAL FACILITIES. - Database of facilities licensed to store, treat and dispose of hazardous waste materials.

RCRA COR: ***EPA*** RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM SITES - Database of RCRA facilities with reported violations and subject to corrective actions.

RCRA GEN: ***EPA*** RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM SITES - Database of facilities that generate or transport hazardous waste or meet other RCRA requirements.LGN - Large Quantity GeneratorsSGN - Small Quantity GeneratorsVGN – Conditionally Exempt Generator.Included are RAATS (RCRA Administrative Action Tracking System) and CMEL (Compliance Monitoring & Enforcement List) facilities.

ERNS: ***EPA/NRC*** EMERGENCY RESPONSE NOTIFICATION SYSTEM - Database of emergency response actions. Data since January 2001 has been received from the National Response System database as the EPA no longer maintains this data.

FINDS: ***EPA*** FACILITY INDEX SYSTEM(FINDS)/FACILITY REGISTRY SYSTEM(FRS) - The index of identification numbers associated with a property or facility which the EPA has investigated or has been made aware of in conjunction with various regulatory programs. Each record indicates the EPA office that may have files on the site or facility. A Facility Registry System site has an FRS in the status field.

STATE SITES: ***CT DEP*** CONTAMINATED AND POTENTIALLY CONTAMINATED SITES - database of Hazardous Waste Facilities as defined by section 22a 134f of the Connecticut General Statute.

STATE SITES: ***RI DEM*** DATABASE OF CERCLA/STATE - database of EPA CERCLA and RI DEM STATE sites containing location and project information.

SPILLS-1990: ***CT DEP*** EMERGENCY RESPONSE ACTIONS AND SPILL RELEASES - database of oil and chemical spills. The database includes discharger, reporter, date of release, cause of incident, and emergency measurement information.

SPILLS-1990: ***RI DEM*** LISTING OF OIL AND CHEMICAL SPILLS - database of spills reported to the Rhode Island Department of Environmental Protection since 1990. The data includes spill date, inspection date, and the amount of spilled material.

SWL: ***CT DEP*** ACTIVE SOLID WASTE LANDFILL FACILITIES - database of landfills including active and closed facilities.

SWL: ***RI DEM*** SOLID WASTE MANAGEMENT FACILITIES LIST - database of permitted waste management facilities. The data includes acreage, owner, operator, and status

REG UST/AST: ***RI DEM*** UNDERGROUND STORAGE TANKS FACILITY MASTER LIST - database of underground storage tanks registered with the Rhode Island Department of Environmental Management. The data includes information regarding tank installation date, capacity, and product stored.

REG UST/AST: ***CT DEP*** REGISTERED UNDERGROUND STORAGE TANKS - database of underground storage tanks, the data includes capacity, substance stored, status, tank material and piping material.

LEAKING UST: ***CT DEP*** LEAKING UNDERGROUND STORAGE TANKS(LUST) - database of lusts, the data reported includes actions, agency, class, and media affected

LEAKING UST: ***RI DEM*** LEAKING UNDERGROUND STORAGE TANKS - database of leaking underground storage tanks that have been reported to the Rhode Island Department of Environmental Management.

RADON: ***NTIS*** NATIONAL RADON DATABASE - EPA radon data from 1990-1991 national radon project collected for a variety of zip codes across the United States.

Environmental FirstSearch Database Sources

NPL: ***EPA*** Environmental Protection Agency

Updated quarterly

CERCLIS: ***EPA*** Environmental Protection Agency

Updated quarterly

NFRAP: ***EPA*** Environmental Protection Agency.

Updated quarterly

RCRA TSD: ***EPA*** Environmental Protection Agency.

Updated quarterly

RCRA COR: ***EPA*** Environmental Protection Agency.

Updated quarterly

RCRA GEN: ***EPA*** Environmental Protection Agency.

Updated quarterly

ERNS: ***EPA/NRC*** Environmental Protection Agency

Updated semi-annually

FINDS: ***EPA*** Environmental Protection Agency

Updated annually

STATE SITES: ***CT DEP*** Connecticut Department of Environmental Protection

Updated quarterly

STATE SITES: ***RI DEM*** Rhode Island Department of Environmental Management

Updated quarterly

SPILLS-1990: ***CT DEP*** Connecticut Department of Environmental Protection's Bureau of Waste Management

Updated quarterly

SPILLS-1990: ***RI DEM*** Rhode Island Department of Environmental Management, Division of Site Remediation

Updated quarterly

SWL: ***CT DEP*** Department of Environmental Protection's Bureau of Waste Management, Solid Waste Program

Updated annually

SWL: ***RI DEM*** Rhode Island Department of Environmental Management, Division of Waste Management

Updated annually

REG UST/AST: ***RI DEM*** Rhode Island Department of Environmental Management, Division of Waste Management

Updated quarterly

REG UST/AST: ***CT DEP*** Connecticut Department of Environmental Protection's Bureau of Waste Management, Underground Storage Tank Enforcement Program.

Updated quarterly

LEAKING UST: ***CT DEP*** The Department of Environmental Protection's Bureau of Waste Management, Underground Storage Tank Enforcement Program

Updated quarterly

LEAKING UST: ***RI DEM*** Rhode Island Department of Environmental Management

Updated quarterly

RADON: ***NTIS*** Environmental Protection Agency, National Technical Information Services

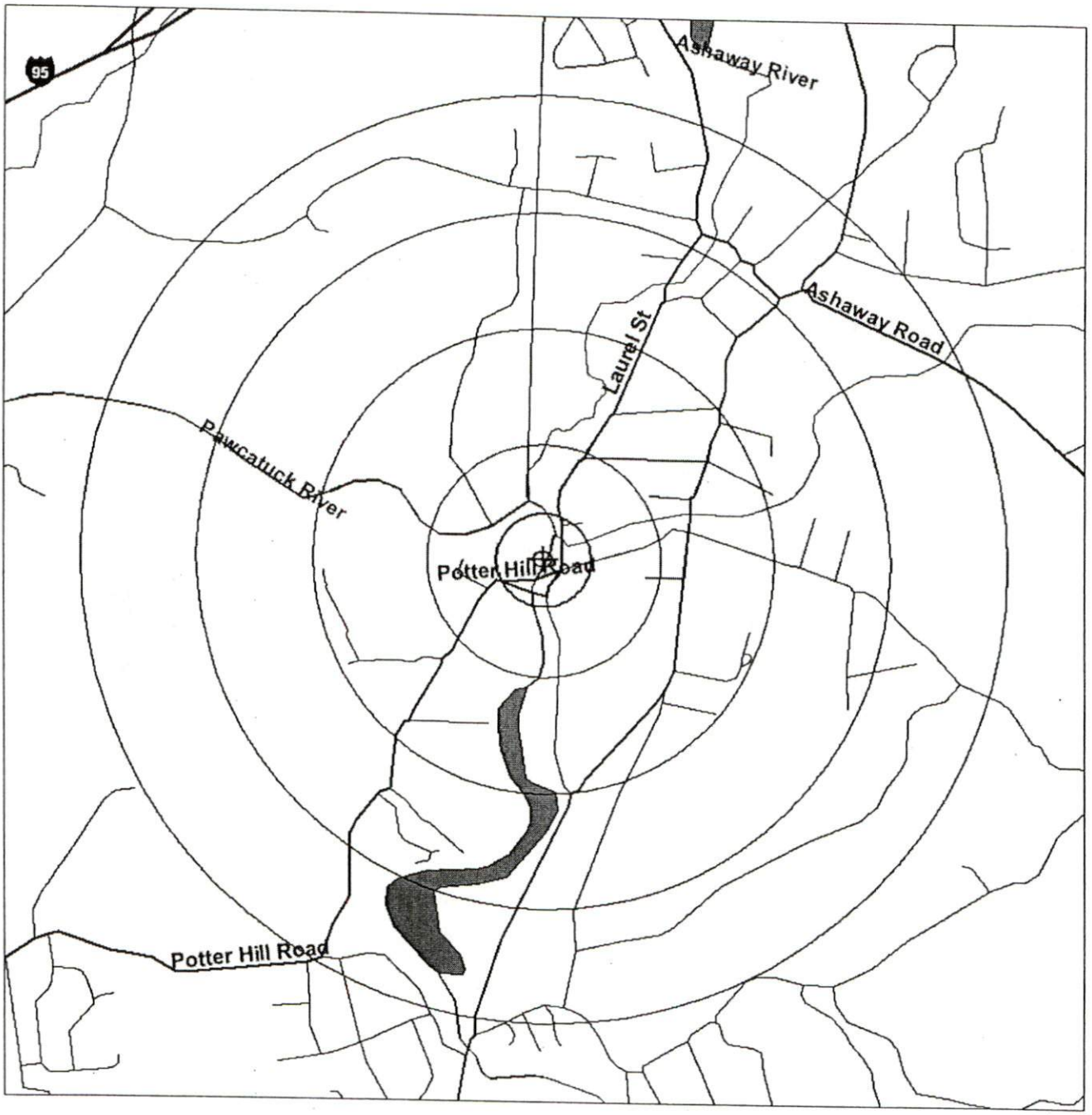
Updated periodically

Environmental FirstSearch

1 Mile Radius

ASTM Map: NPL, RCRACOR, STATE Sites

POTTER HILL ROAD, WESTERLY RI 02891



Source: 2002 U.S. Census TIGER Files

Target Site (Latitude: 41.4147 Longitude: -71.797) .....

Identified Site, Multiple Sites, Receptor .....

NPL, Brownfield, Solid Waste Landfill (SWL) or Hazardous Waste

Railroads .....

Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius

Environmental FirstSearch

.5 Mile Radius

ASTM Map: CERCLIS, RCRATSD, LUST, SWL

POTTER HILL ROAD, WESTERLY RI 02891



Source: 2002 U.S. Census TIGER Files

Target Site (Latitude: 41.4147 Longitude: -71.797) .....

Identified Site, Multiple Sites, Receptor .....

NPL, Brownfield, Solid Waste Landfill (SWL) or Hazardous Waste

Railroads .....

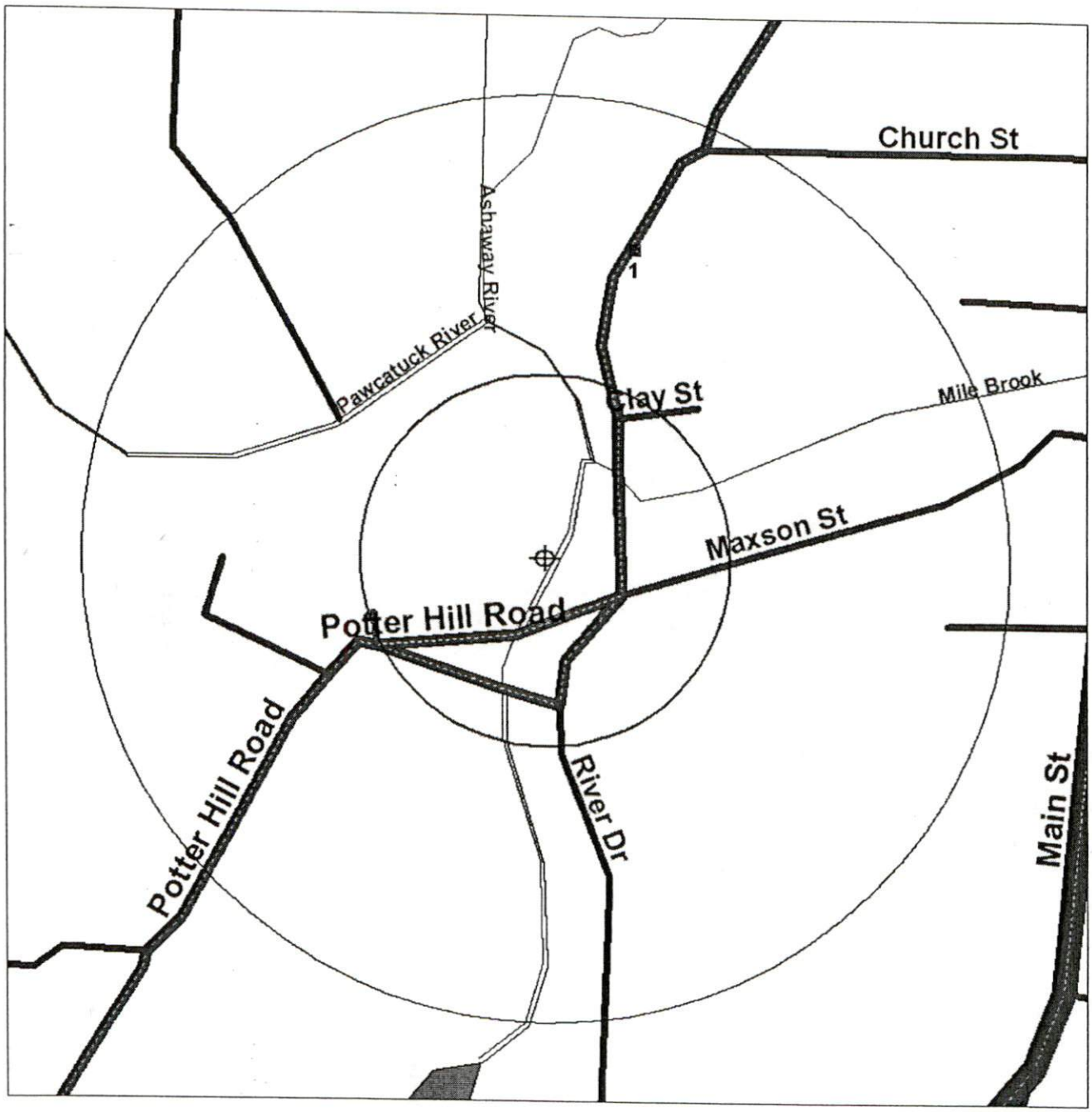
Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius

Environmental FirstSearch

.25 Mile Radius

ASTM Map: RCRAGEN, ERNS, UST

POTTER HILL ROAD, WESTERLY RI 02891



Source: 2002 U.S. Census TIGER Files

Target Site (Latitude: 41.4147 Longitude: -71.797) .....

Identified Site, Multiple Sites, Receptor .....

NPL, Brownfield, Solid Waste Landfill (SWL) or Hazardous Waste

Railroads .....

Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius

Environmental FirstSearch

.5 Mile Radius

ASTM AAI Map: Brownfield

POTTER HILL ROAD, WESTERLY RI 02891



Source: 2002 U.S. Census TIGER Files

Target Site (Latitude: 41.4147 Longitude: -71.797) .....

Brownfield.....

Railroads .....

Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius

Environmental FirstSearch

.5 Mile Radius

ASTM AAI Map: Federal Land Use Sites

POTTER HILL ROAD, WESTERLY RI 02891



Source: 2002 U.S. Census TIGER Files

Target Site (Latitude: 41.4147 Longitude: -71.797) .....

Fed. Land Use: Wilderness Areas, Wildlife Preserves .....

Fed. Land Use: Amer. Indian Sacred Sites, End. Species' Habitats...

Railroads .....

Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius

Environmental FirstSearch

.25 Mile Radius

Non-ASTM Map: Spills 90

POTTER HILL ROAD, WESTERLY RI 02891



Source: 2002 U.S. Census TIGER Files

Target Site (Latitude: 41.4147 Longitude: -71.797) .....

Identified Site, Multiple Sites, Receptor .....

NPL, Brownfield, Solid Waste Landfill (SWL) or Hazardous Waste

National Historic Sites and Landmark Sites .....

Railroads .....

Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius

APPENDIX D

Interview Documentation

Question	Owner			Occupants (If Applicable)			Observed (During Site Visit)		
1a. Is the *property* used for an industrial use?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
1b. Is any *adjoining property* used for an industrial use?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
2a. Did you observe evidence or do you have any prior knowledge that the *property* has been used for an industrial use in the past?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
2b. Did you observe evidence or do you have any prior knowledge that any *adjoining property* has been used for an industrial use in the past?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
3a. Is the *property* used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility (if applicable, identify which)?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
3b. Is any *adjoining property* used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility (if applicable, identify which)?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
4a. Did you observe evidence or do you have any prior knowledge that the *property* has been used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility (if applicable, identify which)?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
4b. Did you observe evidence or do you have any prior knowledge that any *adjoining property* has been used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility (if applicable, identify which)?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
5a. Are there currently any damaged or discarded automotive or industrial batteries, pesticides, paints, or other chemicals in individual containers of greater than 5 gal. (19 L) in volume or 50 gal. (190 L) in the aggregate, stored on or used at the *property* or at the facility?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
5b. Did you observe evidence or do you have any prior knowledge that there have been previously any damaged or discarded automotive or industrial batteries, or pesticides, paints, or other chemicals in individual containers of greater than 5 gal. (19 L) in volume or 50 gal. (190 L) in the aggregate, stored on or used at the *property* or at the facility?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk

6a. Are there currently any industrial *drums* (typically 55 gal. (208 L)) or sacks of chemicals located on the property or at the facility?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
6b. Did you observe evidence or do you have any prior knowledge that there have been previously any industrial *drums* (typically 55 gal. (208 L)) or sacks of chemicals located on the property or at the facility?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
7a. Did you observe evidence or do you have any prior knowledge that *fill dirt* has been brought onto the property that originated from a contaminated site?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
7b. Did you observe evidence or do you have any prior knowledge that *fill dirt* has been brought onto the property that is of an unknown origin?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
8a. Are there currently any *pits, ponds, or lagoons* located on the *property* in connection with waste treatment or waste disposal?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
8b. Did you observe evidence or do you have any prior knowledge that there have been previously, any *pits, ponds, or lagoons* located on the *property* in connection with waste treatment or waste disposal?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
9a. Is there currently any stained soil on the *property*?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
9b. Did you observe evidence or do you have any prior knowledge that there have been previously, any stained soil on the *property*?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
10a. Are there currently any registered or unregistered storage tanks (above or underground) located on the *property*?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
10b. Did you observe evidence or do you have any prior knowledge that there have been previously, any registered or unregistered storage tanks (above or underground) located on the *property*?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
11a. Are there currently any vent pipes, fill pipes, or access ways indicating a fill pipe protruding from the ground on the *property* or adjacent to any structure located on the *property*?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
11b. Did you observe evidence or do you have any prior knowledge that there have been previously, any vent pipes, fill pipes, or access ways indicating a fill pipe protruding from the ground on the *property* or adjacent to any structure located on the *property*?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
12a. Is there currently evidence of leaks, spills or staining by substances other than water, or foul odors, associated with any flooring, drains, walls, ceilings, or exposed grounds on the property?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
12b. Did you observe evidence or do you have any prior knowledge that there have been previously any leaks, spills or staining by substances other than water, or foul odors, associated with any flooring, drains, walls, ceilings, or exposed grounds on the property?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk

13a. If the *property* is served by a private well or non-public water system, is there evidence or do you have prior knowledge that contaminants have been identified in the well or system that exceed guidelines applicable to the water system?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
13b. If the property is served by a private well or non-public water system, is there evidence or do you have prior knowledge that the well has been designated as contaminated by any government environmental/health agency?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
14. Does the *owner* or *occupant* of the *property* have any knowledge of *environmental liens* or governmental notification relating to past or recurrent violations of environmental laws with respect to the *property* or any facility located on the *property*?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
15a. Has the *owner* or *occupant* of the *property* been informed of the past existence of *hazardous substances* or *petroleum products* with respect to the *property* or any facility located on the *property*?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
15b. Has the *owner* or *occupant* of the *property* been informed of the current existence of *hazardous substances* or *petroleum products* with respect to the *property* or any facility located on the *property*?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
15c. Has the *owner* or *occupant* of the *property* been informed of the past existence of environmental violations with respect to the *property* or any facility located on the *property*?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
15d. Has the *owner* or *occupant* of the *property* been informed of the current existence of environmental violations with respect to the *property* or any facility located on the *property*?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
16. Does the *owner* or *occupant* of the *property* have any knowledge of any *environmental site assessment* of the *property* or facility that indicated the presence of *hazardous substances* or *petroleum products* on, or contamination of, the *property* or recommended further assessment of the *property*?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
17. Does the *owner* or *occupant* of the *property* know of any past, threatened, or pending lawsuits or administrative proceedings concerning a release or threatened release of any *hazardous substance* or *petroleum products* involving the *property* by any owner or occupant of the *property*?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
18a. Does the *property* discharge waste water (not including sanitary waste or storm water) onto or adjacent to the *property* and/or into a storm water system?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
18b. Does the *property* discharge waste water (not including sanitary waste or storm water) onto or adjacent to the *property* and/or into a sanitary sewer system?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk

19. Did you observe evidence or do you have any prior knowledge that any *hazardous substances* or *petroleum products*, unidentified waste materials, tires, automotive or industrial batteries, or any other waste materials have been dumped above grade, buried and/or burned on the *property*?	Yes	No	Unk	Yes	No	Unk	(Yes)	No	Unk
20. Is there a transformer, capacitor, or any hydraulic equipment for which there are any records indicating the presence of PCB's?	Yes	No	Unk	Yes	No	Unk	Yes	(No)	Unk

21. Do any of the following Federal government record systems list the property or any property within the search distance noted below:		
Federal National Priorities List - within 1.0 miles (1.6 Km)?	Yes	(No)
Federal CERCLIS List - within 0.5 miles (0.8 Km)?	Yes	(No)
Federal CERCLIS NFRAP List – property & adjoining properties?	Yes	(No)
Federal RCRA CORRACTS Facilities List - within 1.0 miles (1.6 Km)?	Yes	(No)
Federal RCRA non-CORRACTS TSD Facilities List - within 0.5 miles (1.6 Km)?	Yes	(No)
Federal RCRA Generators List - property & adjoining properties?	Yes	(No)
Federal ERNS List - property only?	Yes	(No)
22. Do any of the following state record systems list the property or any property within the search distance noted below:		
State lists of hazardous waste sites identified for investigation or remediation:		
State – Equivalent National Priorities List - within 1.0 miles (1.6 Km)?	Yes	(No)
State – Equivalent CERCLIS List - within 0.5 mile (0.8 Km)?	Yes	(No)
State Landfill and/or Solid Waste Disposal Site Lists - within 0.5 mile (0.8 Km)?	Yes	(No)
State Leaking UST (LUST) Lists - within 0.5 mile (0.8 Km)?	(Yes)	No
State Registered UST Lists – property & adjoining properties?	Yes	(No)
23. Based upon a review of *fire insurance maps* 10.3.1.3 or consultation with the local fire department serving the *property*, all as specified in the guide, are any buildings or other improvements on the *property* or on an *adjoining property* identified as having been used for an industrial use or uses likely to lead to contamination of the *property*?	Yes	(No)

The preparer of the transaction screen questionnaire must complete and sign the following statement.

The ***Owner*** questionnaire was completed by:

Name _____ Title _____

Firm _____ Phone Number _____

Address _____

_____

_____

Date _____

Preparer's Relationship to Site _____

Preparer's Relationship to user (e.g., principal, employee, agent, consultant, client) _____

The ***Occupant*** questionnaire was completed by:

Name _____ Title _____

Firm _____ Phone Number _____

Address _____

_____

_____

Date _____

Preparer's Relationship to Site _____

Preparer's Relationship to user (e.g., principal, employee, agent, consultant, client) _____

The ***Site Visit*** questionnaire was completed by:

Name Joseph Unsworth Title Project Manager

Firm Jacques Whitford Company, Inc. Phone Number 401-312-8005

Address 24 Albion Road, Suite 220

Lincoln, RI 02865

_____

Date 10/7/2005

Preparer's Relationship to Site None

Preparer's Relationship to user (e.g., principal, employee, agent, consultant, client) Consultant

---

The ***Government Records*** and ***Historical Sources Inquiry*** questionnaire was completed by:

Name Joseph Unsworth Title Project Manager

Firm Jacques Whitford Company, Inc. Phone Number 401-312-8005

Address 24 Albion Road, Suite 220

Lincoln, RI 02865

_____

Date 10/7/2005

Preparer's Relationship to Site None

Preparer's Relationship to user (e.g., principal, employee, agent, consultant, client) Consultant

User's relationship to the Site (for example, owner, prospective purchaser, lender, etc.)

If the preparer(s) is different from the user, complete the following:

Name of User Renewable Resources Inc.

User's Address 900 North Strafford, Suite 2428

Arlinton, VA 22203

User's Phone Number

Copies of the completed questionnaire have been filed at: Jacques Whitford Company, Inc

Copies of the completed questionnaire have been mailed or delivered to:

Preparer represents that to the best of the preparer's knowledge the above statements and facts are true and correct and to the best of the preparer's actual knowledge no material facts have been suppressed or misstated.

Signature Date 2/27/2006

Signature Date

Signature Date

Guide to Transaction Screen Questionnaire - (ASTM Designation: E 1528-00)

Question 1

It is recommended that the preparer describe the use of the *property* and *adjoining properties*. Certain industrial uses on the *property* may raise concerns regarding the possibility of contamination affecting the *property*. For the purposes of the transaction screen questionnaire, an industrial use is an activity requiring the application of labor and capital for the production or distribution of a product or article, including, without limitation, manufacturing, processing, extraction, refining, warehousing, transportation, and utilities. Manufacturing is defined as a process or operation of producing by hand, machinery, or other means a finished product or article from raw material. Industrial uses may be categorized as light or heavy industrial uses, depending on the scale of the operations and the impact upon surrounding property in terms of smoke, fumes, and noise. Regardless of such categorization, the concern for purposes of the transaction screen process is whether the use involves the processing, storage, manufacture, or transportation of *hazardous substances* or *petroleum products*. The term *adjoining properties* means any real property or properties the border of which is contiguous or partially contiguous with that of the property, or that would be contiguous or partially contiguous with that of the property but for a street, road, or other public thoroughfare separating them. *Adjoining properties* means the *property* and include *properties* across the street or any right of way from the property.

Question 2

See guide for Question 1.

Question 3

It is recommended that the *preparer* describe the uses of the *property* and *adjoining properties*. The facilities mentioned in this question all involve the use of *hazardous substances* or *petroleum products* and therefore require further inquiry concerning the possible release of such substances.

Question 4

See guide for Question 3.

Question 5

Are there any containers on the site that may contain any of these items? Is there any reason to suspect that chemicals or *hazardous substances* in such quantities may be stored on the site? Sheltered areas, cartons, sacks, storage bins, large canisters, sheds, or cellars of existing improvements are examples of containers and areas where chemicals or *hazardous substances* may be stored. If the answer to this question is "yes", list the items and the location(s) where they are stored. If unfamiliar with the contents of any container located on the site, the question must be answered "yes" until the materials are identified. *Hazardous substances* may often be unmarked. The *preparer* should never open any containers that are unmarked because they may contain explosive materials or acids. Consumer products in undamaged containers used for routine office maintenance or business, such as copy toner, should not create a need for further inquiry unless the quantity of such products is in excess of what would be customary for such use.

Question 6

Chemicals are frequently stored in large 55-gal (208-L) drums and dry chemicals are often stored in 20 lb (9 kg) sacks.

Question 7

The origin of *fill dirt* brought onto the *property* should be investiagted to determine whether such dirt originated from a contaminated site. *Fill dirt* is defined as dirt, soil, sand, or other earth, that is obtained off-Site, that is used to fill holes or depressions, create mounds, or otherwise artificially change the grade or elevation of real property. It does not include material that is used in limited quantities for normal landscaping activities. If any structures have been demolished on the *property*, the *preparer* should investigate whether the structures were demolished in place and *fill dirt* compacted over them because such demolition debris may contain asbestos or *hazardous substances*.

Question 8

The presence of *pits*, *ponds*, or *lagoons*, together with waste treatment or waste disposal may indicate contaminated property. *Pits*, *ponds*, or *lagoons* are defined as man-made or natural depressions in a ground surface that are likely to hold liquids or sludge containing *hazardous substances* or *petroleum products*. The likelihood of such liquids or sludge being present is determined by evidence of factors associated with the pit, pond, or lagoon, including, but not limited to, discolored water, distressed vegetation, or the presence of an obvious wastewater discharge.

Question 9

Stained soils are frequently associated with contamination and often are an indication of either current or previous leakage associated with piping and liquid storage containers. Soils that are stained show a marked discoloration as compared to other soils in the immediate vicinity.

Question 10

Tanks are often used to store heating fuels, chemicals, and petroleum products; while tanks may be associated with the storage of chemicals, they are most often associated with liquid fuel heating systems (e.g., oil furnaces).

Question 11

Vent or fill pipes often signal the current or previous existence of underground storage tanks. Additionally, in answering this question the owner and occupant should consider any asphalt or concrete patching that would indicate the possibility of a previous underground storage tank removal.

Question 12

Stains (other than water stains) or foul odors may indicate leaks of hazardous substances or contaminants. Floor drains located within a building adjacent to hazardous substance storage areas or connected to an on-site disposal system (e.g., septic system) present a potential source of subsurface discharge of contaminants.

Question 13

Private wells and non-public water systems are not monitored daily for water quality as municipal systems are monitored. If the system is private, it probably has been tested for contamination or evidence that it is free from contamination, and the results of any such tests should be produced by the *owner* or *occupant* of the well. The preparer is not required to test the water system to conduct the *transaction screen.*

Question 14

In most cases, the federal or state government will notify the property owner prior to filing a lien on the *property.* Sections 302, 311, 312, and 313 of the Emergency Planning and Community Right-To-Know Act and other provisions of federal and state environmental laws establish reporting requirements with respect to business storing or using *hazardous substances* in excess of certain quantities. These businesses should be making periodic reports to a federal, state, or local environmetal department, agency, or bureau. The government may periodically inspect such facilities to ensure compliance with environmental laws. In the event of a release of a reportable quantity within a 24-hour period (as defined in CERCLA and regulations promulgated pursuant to CERCLA), the person in charge of the facility is obligated to notify the U.S. EPA of the release. Any notification or response by any governmental entity will be in writing.

Question 15

Consider whether any *environmental professionals* familiar with *hazardous substances* or *petroleum products* have observed or determined that contamination existed on the property. *Hazardous substances* or *petroleum products* from the *property* may have affected soils, air quality, water quality, or otherwise affected structures located on the *property.*

Question 16

Copies of *reasonably ascertainable* prior *environmental site assessments* of the *property* or any portion thereof should be obtained and examined to determine whether further action or inquiry is necessary in connection with any environmental problems raised by a prior *environmental site assessment.*

Question 17

The *user* is not required to make an independent investigation or search of records on file with a court or public agency in answering this question; this question is to be answered by the *owner* or *occupant* based on upon their respective *actual knowledge* and review of *reasonably ascertainable* records in their possession.

Question 18

The *owner* and each *occupant* should be asked where drain traps lead and the purpose of drainage pipes at the facility. Domestic sewage is not a CERCLA issue and the reference to *wastewater* does not include domestic sewage.

Question 19

Past waste disposal practices should be examined because these may have resulted in *hazardous substances* or *petroleum products* being released on the *property.* Does the *property* evidence any mounds or depressions that suggest a disposal site?

Question 20

The PCBs are regulated by the Toxic Substances Control Act 15 USC. Section 2601 *et seq.* and, in the absence of a release, are not regulated by CERCLA. The provisions of CERCLA do apply if there is a release of PCBs. Accordingly, if an affirmative answer is obtained to this question, the further focus should be on whether there have been any instances of insulating oil leakage and, if so, whether these are suspected of being PCB or PCB-contaminated. Transformers containing PCBs may have many different sizes and shapes and are to be registered pursuant to 40 CFR § 761.30. Elevators and auto lifts are often run by hydraulically controlled systems containing PCBs. If inspection or maintenance records for the elevator, capacitor, or other hydraulic equipment indicate no release has occurred or that regular, scheduled maintenance has taken place and the machinery does not appear to be damaged or leaking, no further inquiry is required.

Definitions

Actual Knowledge – the knowledge actually possessed by an individual who is a real person, rather than an entity. Actual knowledge is to be distinguished from constructive knowledge, that is, knowledge imputed to an individual or entity.

Adjoining Properties – any real property or properties the border of which is contiguous or partially contiguous with that of the property, or that would be contiguous or partially contiguous with that of the property but for a street, road, or other public thoroughfare separating them. *Adjoining properties* means the *property* and include *properties* across the street or any right of way from the property.

Asbestos Containing Material (ACM) - any material or product that contains more than 1% abestos.

Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) – the list of sites compiled by EPA that EPA has investigated or is currently investigating for potential hazardous substance contamination for possible inclusion on the National Priorities List.

CORRACTS List – list of hazardous waste treatment, storage or disposal facilities and other RCRIS facilities (due to past interim status or storage of hazardous waste beyond 90 days) who have been notified by the U.S. Environmental Protection Agency to undertake corrective action under RCRA.

Environmental Lien - a charge, security, or encumberance upon title to a *property* to secure the payment of a cost, damage, debt, obligation, or duty arising out of response actions, cleanup, or other remediation of *hazardous substances* or *petroleum products* upon a *property*.

ERNS List – EPA's Emergency Response Notification System list of reported CERCLA hazardous substance releases or spills in quantities greater than the reportable quantity, as maintained at the National Response Center.

Hazardous Substance - A substance defined as a hazardous substance pursuant to CERCLA 42 USC 9601 (14), as interpreted by EPA regulations and the courts: "(A) any substance designated pursuant to section 1321(b)(2)(A) of Title 33, (B) any element, compound, mixture, solution, or substance designated pursuant to section 9602 of this title, (C) any hazardous waste having the characteristics identified under or listed pusuant to section 3001 of the Solid Waste Disposal Act, (D) any toxic pollutant listed under section 1317(a) of Title 33, (E) any hazardous air pollutant listed under section 112 of the Clean Air Act, and (F) any imminently hazardous chemical substance or mixture with respect to which the Administrator (of EPA) has taken action pursuant to section 2602 of Title 15.

LUST Sites – state lists of leaking underground storage tank sites.

National Priorities List (NPL) – list compiled by EPA pursuant to CERCLA 42 USC ξ 9605 (a)(8)(B) of properties with the highest priority for cleanup pursuant to EPA's hazard ranking system.

Occupants - those tenants, subtenants, or other persons or entities using the *property* or a portion of the *property*.

Owner - generally the fee owner of record of the *property*.

Petroleum Exclusion - the exclusion from CERCLA liability provided 42 USC ξ 9601(14), as interpreted by the courts and EPA: "The term (hazardous substance) does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance under Subparagraphs (A) through (F) of this paragraph, and the term does not include natural gas, natural gas liquids, liquified natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas)."

Petroleum Products - those substances included within the meaning of the *petroleum exclusion* to CERCLA.

Phase I Environmental Site Assessment – the practice described in Practice E 1527. The process by which a person or entity seeks to determine if a particular parcel of real property (including improvements) is subject to *recognized environmental conditions*.

Preparer – The person preparing the *environmental transaction screen questionnaire* pursuant to this practice, who may be either the *user* or the person to whom the *user* has delegated the preparation.

Property - the real property that is the subject of the environmental site assessment described in this practice. Real property includes buildings and other fixtures and improvements located on the property and affixed to the land.

RCRA Generators – those persons or entities which generate *hazardous wastes*, as defined and regulated by RCRA.

RCRA Generators List – list kept by EPA of those persons or entities that generate hazardous wastes as defined and regulated by RCRA.

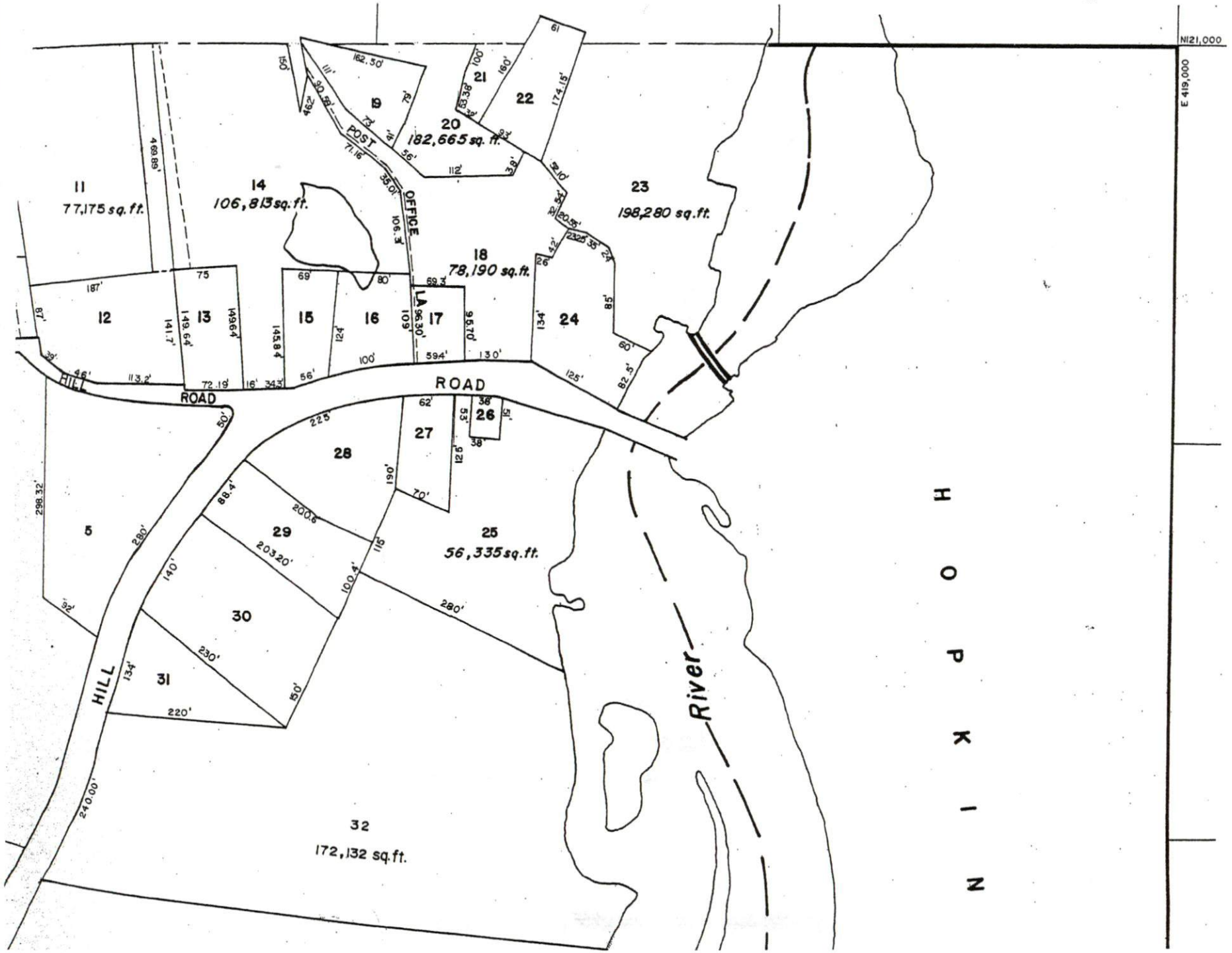
Recognized Environmental Conditions – the presence or likely presence of any *hazardous substances* or *petroleum products* on a *property* under conditions that indicate an existing release, a past release, or a material threat of a release of any *hazardous substances* or *petroleum products* into structures on the *property* or into the ground, ground water, or surface water of the *property*.

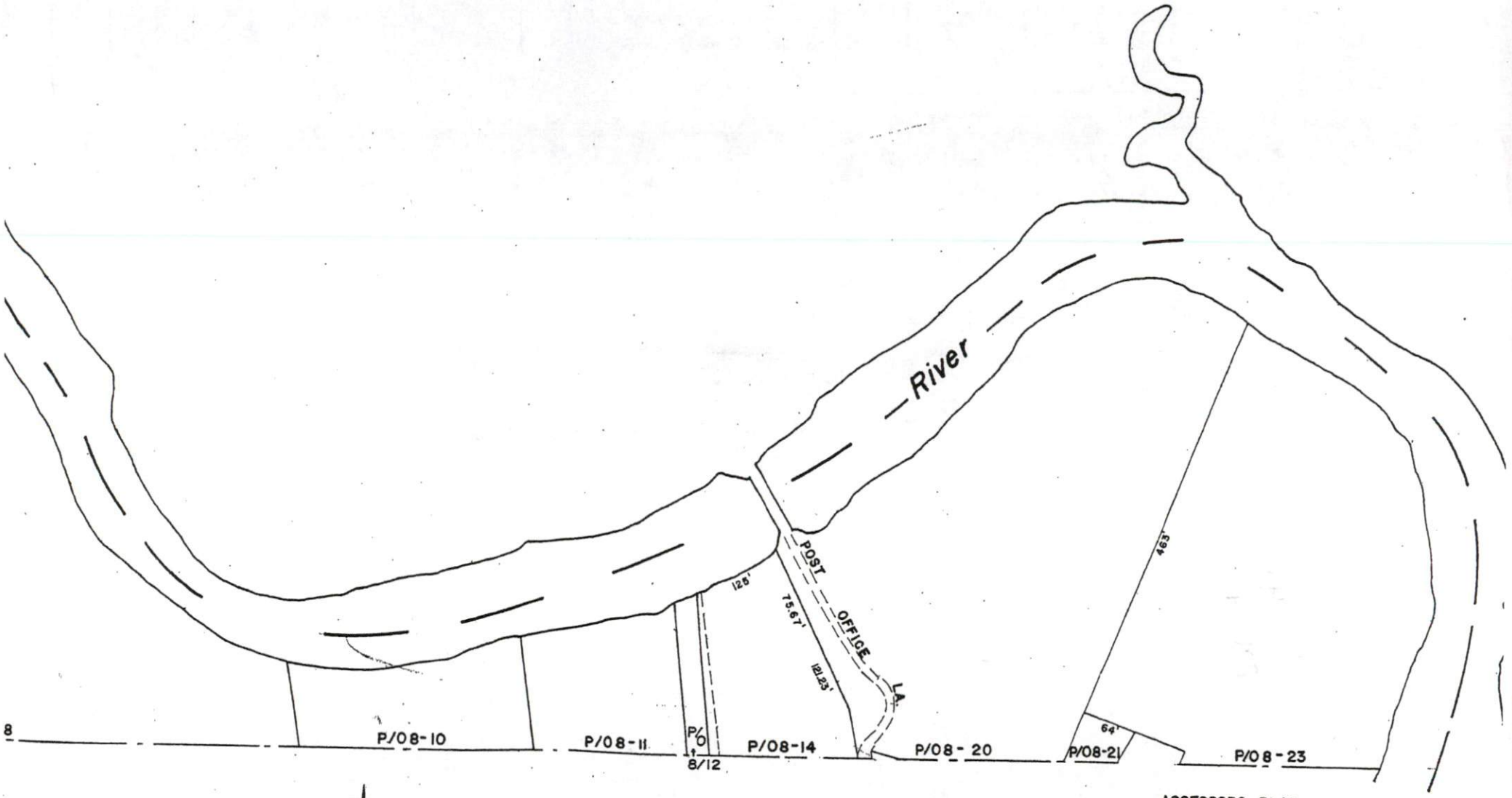
Underground Storage Tank (UST) – any tank, including underground piping connected to the tank, that is or has been used to contain *hazardous substances* or *petroleum products* and the volume of which is 10 % or more beneath the surface of the ground.

User – the party seeking to use the transaction screen process of this practice or the *Phase I Environmental Site Assessment* of Practices E 1527 or E 1528 to perform an environmental assessment of the *property*. A *user* may include, without limitation, a purchaser of *property*, a potential tenant of *property*, an owner of *property*, a lender, or a property manager.

APPENDIX E

Miscellaneous Documentation


N121,000
E 419,000
11
77,175 sq. ft.
14
106,813 sq. ft.
19
20
182,665 sq. ft.
21
22
23
198,280 sq. ft.
18
78,190 sq. ft.
12
13
15
16
17
24
25
56,335 sq. ft.
26
27
28
29
30
31
32
172,132 sq. ft.
5
POST
OFFICE
LA
HILL ROAD
ROAD
HILL
River
H O P K I N



REVISIONS			
RIPTION	MADE	CH'K'D	AP'V'D

Grid North

NOTE

THE AREAS, BOUNDARIES AND DIMENSIONS SHOWN ON THIS TAX MAP ARE DERIVED FROM AERIAL PHOTOGRAPHS, GROUND SURVEYS AND RECORDED PLANS, MAPS, DEEDS AND WILLS AND ARE TO BE USED FOR PROPERTY ASSESSMENT PURPOSES ONLY AND NOT FOR CONVEYANCE

ASSESSORS PLAT

TOWN OF WESTERLY

WASHINGTON COUNTY, RHODE ISLAND

PREPARED BY

JAMES W. SEWALL COMPANY, OLD TOWN, MAI

SCALE 1"=100'

0 50 100 200 400 600 FE

0 5 10 20 50 100 150 MI

006178 92 OCT -8 PM 3:12 BK 432 PG 053

CONSERVATOR'S DEED

FLEET BANK, N.A., Conservator of the Estate of HELEN E. COTTRELL by the power conferred by the Order of the Probate Court of the Town of Westerly entered on September 2, 1992 and the Order of the Probate Court of the Town of Hopkinton entered on August 20, 1992 and by every other power it thereunto enabling for Fifty Thousand and No/100ths ($50,000.00) Dollars paid, grants to RENEWABLE RESOURCES, INC., a Rhode Island Corporation, the following described parcels of real estate:

That certain real estate situated in the Towns of Westerly and Hopkinton, in the County of Washington, State of Rhode Island, and described as follows:

TRACT ONE - A certain lot or parcel of land, lying and being in said Town of Westerly, bounded and described as follows: Beginning at a stone post, on the westerly bank of the Pawcatuck River, said point being the southeasterly corner of the premises now being described; thence northwesterly a distance of 60 feet, more or less, to a wall marking the northerly and easterly boundary line of land now or formerly of Howard E. Thorp, et ux; thence northeasterly along said wall, a distance of 85.0 feet to an angle in said wall; thence northwesterly, along said wall, a distance of 24.0 feet, to an angle; thence northwesterly, along said wall, a distance of 35 feet, to a point; thence northwesterly, a distance of 23.25 feet, to an iron pipe at an angle, said pipe being about 1.75 feet southwesterly from the southwesterly corner of the southwest pier of the water tower; thence northwesterly a distance of 20.55 feet to an iron pipe at an angle; thence northeasterly, a distance of 32.54 feet, more or less, to a stone post at an angle, said point being the northwest corner of the water tower lot, so-called, as described in a deed from William H. Thorp to the Pawcatuck Woolen Mills, dated October 29, 1903, and recorded in the Land Evidence Records of said Town of Westerly, in Book No. 35, at page 301; thence northwesterly, a distance of 52.10 feet to an iron pipe driven in the ground at an angle, said point being located 37.40 feet easterly of a drill hole in a large boulder; thence northeasterly, a distance of 174.15 feet to an iron pipe; thence northwesterly, a distance of 125 feet, to a point on the westerly line of a parcel of land conveyed by William H. Thorp and Alice E. Thorp to the Pawcatuck Woolen Mills, by deed dated July 15, 1920, and recorded in the Land Evidence Records of said Town of Westerly in Book No. 46, at Page 161, said point being located 100 feet northerly along said boundary line, from the center line of a well, thence northeasterly, a distance of 463 feet, more or less, to the Pawcatuck River, said last mentioned line passing through an oak tree located near the edge of the Pawcatuck River; thence in a prolongation of said last mentioned line, to the boundary line between the said Town of Westerly and the said Town of Hopkinton, at the center of the Pawcatuck River; thence southerly and southwesterly, along the boundary line between the said

TAX $ 140.00
DATE 10/8/92
RECORDED IN WESTERLY
001759
RHODE ISLAND REAL ESTATE CONVEYANCE TAX

Town of Westerly and the said Town of Hopkinton, to a point on the prolongation easterly of the first described boundary line of the premises now being described; thence westerly to the point and place of beginning. Said premises are shown and delineated on a plat entitled, "Plat Showing Location of Properties belonging to The Pawcatuck Woolen Mills, Potter Hill--Westerly--R.I. Scale 40 feet to an Inch, July 1920. George W. Woodward, Surveyor, Revised March 1930, Rossi & Lewis, Engineers," on file or to be placed on file in the office of the Town Clerk of said Town of Westerly, reference to which plat being hereby had and made, and the same being made a part hereof. Reserving and excepting the same right to pass over and across so much of said premises as are designated as Lot No. 5 on said plat, and by the same parties as is mentioned and are named in certain deeds to Edwin Babcock and Horace Babcock of said Lot No. 5, which said deeds are now on record in the Records of Land Evidence of said Town of Westerly reference thereto being hereby made. Being Lots Nos. 3A, 5 and 11, as shown on said revised plat dated March, 1930, but not including lot No. 11A, as shown on said plat.

Being the same premises described as Parcel No. 1 in that certain deed of Frederick T. Lawrence and Carrie K. Lawrence to Swift River Woolen Co. dated April 15, 1930 and recorded in the Land Evidence Records of said Town of Hopkinton in Book No. 37 at Page 489.

Being the same premises described as Tract One in that certain deed of Swift River Woolen Co. to Helen E. Cottrell dated August 4, 1955 and recorded in the Land Evidence Records of the Town of Westerly in Book 74 at Page 354.

TRACT TWO - A certain lot or parcel of land lying and being in said Town of Hopkinton, bounded and described as follows: Commencing on the easterly bank of the Pawcatuck River, at the northerly side of the abutment to the Potter Hill bridge, so-called, and running in a northeasterly and northerly direction, with the northwesterly and westerly boundary of the Ashaway Road, so-called, 1100 feet, more or less, to land now or formerly of Charles W. Austin; thence in a northwesterly direction with the southeasterly line of said Austin land, 87.5 feet, more or less, to a corner; thence in a northerly direction with the westerly line of said Austin land, 23.5 feet, more or less, to a corner; thence in a westerly direction about 95 feet, along land formerly of said Austin, to the Pawcatuck River; thence in a continuation of said last mentioned line, to the boundary line between said Town of Westerly and Hopkinton; thence upstream southeasterly, southerly and southwesterly, along the boundary line of said Town of Westerly and Hopkinton, to the northerly side of said Potter Hill Bridge, over said Pawcatuck River; thence southeasterly to the point and place of beginning. Said premises are shown and delineated on said plat above referred to, as Lot No. 8, reference to the same being hereby had and made and the same being made a part hereof.

Being the same premises described as Parcel No. 2 in that certain deed of Frederick T. Lawrence and Carrie K. Lawrence to Swift River Woolen Co. dated April 15, 1930 and recorded in the Land Evidence Records of said Town of Westerly in Book No. 53 at Page 427 and also recorded

in the Land Evidence Records of said Town of Hopkinton in Book 37 at Page 489. Being the same premises described as TRACT TWO in that certain deed of Swift River Woolen Co. to Helen E. Cottrell dated August 4, 1955 and recorded in the Land Evidence Records of the Town of Westerly in Book 74 at Page 354.

TRACT THREE - A certain lot or parcel of land, lying and being in the Village of Potter Hill, in said Town of Westerly, which formerly contained an office building and other improvements bounded and described as follows, to wit:- Beginning at a stone post on the westerly bank of the Pawcatuck River, said point being the southeasterly corner of land now or formerly of Frederick T. Lawrence, and the northeasterly corner of the premises herein conveyed; thence run southerly, 13 feet, more or less, along said Pawcatuck River, to a point three (3) feet southerly from the southerly side of the southerly side extended to the former office building, as the stood in 1955; thence run westerly, in a line three (3) feet southerly from and parallel with the southerly side of the former office building, to a point three (3) westerly from the westerly side of the former office building, if extended southerly; thence run northerly, in a line three (3) feet westerly from the westerly side of the former office building, to land now or formerly of said Frederick T. Lawrence; thence run easterly, along land now or formerly of said Frederick T. Lawrence, to the point and place of beginning.

Being the same premises conveyed to Swift River Woolen Co. by deed of Frederick T. Lawrence, dated May 6, 1930 and recorded in the Land Evidence Records of said Town of Westerly in Book No. 53 at Page 443.

Being the same premises described as TRACT THREE in that certain deed of the Swift River Woolen Co. to Helen E. Cottrell dated August 4, 1955 and recorded in the Land Evidence Records of the Town of Westerly in Book 74 at Page 354.

Together with all and singular the factories, store houses, barns and other improvements standing upon each of said tracts and premises aforedescribed, and the dam and water power and water rights and water privileges connected with and belonging to the said premises; subject, however, to the obligations made and contained in a certain agreement between Thomas W. Potter and Edwin Babcock and Horace Babcock, dated January 7, A.D. 1850, and recorded in Book 18, at Page 707, and in a certain deed from Thomas W. Potter to Edwin Babcock and Horace Babcock, of the same date, and recorded in the said agreement and to said deed being hereby made. Subject also to the obligations, if any, that the said Potter Hill Woolen Co., Inc., may be under by virtue of a certain agreement between the Potter Hill Manufacturing Company and the White Rock Company, so-called, dated September 25, 1828, and recorded in the records of Land Evidence in said Town of Westerly, in deed Book 18, at Page 554, reference to said agreement being hereby made. Subject, also, to any changes in the bank of said Pawcatuck River by reason of the action of the water thereof, since the year 1873.

Subject also to a certain pole line agreement granted to the Narragansett Electric Company by the Swift River Woolen Co.

Subject also to a Condemnation Order of the Town of Westerly which has been affirmed by the Rhode Island Washington County Superior Court in Civil Action File No. 80-4 entitled "Helen E. Cottrell, d/b/a Westerly Woolen Company vs. R.I. State Board of Standards and Appeals."

IN WITNESS WHEREOF, FLEET BANK, N.A., Conservator of the Estate of HELEN E. COTTRELL, has caused its corporate name and seal to be affixed hereto by ALLEN J. WELCH, Vice President, Fleet Bank, N.A. this 22nd day of SEPTEMBER, 1992.

FLEET BANK, N.A.
Conservator of the Estate of
HELEN E. COTTRELL

BY: Allen J. Welch
ALLEN J. WELCH
Its Vice President

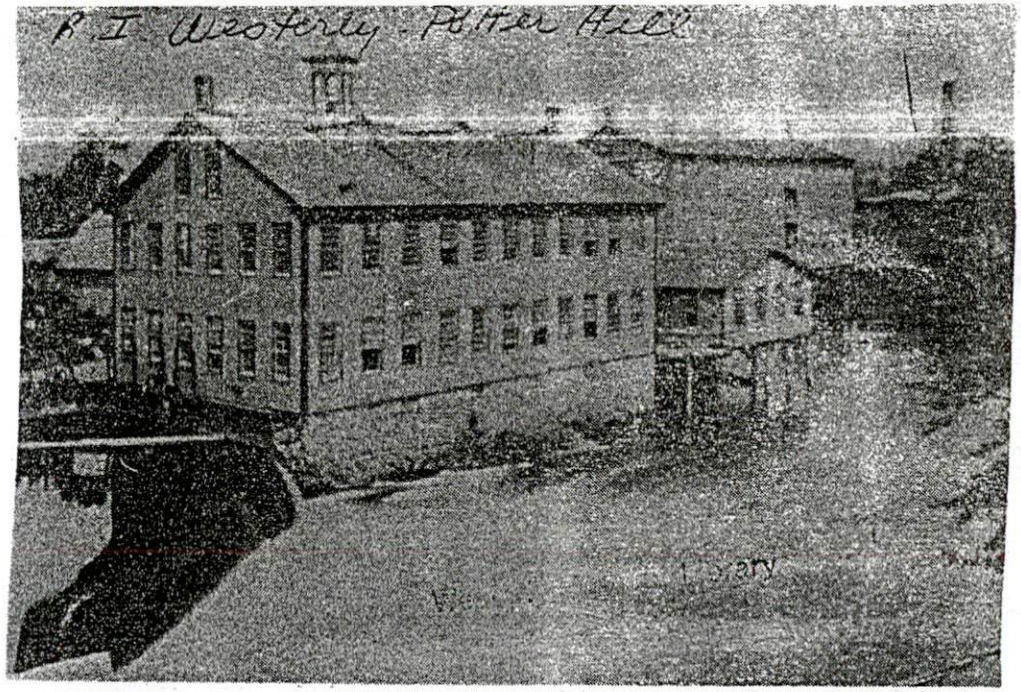
STATE OF CONNECTICUT
COUNTY OF NEW LONDON

In New London on the 22nd day of September, 1992 before me personally appeared ALLEN J. WELCH, a Vice President of the said FLEET BANK, N.A., Conservator of the Estate of HELEN E. COTTRELL, to me known and known by me to be the party executing the foregoing in his said capacity for and in behalf of the said FLEET BANK, N.A., Conservator of the Estate of HELEN E. COTTRELL, and he then and there acknowledged said instrument, by him executed in his capacity for and in behalf of the said FLEET BANK, N.A., Conservator of the Estate of HELEN E. COTTRELL, to be the free act and deed of the said FLEET BANK, N.A., Conservator of the Estate of HELEN E. COTTRELL and his own free act and deed.

Maureen S. Gavitt
MAUREEN S. GAVITT
Notary Public
My Commission Expires: 3/31/93

DONNA L. GIORDANO, TOWN CLERK
WESTERLY, R.I. RET: Payne &

R I Westerly - Potter Hill



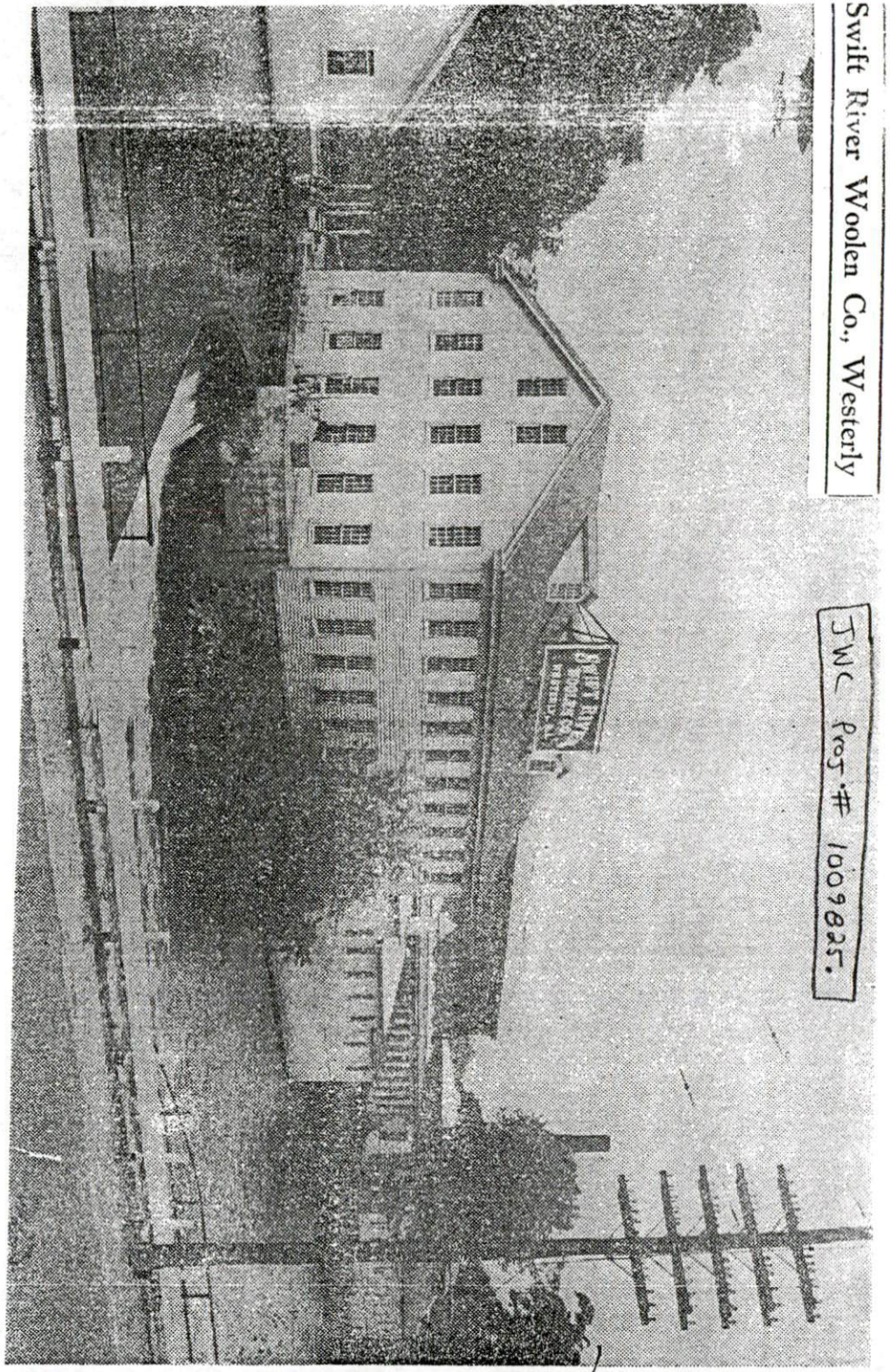
POTTER HILL MILL — The Potter Hill mill was a flourishing industry when this photo was taken. Located on the Westerly side of the river separating Westerly and Ashaway, the building is still standing but has not been occupied for many years. WS 7-15-74

POTTER HILL MITT — This is the way the Potter Hill Mill, located at the town line dividing Westerly and Ashaway in Potter Hill, looked around the turn of the century. The building is still standing but has been closed for many years and is beginning to show its age. WS 3 JUN 75

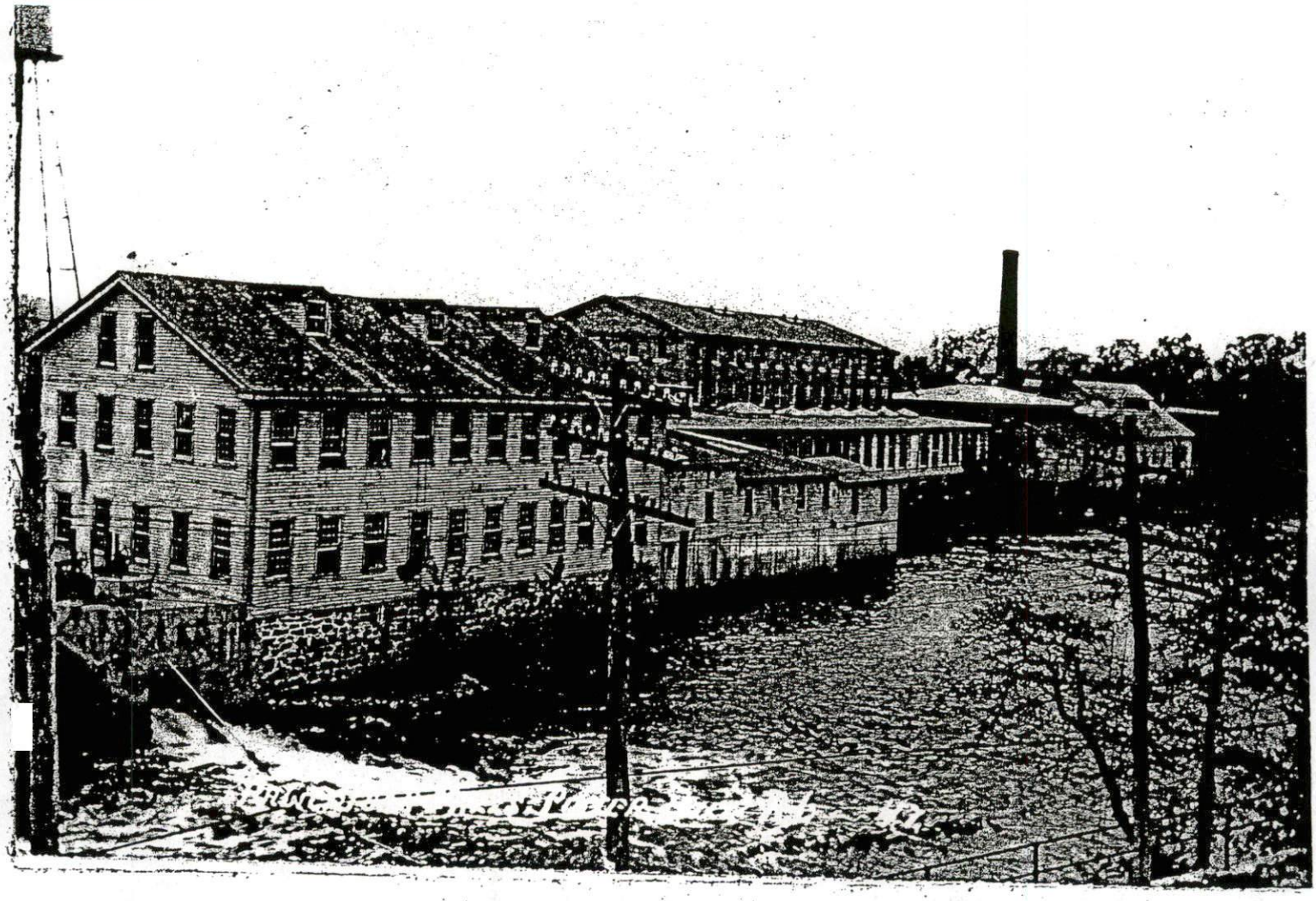


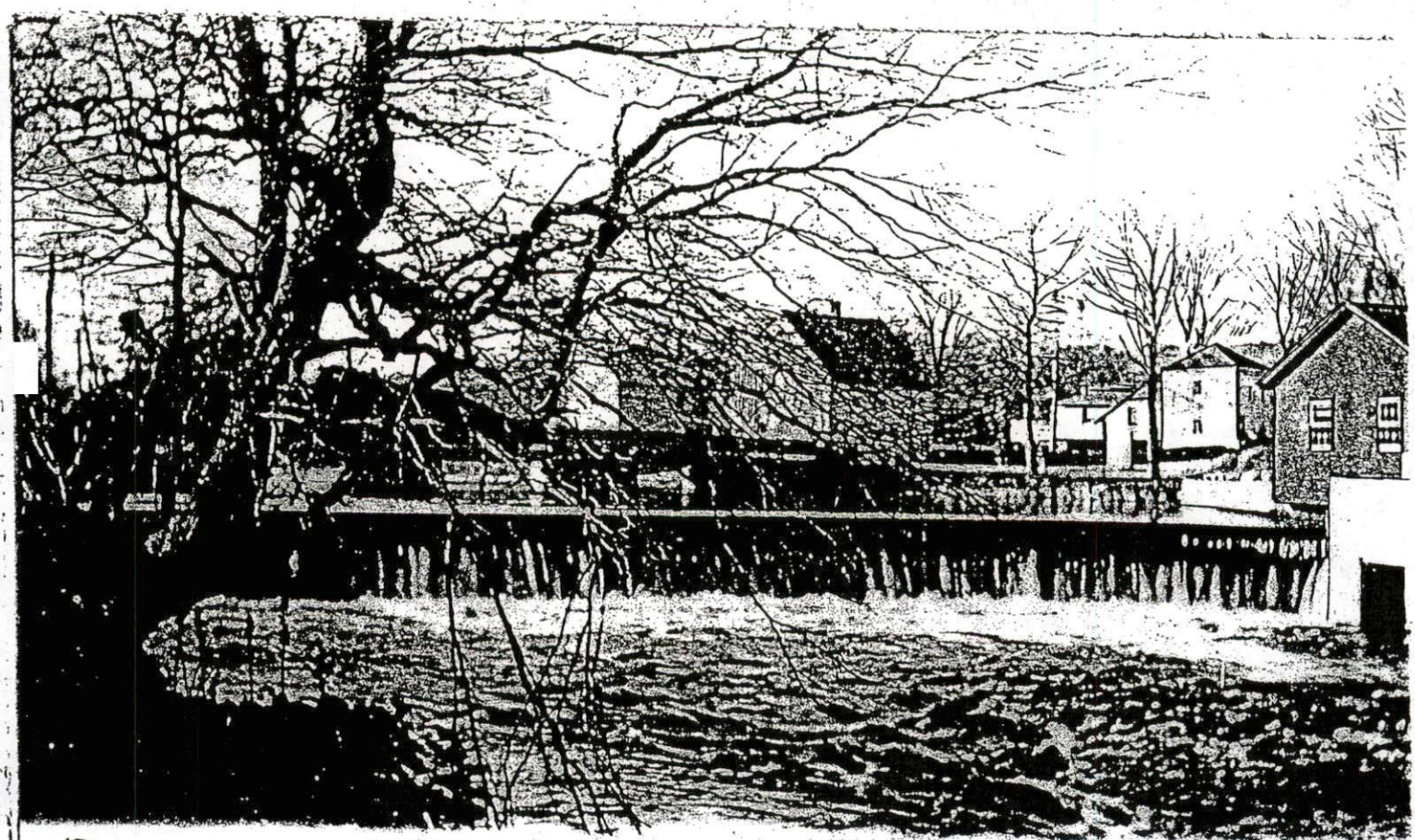
Westerly - Potter Hill

R.I. Westerly Potter Hill



JWC Proj # 1009825.



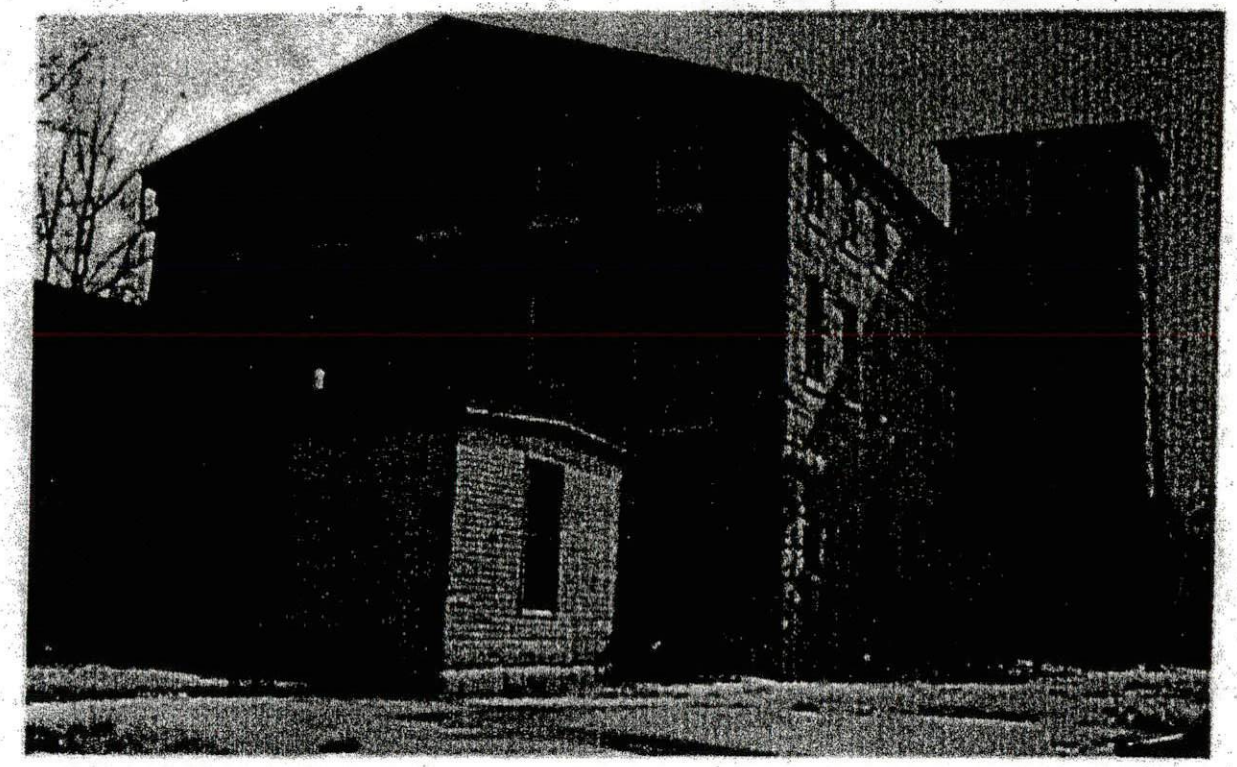


Potter Hill Dam and Bridge, near Westerly, R. I.

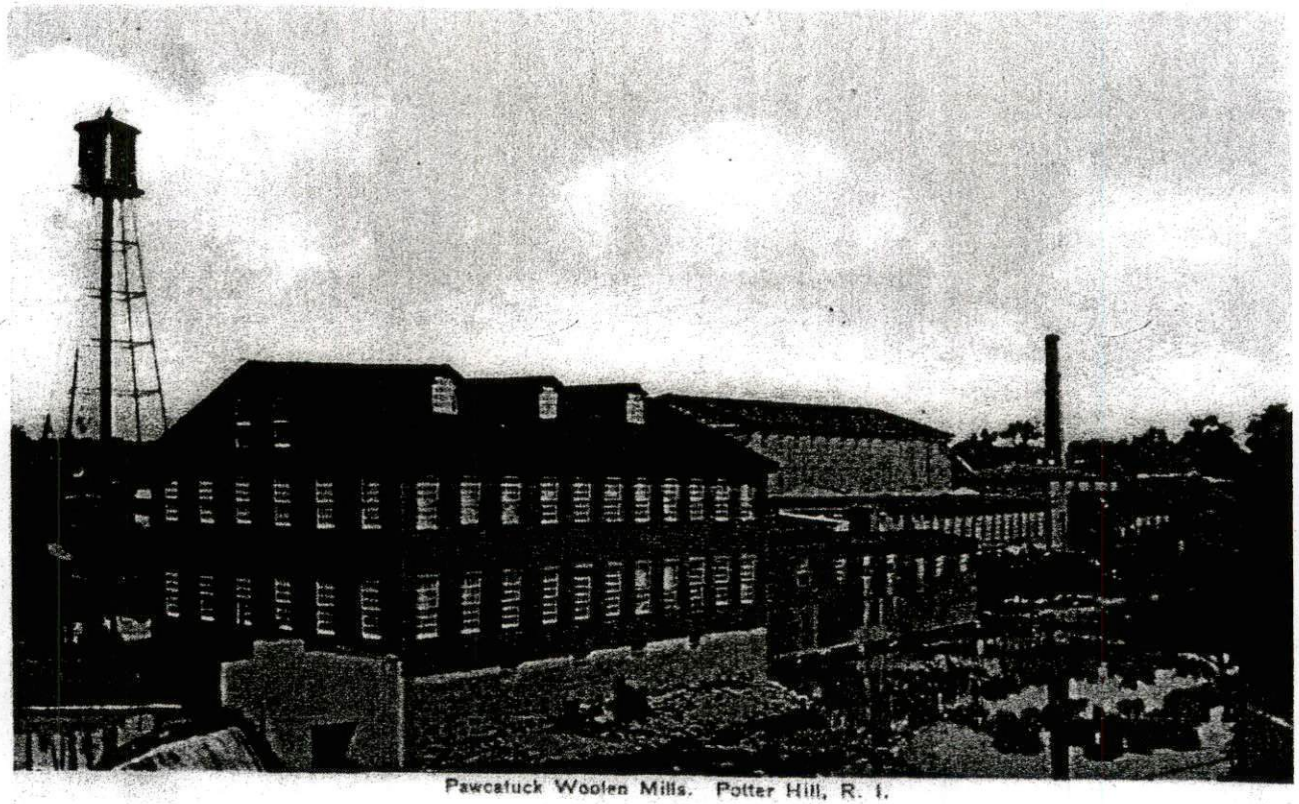
Boys-32. Girls-16.

9-24-'01. Lillian Wilson.

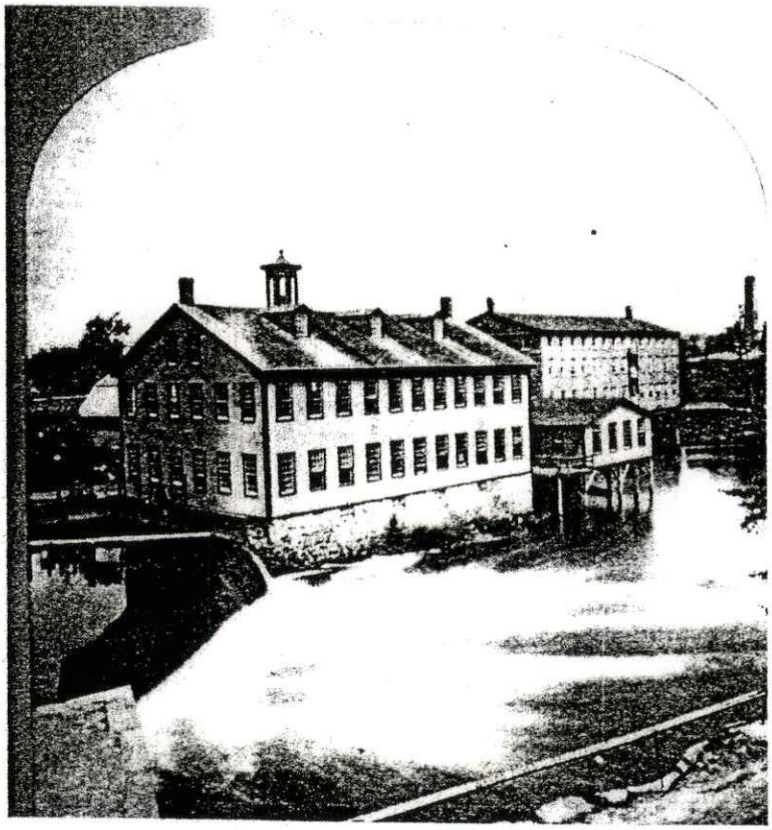
No. [illegible] Made in Germany for Woodmansee, Westerly, R. I.



Stone Mill Building (1847)



Pawcatuck Woolen Mills. Potter Hill, R. I.



Property Location: 198 POTTER HILL RD | *MAP ID:* 8/ 23/ / / | *Bldg Name:* | *State Use:* 400V

Vision ID: 55 | *Account #* 18049575 | *Bldg #:* 1 of 1 | *Sec #:* 1 of 1 | *Card* 1 of 1 | *Print Date:* 02/27/2006 10:36

CURRENT OWNER	TOPO.	UTILITIES	STRT./ROAD	LOCATION
RENEWABLE RESOURCES INC	1 Level	2 Public Water	1 Paved	3 Rural
C/O ED CARAPEZZA		6 Septic		7 Waterfront
900 N STAFFORD ST APT 2428				
ARLINGTON, VA 22203				
Additional Owners:				

SUPPLEMENTAL DATA

Other ID:	008-023	DATE RECO	
FIRE DIST	WFD		
STATE CODE	07		
SEWER	N	55	
DEED TYPE			
GIS ID:		ASSOC PID#	

CURRENT ASSESSMENT

Description	Code	Appraised Value	Assessed Value
IND LND	0700	110,400	110,400
		Total	110,400	110,400

1401 WESTERLY, RI

VISION

RECORD OF OWNERSHIP

	BK-VOL/PAGE	SALE DATE	q/u	v/i	SALE PRICE	V.C.
RENEWABLE RESOURCES INC	432/ 53	10/08/1992	U	I	50,000	1N
COTTRELL HELEN E	74/ 354	08/15/1955			0	
Swift River Woolen Co.	53/443	05/06/1930				
Frederick T. Lawrence	53/190	3/12/1930				

PREVIOUS ASSESSMENTS (HISTORY)

Yr.	Code	Assessed Value	Yr.	Code	Assessed Value	Yr.	Code	Assessed Value
2005	0700	110,400	2005	0700	110,400	2003	0700	110,400
	Total:	110,400		Total:	110,400		Total:	110,400

EXEMPTIONS

Year	Type	Description	Amount
		Total:	

OTHER ASSESSMENTS

Code	Description	Number	Amount	Comm. Int.

This signature acknowledges a visit by a Data Collector or Assessor

APPRAISED VALUE SUMMARY

Appraised Bldg. Value (Card)	0
Appraised XF (B) Value (Bldg)	0
Appraised OB (L) Value (Bldg)	0
Appraised Land Value (Bldg)	110,400
Special Land Value	0
Total Appraised Parcel Value	110,400
Valuation Method:	C
Adjustment:	0
Net Total Appraised Parcel Value	110,400

ASSESSING NEIGHBORHOOD

NBHD/ SUB	NBHD NAME	STREET INDEX NAME	TRACING	BATCH
0035/A				

NOTES

MILL COMPLEX ON RIVER
BLDGS IN VERY POOR COND
VACANT AND VANDALIZED
BLDGS HAVE NO VALUE
LOCKED GATE

BUILDING PERMIT RECORD

Permit ID	Issue Date	Type	Description	Amount	Insp. Date	% Comp.	Date Comp.	Comments

VISIT/ CHANGE HISTORY

Date	Type	IS	ID	Cd.	Purpose/Result
10/28/1999			WW	04	Measur/Vac/Boarded up
6/1/1994			CV		
8/3/1990			DT	10	Measu/LtrSnt Letter Se
3/1/1990	X		TT	00	Measur+Listed

LAND LINE VALUATION SECTION

B #	Use Code	Use Description	Zone	D	Frontage	Depth	Units		Unit Price	I. Factor	S.A.	Acre Disc	C. Factor	ST. Idx	Adj.	Notes- Adj	Special Pricing		Adj. Unit Price	Land Value
1	400V	INDUSTRL MDL-00	R60				60,000	SF	1.74	1.00	9	1.0000	1.00	0035	0.85				1.48	88,800
1	400V	INDUSTRL MDL-00	R60				3.17	AC	8,000.00	1.00	9	1.0000	1.00	0035	0.85				6,800.00	21,600

Total Card Land Units: 4.55 AC | **Parcel Total Land Area:** 198,085 SF | **Total Land Value:** 110,400

APPENDIX F

Resumes of Environmental Professionals

Joseph T. Unsworth, P.E.

Project Manager

PROFILE

Mr. Unsworth is a licensed professional engineer in Rhode Island. Mr. Unsworth started his career with the Rhode Island Department of Environmental Management (RIDEM). Mr. Unsworth was an Air Pollution Engineer for three years and a Principal Engineer for approximately five years in the Site Remediation program. Mr. Unsworth has been employed in the environmental consulting industry for the past nine years primarily as a Project Manager for the investigation and remediation of various types of property.

At Jacques Whitford, he has applied his regulatory experience, project management skills, and contractor management experience to the investigation of all facets of the environmental and engineering field. Currently Mr. Unsworth is a Project Manager located in the Rhode Island office and manages the daily progress of each project for which he is responsible. This involves project scheduling, work plan and quality assurance plan preparation, budget control, subcontractor interaction, client correspondence, data reduction and analysis, and report preparation. In addition to his direct project involvement, Mr. Unsworth manages the office's health and safety policies, implements the office's internal training program, and is the technical advisor for RIDEM regulations.

EDUCATION

University of Rhode Island, 1988
BS in Chemical Engineering

PROFESSIONAL COURSES AND DESIGNATIONS

- Licensed Professional Engineer (RI), 2002
- OSHA 29 CFR 1910.120, 40 Hour Hazardous Waste Site Worker Protection Training
- First Aid & CPR

CAREER SUMMARY

2002-Present	**Jacques Whitford, Rhode Island** Project Manager
1998-2002	**GZA Geoenvironmental** Project Manager
1997-1998	**Environmental Science Services** Project Manager
1996-1997	**Coneco Environmental** Project manager
1988-1996	**Rhode Island Department of Environmental Management** Principal Engineer



LANDMARK PROJECTS

International Depository Inc, North Kingstown, RI. *Client:* Rhode Island Department of Transportation, 1992

Supervised the removal of over 2,000 drums of various hazardous materials stored in deteriorating conditions at a former hazardous waste storage facility. Also managed the remediation of two areas of soil contamination. Responsibilities included subcontractor management, maintaining site security, overseeing emergency response actions, and ensuring project was completed within budget and in compliance with a USEPA order.
Role: Project Manager

Central Landfill, Johnston, RI
Client: Rhode Island Resource Recovery Corporation, 1999-2002

As Project Manger, responsibilities included the management of all environmental monitoring programs. The project included the quarterly sampling and analysis of over 40 groundwater monitoring wells, 10 surface waster and sediment locations, leachate sampling, ambient air testing, indoor air testing, and surface emission monitoring. The project also required data reduction and reporting to the RIDEM that included statistical analysis of laboratory results.

Former Providence Steel, Providence, RI
Client: Millhaus LLC, 2003-Ongoing

The project included the excavation and onsite treatment of soil impacted with high levels of lead. The treatment included the stabilization of the lead in the soil with a phosphorous based chemical that reduced the leachable lead to below hazardous waste standards. The treatment of the soil resulted in saving the client over $75,000 in disposal cost. In additional to the onsite treatment, other responsibilities included managing the testing of all soils, managing the transportation of disposal of contaminated soil, and all regulatory correspondence with the RIDEM. Ongoing activities include capping of the site with a combination of soil and asphalt and filing of an Environmental Land Use Restriction on the deed of the property.
Role: Project Manager



Vincent L. Jacques, P.E.

Civil/Environmental Engineer

PROFILE

Mr. Jacques is a Professional Engineer with 12 years experience conducting environmental investigations at contaminated sites, due diligence assessments, and hazardous material assessment and abatement projects throughout New England. Mr. Jacques has supervised and completed numerous Level I & II Environmental Site Assessments on industrial, commercial and residential properties for lending institutions, municipalities and private clients. Mr. Jacques has also been involved in various Phase III/remediation projects involving the restoration of impact soil, groundwater, and vapor gas. He also completed numerous asbestos and lead-based paint surveys, abatement plans, operations and maintenance programs, project monitoring, and final clearance testing for various types of properties, each approved by appropriate state agencies. Mr. Jacques also has significant experience in preparing storm water permits, Title V air permits, underground injection control permits, and spill prevention counter control measure plans.

Mr. Jacques is currently the Area Manager for Jacques Whitford's Rhode Island office. In this capacity, Mr. Jacques is responsible for ensuring that the quality of all projects meets Jacques Whitford's stringent quality standards, the appropriate resources are assigned to each project, and ensuring project success through appropriate communication with clients.

EDUCATION

The University of Rhode Island, 1992
B.S in Civil Environmental Engineering

Northeastern University, 1997
Certificate of Professional Achievement, Specialization: Hazardous Waste Management,
Concentration: Site Investigation and Remediation

PROFESSIONAL COURSES AND DESIGNATIONS

- Professional Engineer, Rhode Island – No. 7047, 1999
- Certified Asbestos Inspector & Project Designer, Rhode Island – AAC-0409IS/AAC-0909PD
- Certified Asbestos Inspector, Project Designer and Project Monitor, Massachusetts – AI 040309/AD 40576/AM 040310
- Certified Asbestos Inspector & Project Designer, New Hampshire –224-I
- Certified Asbestos Inspector, Maine – AI-0224
- Environmental Lead Inspector Training – Initial 40 hour course
- Princeton Gamma-Tech, Inc. X-ray Fluorescence Analyzer Training
- Certified Environmental Inspector/Specialist, Environmental Assessment Association



- OSHA 29 CFR 1910.120, 40 Hour Hazardous Waste Site Worker Protection Training
- OSHA 29 CFR 1910.120, Confined Space Entry
- OSHA 29 CFR 1910.120, 8 Hour Supervisor Training
- OSHA 29 CFR 1910.120, 8 Hour Refresher Training
- First Aid and CPR Trained

CAREER SUMMARY

2002-present	**Jacques Whitford Company, Inc. – Lincoln, Rhode Island** Area Manager
1994-2002	**Kenyon Environmental, Inc. – Pawtucket, RI** President
1991-1994	**Kenyon Environmental, Inc. – East Providence, RI** Vice President
1988-1991	**Narragansett Bay Commission, Providence, RI** Environmental Engineer

MEMBERSHIPS/ASSOCIATIONS

- Voting Member, ASTM, Committee E50, Environmental Assessment
- Member, Chi Epsilon – Civil Engineering Honor Society
- Member, Tau Beta Pi – Engineering Honor Society
- Member, Golden Key – National Honor Society
- PADI Certified for Scuba Diving
- Member, The University Club, Providence, Rhode Island
- St. James Church, Finance Committee Member
- Pack 1 Manville, Cub Scout Leader and Committee Member



REPORT

Limited Phase II Environmental Site Assessment – 198 Potter Hill Road, Westerly, RI

Prepared for:

Renewable Resources Inc.

PROJECT NO. 1009825.01

PROJECT NO. 1009825.01

REPORT TO

Renewable Resources Inc.
C/O Dr. Edward Carapezza
900 North Strafford, Suite 2428
Arlington, VA 22203

ON

Limited Phase II Environmental Site Assessment – 198 Potter Hill Road, Westerly, RI

April 26, 2006

Jacques Whitford
24 Albion Road, Suite 220
Lincoln, Rhode Island,
02865

Phone: 401-312-8005
Fax: 401-312-8010

www.jacqueswhitford.com

Joseph T. Unsworth, P.E — Date
Project Manager

Vincent L. Jacques, P.E — Date
Senior Reviewer

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2.2 Substances of Concern (SOC) 2
2.3 Conceptual Site Model 2

3.0 SCOPE OF WORK **3**
3.1 Test Pits 3
3.2 Field Observations 3

4.0 RESULTS **3**

5.0 CONCLUSIONS & RECOMMENDATIONS **4**

6.0 LIMITATIONS **5**

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APPENDIX C Photographs
APPENDIX D Analytical Data Report

1.0 INTRODUCTION

Jacques Whitford Company, Inc. (Jacques Whitford) has conducted a Li Environmental Site Assessment (ESA) on the property located at 198 Potter Hill R RI, hereinafter referred to as the "Site."

This report has been prepared for the exclusive use and reliance by Renewable (Client) by the authority of Mr. Edward Carapezza, PhD. Jacques Whitford com ESA on the Site for the Client, which was documented in a report dated March 14, purpose of this Limited Phase II ESA is to determine if a release has occurred at a (AOCs) that were identified during the Phase I ESA.

Mr. Joseph T. Unsworth, P.E. of Jacques Whitford was on-Site on Wednesday, observe the completion of six test pits and collect soil samples. This report findings and results from the investigation. **Appendix A** contains figures of t **(Figure 1)** and test pit locations (**Figure 2**). **Appendix B** includes test pit logs a photographs of the test pits. **Appendix D** contains the laboratory analytical dat samples.

2.0 SITE DESCRIPTION

2.1 Site and Vicinity General Characteristics

According to records on file at the Westerly Tax Assessor's office, the subject pro one land parcel identified on Westerly Tax Assessor's Plat Map Plat Map 8, as Lot contains approximately 4.55 acres. Lots 23 is located in an area zoned "RR-60", Residential with a minimal lot size of 60,000 square feet. Lot 23 is not bound by an to the subject property is from Potter Hill Road via a driveway that runs across t part of Lot 24 and onto the southern part of the subject property. Properties abu property are residential and agricultural properties to the west, the Pawcatuck River north, and residential properties further east and north.

The subject property has been vacant for over 40 years and no utilities appear to subject property. Electricity and telephone service are available for the subject pro water is available in the area of the subject property. There were no records at the Department for the subject property. The subject property formerly relied on an water, which was stored in a storage tank tower on the site. There are no municip area of the subject property. The field property card from the Westerly Tax Assess the subject property utilizes a septic system, however, the current site owner in believed that all wastewater was formerly discharge directly to the adjacent Pawcat subject property buildings are not currently heated. The boilers remaining in th building appear to have been fueled by coal.

2.2 Substances of Concern (SOCs)

Coal may have been used for fuel on the subject property. Metals and polynuclear aromatic hydrocarbons are typical SOCs associated with coal. An area of dumping was observed in the north western part of the subject property. Miscellaneous debris was observed including several rusted 55 gallon drums. None of the drums contained any liquid and were rusted. Various materials could have been buried in this are including chemical containing volatile organic compounds (VOCs), metals, and coal/coal ash.

2.3 Conceptual Site Model

A Conceptual Site Model includes identifying Areas of Concern (AOC), SOCs from each AOC, potential release mechanisms from each AOC, potential media impacted by each AOC, and potential migration pathways from each AOC. During the Phase I ESA, Jacques Whitford identified several potential AOCs, which are summarized in the following bulleted paragraphs:

AOC #1 – Northwestern Debris Area: A mound of buried debris was observed in the northwestern portion of the Site. Drums were observed near the debris pile. The unlabelled drums all were rusted and did not contain any liquids. Some drums were intact and some were not. No odors or other evidence of a release was observed from any of the drums.

AOC #2 – Potential Former Coal Storage: The Site likely stored coal for use as fuel in the boilers that still exist on the Site. Jacques Whitford reviewed aerial photographs dating back to 1939 to assess exterior areas that could have been used for coal storage. Based on a review of the aerial photographs, the only area that appears to been able to be used for coal storage is west of the building near the former boiler building.

Table 1 provides a description of each AOC, the associated SOCs, potential release mechanisms, potential impacted media, and potential migration pathways. The Scope of Work in Section 3.0 provides the methods to assess each of the AOCs.

Table 1 – Summary of Conceptual Site Model

Area of Concern	Substances of Concern	Potential Release Mechanism	Potentially Impacted Media	Potential Migration Pathways
Northwestern Debris Area	VOCs/Metals/PAHs	Miscellaneous materials buried including drums that could have rusted and leaked contents.	Soils and groundwater	SOCs can be adsorbed onto subsurface soils and/or released to groundwater
Potential Former Coal Storage	Metals/PAHs	Coal stored on unpaved areas could result in coal being mingled with soils.	Soil beneath former coal piles. Coal typically does not result in groundwater contamination.	SOCs can be adsorbed onto subsurface soils but are typically do not impact groundwater.

3.0 SCOPE OF WORK

In order to assess whether a release has occurred from the AOCs, the follo investigation was completed.

3.1 Test pits

The objective of the investigation was to assess potential impacts from the AOC April 3, 2006, a Case 580K rubber tired backhoe, contracted by the Client, was util six test pits (TP-1 through TP-6) at the Site. Refer to Figure 2 for test pit locations through TP-3 were completed in the buried debris pile on the northwest area of th TP-4 through TP-6 were completed west of the Site building near the former boiler b

Soil samples were collected from each of the test pits for lithologic classification potential impacts. The test pits were advanced to approximately 6 feet below grour Test pit logs are presented in Appendix A. All collected soil samples were assesse impacts by visual and olfactory examination. Debris and possible ash were obse the test pits, however no olfactory evidence of impacts were observed. Soil sar field-screened for the presence of volatile organic compounds (VOCs) using a photoionization detector (PID) equipped with a 10.6 eV bulb and an organic vapor of 0.1 to 10,000 parts-per-million (ppm). No VOCs were detected in any of t collected.

Two soil samples were collected for laboratory analysis. One soil samples was coll and one from TP-5. TP-3 contained a large amount of debris including possi material. TP-3 contained more debris and more various materials than the othe buried debris area. A soil samples was also collected from TP-5. TP-5 contained w be cloth material and/or coal ash. None of the other test pits completed west appeared to contain these materials. The soil samples collected were submitt Analytical, Inc. (Spectrum Analytical) laboratory in Agawam, Massachusetts, for an Pollutant 13 Metals by USEPA Method 200.7/7471A and PAHs by USEPA Method 8

3.2 Field Observations

Site soils encountered in the test pits in the buried debris area consisted prim underlain by debris and fine to coarse sand with trace silt, classified as "SW-Fill" (Soil Classification). The debris consisted of glass, metal, brick, wood, and encountered in the test pits near the buildings consisted primarily of topsoils und coarse sand with some gravel and trace silt, and possible ash in two of the test pi "SW-Fill" (ASTM – Unified Soil Classification).

4.0 RESULTS

The objective of this limited Phase II ESA was to assess whether potential former c an observed debris pile have impacted soils at the Site. Soil samples were submitt for analysis. The results of the analysis are summarized on **Table 2**. There we SVOCs detected in any of the soil samples at concentrations greater than the ap criteria. Arsenic and beryllium were detected in one soil sample obtained near th building at concentrations greater than RIDEM's Residential Direct Exposure Criteria

Table 2 – Summary of Soil Analytical Results

Parameter	RIDEM Standard		TP-3/S1	TP-5/S1
	RDEC	GA Leach		
PAHs				
Benzo(a)anthracene	0.9	NE	ND	0.24
Benzo(a)pyrene	0.4	240	ND	0.232
Benzo(b)fluoranthene	0.9	NE	ND	0.299
Benzo(g,h,i)perylene	0.8	NE	ND	0.203
Chrysene	0.4	NE	ND	0.357
Fluoranthene	20	NE	ND	0.566
Phenanthrene	40	NE	ND	0.322
Pyrene	13	NE	ND	0.424
PP 13 Metals				
Antimony	10	NA	ND	ND
Arsenic	7	NA	4.90	**10.4**
Beryllium	0.4	NA	0.375	**0.405**
Cadmium	39	NA	0.618	0.503
Chromium	390	NA	46.7	280
Copper	3,100	NA	73.6	23.6
Lead	150	NA	134	101
Mercury	23	NA	0.621	ND
Nickel	1,000	NA	6.06	9.39
Selenium	390	NA	ND	ND
Silver	200	NA	ND	ND
Thallium	5.5	NA	ND	ND
Zinc	6,000	NA	81.8	127

Notes: * RIDEM Standards from *"Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases"*
I/CDEC – Industrial/Commercial Direct Exposure Criteria, GA Leach – GA Leachability Criteria
All results are in mg/kg
NE – None Established
ND – Not Detected
NA – Not applicable due to the fact that samples were analyzed for total metals and not TCLP metals

5.0 CONCLUSIONS & RECOMMENDATIONS

Jacques Whitford performed a Limited Phase II ESA at the Site to determine if a release has occurred at AOCs that were identified during the Phase I ESA. Based on the results from this investigation, one of the AOCs appears to have impacted subsurface soil Site. The area west of the building near the former boiler building appears to have been used for coal storage or possible ash disposal. Two metals were detected in the soil sample form this area at concentrations greater than RIDEM's Residential Direct Exposure Criteria (RDEC).

Due to the detection of arsenic and beryllium in soils on the Site at concentrations greater than criteria contained in RIDEM's *Rules and Regulations for the Investigation and Remediation of Hazardous Materials Releases* (Remediation Regulations), any owner or operator of the Site is required to notify the RIDEM of a release. Due to the fact that the Client is the owner of the Site, notification is required within 15 days of obtaining knowledge of the release. The RIDEM will

require that a Site Investigation Report (SIR) be completed for the Site that asse and extent of contamination at the Site. The SIR must include three remedial addressing the contamination detected. One of the remedial alternatives must be preferred remedial alternative. This Limited Phase II ESA and the Phase I ESA c used in the SIR. Addition soil samples near the area of test pit TP-5 may be requir extent of the observed ash. Preferred remedial alternatives to control risks assoc exposure typically include capping with asphalt or clean soil or excavation and The appropriate preferred remedial alternative will be recommended when th contamination is more accurately assessed.

Once the SIR is approved, a Remedial Action Work Plan will be required along with The RAWP provides the details of how the approved preferred remedial alt implemented. Once the preferred remedial alternative is completed and all rem attained, the RIDEM will issue a Letter of Compliance for the Site.

6.0 LIMITATIONS

Information obtained from the Client, public agencies, limited site reconnaissance, li and laboratory chemical analysis was used to characterize the subject property. services provided are extensive, findings and conclusions are limited to and by the quantitative information obtained. Further subsurface investigation methods ar could further define the subject property soil and groundwater conditions. If inforn available concerning the subject property that was not included in this report, it s available to Jacques Whitford so that conclusions and/or recommendations can and modified, where applicable.

No attempt was made to determine the compliance of present or former owners or subject property with Federal, State, or Municipal environmental or land use laws Because geological formations are inherently heterogeneous in nature, the profes and opinions provided by Jacques Whitford under this agreement are not guar representation of complete subject property conditions.

Events occurring on the subject property after April 3, 2006, the date of test pitting, scope of this report. Jacques Whitford makes no expressed or implied rep warranties regarding any changes in condition of the premises after this date.

Predefined PID field screening is not as sensitive as laboratory analysis and con from such screening are limited to those compounds potentially detectable with a 1(lamp. No representation regarding the potential results of additional field scree analysis, or regarding the potential results or analysis for materials not analyzed for implied.

Jacques Whitford has retained a copy of this report. No additions or deletions are pe the written consent of Jacques Whitford and the Client. Use of this report in who parties other than those authorized by the Jacques Whitford and the Client is prohibit



SOURCE: USGS TOPOGRAPHIC MAP 1984

Jacques Whitford

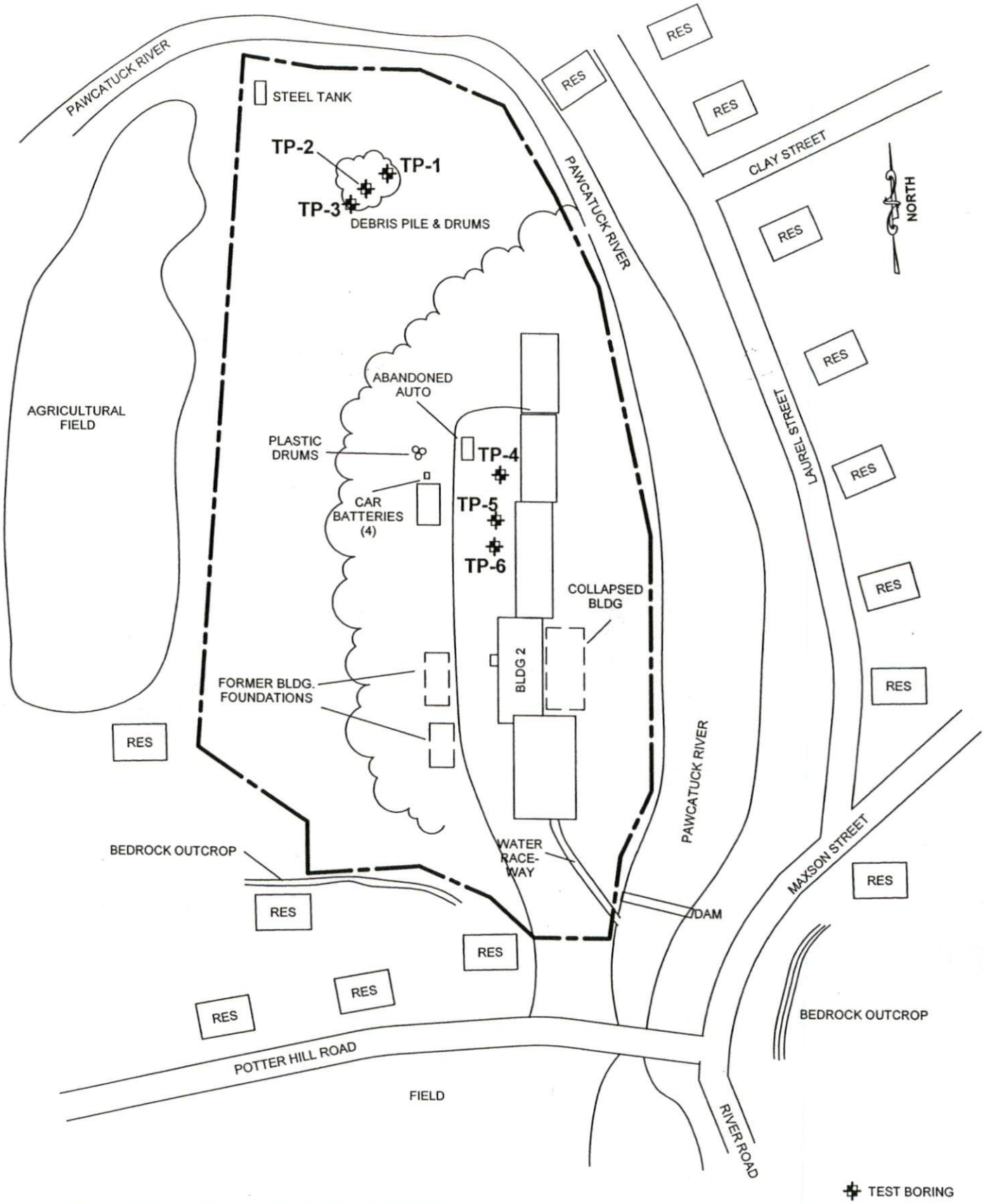
Jacques Whitford Cor

JACQUES WHITFORD LOCATION: LINCOLN, RI		BASEMAP SOURCE: ASHAWAY QUAD	
DATE PREPARED: 2-14-06	PREPARED BY: MJB	APPROXIMATE SCALE: 1:24,000	
PROJECT NAME/FILE NAME: MILL BLDG./LOCUS		PROJECT NUMBER/PHASE: 1009825.	

NORTH

DRAWING TITLE: **SITE LOCATION M**
POTTER HILL ROA
WESTERLY, RI

PREPARED FOR: RENEWABLE RESOURCES



Jacques Whitford Company, Inc.

JACQUES WHITFORD LOCATION:
24 ALBION ROAD, SUITE 220, LINCOLN, RI

DATE PREPARED:	DESIGNED BY:	DRAWN BY:	CHECKED BY:	REVIEWED BY:
3-8-06	JTU	WL	VLJ	JTU
REVISION DATE:	REVISION NO:	DRAWN BY:	CHECKED BY:	REVIEWED BY:

DRAWING TITLE:

SITE PLAN

198 POTTER HILL ROAD
WESTERLY, RI

PROJECT NAME/FILE NAME:	PROJECT NUMBER/PHASE:	SCALE:
198 POTTER HILL	1009825	NTS

PREPARED FOR:
Renewable Resources Inc.

FIGURE NO. 2

APPENDIX B

Tets Pit Logs

JWC TEST PIT EXCAVATION LOG

PROJECT: 198 Potter Hill Road

LOCATION: Westerly, RI

TEST PIT NO.: TP-1

DATE: 4/3/2006

FILE NO.: 1009825.01

JWC REP.: JTU

EXCAVATION EQUIPMENT

CONTRACTOR:

OPERATOR: Randy

MAKE: Case MODEL: 580 K

CAPACITY: 1/2 yd3 REACH: 15 ft

TIME STARTED: 0807

TIME COMPLETED: 0815

GROUND ELEV.:

WEATHER: Sunny, 40-45 F, wind < 5

SAMPLE DEPTH FEET	STRATA CHANGE	SOIL DESCRIPTION	EXCAV. EFFORT	HNU INSTRUMENT READING	REMARKS
1	Topsoil	f SAND , little organics, brown	E	0.0	
2 S-1		f-c SAND and DEBRIS (metal, glass), little silt, dry, brown	E		
3					
4		f-m SAND, little silt, moist, brown	E		
5					
6					
7		Test Pit Terminated			
8					
9					
10					
11					
12					
13					
14					

REMARKS

(Test Pit Log.xls-9/18/2002)

JWC TEST PIT EXCAVATION LOG

PROJECT: 198 Potter Hill Road

LOCATION: Westerly, RI

TEST

EXCAVATION EQUIPMENT

CONTRACTOR:

OPERATOR: Randy

MAKE: Case MODEL: 580 K

CAPACITY: 1/2 yd3 REACH: 15 ft

TIME STARTED: 0807

TIME COMPLETED: 0820

GROUND ELEV.:

SAMPLE DEPTH FEET		STRATA CHANGE	SOIL DESCRIPTION	EXCAV. EFFORT	HNU INSTR READ
1		Topsoil	f SAND , little organics, brown	E	
2	S-1		f-c+ SAND and DEBRIS (metal, glass, brick), little silt, moist, brown	E	
3					
4				E	
5			f-m SAND, little silt, moist, brown		
6				E	
7			Test Pit Terminated		
8					
9					
10					
11					
12					
13					
14					

REMARKS

JWC TEST PIT EXCAVATION LOG

PROJECT: 198 Potter Hill Road

LOCATION: Westerly, RI

TEST PIT NO.: TP-3

DATE: 4/3/2006

FILE NO.: 1009825.01

JWC REP.: JTU

WEATHER: Sunny, 40-45 F, wind < 5

EXCAVATION EQUIPMENT

CONTRACTOR:

OPERATOR: Randy

MAKE: Case MODEL: 580 K

CAPACITY: 1/2 yd3 REACH: 15 ft

TIME STARTED: 0825

TIME COMPLETED: 0835

GROUND ELEV.:

SAMPLE DEPTH FEET	STRATA CHANGE	SOIL DESCRIPTION	EXCAV. EFFORT	HNU INSTRUMENT READING	REMARKS
1	Topsoil	f SAND , little organics, brown	E	0.0	
2 S-1		f-c SAND and DEBRIS (metal, glass, fabrics, wood), little silt, dry, brown	E		
3					
4			E		
5		f-m SAND, little silt, moist, brown			
6			E		
7		Test Pit Terminated			
8					
9					
10					
11					
12					
13					
14					

REMARKS

JWC TEST PIT EXCAVATION LOG

PROJECT: **198 Potter Hill Road**

LOCATION: **Westerly, RI**

TEST

EXCAVATION EQUIPMENT

CONTRACTOR:

OPERATOR: **Randy**

MAKE: **Case** MODEL: **580 K**

CAPACITY: **1/2 yd3** REACH: **15 ft**

TIME STARTED: **0845**

TIME COMPLETED: **0855**

GROUND ELEV.:

J

WI

SAMPLE DEPTH FEET	STRATA CHANGE	SOIL DESCRIPTION	EXCAV. EFFORT	HNU INSTR READ
1	Topsoil	f SAND , little organics, brown	E	
2 S-1		f-c SAND , dry, black (ash)		
3		f-c+ SAND, littel gravel, trace silt, dry, tan	E	
4				
5			E	
6				
7		Test Pit Terminated		
8				
9				
10				
11				
12				
13				
14				

REMARKS

JWC TEST PIT EXCAVATION LOG

PROJECT: 198 Potter Hill Road

LOCATION: Westerly, RI

TEST PIT NO.: TP-5

DATE: 4/3/2006

FILE NO.: 1009825.01

JWC REP.: JTU

WEATHER: Sunny, 40-45 F, wind < 5

EXCAVATION EQUIPMENT

CONTRACTOR:

OPERATOR: Randy

MAKE: Case MODEL: 580 K

CAPACITY: 1/2 yd3 REACH: 15 ft

TIME STARTED: 0900

TIME COMPLETED: 0910

GROUND ELEV.:

SAMPLE DEPTH FEET	STRATA CHANGE	SOIL DESCRIPTION	EXCAV. EFFORT	HNU INSTRUMENT READING	REMARKS
1	Topsoil	f SAND , little organics, brown	E		
2 S-1		f-c SAND , littel ash, dry, tan/black		0.0	
3		f-M SAND, possible ash, trace silt, dry, brown/black	E		
4			E		
5		f-M SAND, little gravel, trace silt, moist, brown	E		
6					
7		Test Pit Terminated			
8					
9					
10					
11					
12					
13					
14					

REMARKS

JWC TEST PIT EXCAVATION LOG

PROJECT: **198 Potter Hill Road**

LOCATION: **Westerly, RI**

TEST

EXCAVATION EQUIPMENT

CONTRACTOR:

OPERATOR: **Randy**

MAKE: **Case** MODEL: **580 K**

CAPACITY: **1/2 yd3** REACH: **15 ft**

TIME STARTED: **0915**

TIME COMPLETED: **0925**

GROUND ELEV.:

SAMPLE DEPTH FEET	STRATA CHANGE	SOIL DESCRIPTION	EXCAV. EFFORT	HNU INSTR REAI
1	Topsoil	f SAND , little organics, brown	E	
2 S-1		f-m SAND, trace gravel, trace silt, dry, tan	E	
3				
4			E	
5		Test Pit Terminated		
6				
7				
8				
9				
10				
11				
12				
13				
14				

REMARKS

APPENDIX C

Phtotographs



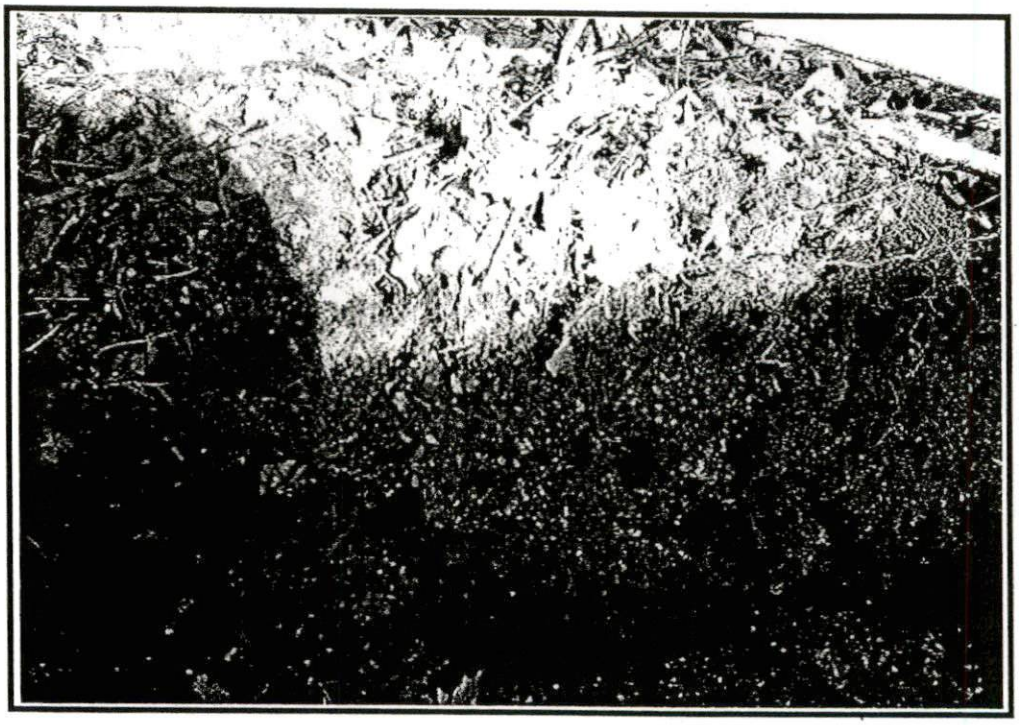
Test Pit TP-1



Test Pit TP-2



Test Pit TP-3



Test Pit TP-5

APPENDIX D

Analytical Data Report

Report Date:
11-Apr-06 09:18

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

Jacques Whitford Company, Inc.
24 Albion Rd, Suite 220
Lincoln, RI 02865
Attn: Joe Unsworth

Project: 198 Potter Hill Rd - Westerly, RI
Project 1009825.01

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SA42943-01	TP3/S1	Soil	03-Apr-06 00:00	04-Apr-06 14:30
SA42943-02	TP5/S1	Soil	03-Apr-06 00:00	04-Apr-06 14:30

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. All applicable NELAC requirements have been met.
Please note that this report contains 9 pages of analytical data including Chain of Custody document(s).
This report may not be reproduced, except in full, without written approval from Spectrum Analytical, Inc.

Massachusetts Certification # M-MA138/MA1110
Connecticut # PH-0777
Florida # E87600/E87936
Maine # MA138
New Hampshire # 2538/2972
New York # 11393/11840
Rhode Island # 98
USDA # S-51435
Vermont # VT-11393

Authorized by:

Hanibal C. Tayeh, Ph.D.
President/Laboratory Director

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Sample Identification	Client Project #	Matrix	Collection Date/
TP3/S1 SA42943-01	1009825.01	Soil	03-Apr-06 00:

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepa
Semivolatile Organic Compounds by GCMS								
PAHs by SW846 8270C								
Prepared by method SW846 3550B								
83-32-9	Acenaphthene	BRL		µg/kg dry	187	1	SW846 8270C	06-Apr-
208-96-8	Acenaphthylene	BRL		µg/kg dry	187	1	"	"
120-12-7	Anthracene	BRL		µg/kg dry	187	1	"	"
56-55-3	Benzo (a) anthracene	BRL		µg/kg dry	187	1	"	"
50-32-8	Benzo (a) pyrene	BRL		µg/kg dry	187	1	"	"
205-99-2	Benzo (b) fluoranthene	BRL		µg/kg dry	187	1	"	"
191-24-2	Benzo (g,h,i) perylene	BRL		µg/kg dry	187	1	"	"
207-08-9	Benzo (k) fluoranthene	BRL		µg/kg dry	187	1	"	"
218-01-9	Chrysene	BRL		µg/kg dry	187	1	"	"
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/kg dry	187	1	"	"
206-44-0	Fluoranthene	BRL		µg/kg dry	187	1	"	"
86-73-7	Fluorene	BRL		µg/kg dry	187	1	"	"
193-39-5	Indeno (1,2,3-cd) pyrene	BRL		µg/kg dry	187	1	"	"
90-12-0	1-Methylnaphthalene	BRL		µg/kg dry	187	1	"	"
91-57-6	2-Methylnaphthalene	BRL		µg/kg dry	187	1	"	"
91-20-3	Naphthalene	BRL		µg/kg dry	187	1	"	"
85-01-8	Phenanthrene	BRL		µg/kg dry	187	1	"	"
129-00-0	Pyrene	BRL		µg/kg dry	187	1	"	"
Surrogate recoveries:								
321-60-8	*2-Fluorobiphenyl*	*71.6*		*30-130 %*			"	"
1718-51-0	*Terphenyl-dl4*	*67.8*		*30-130 %*			"	"
Total Metals by EPA 6000/7000 Series Methods								
7439-97-6	Mercury	0.621		mg/kg dry	0.0700	1	SW846 7471A	06-Apr-0
Total Metals by EPA 200 Series Methods								
7440-22-4	Silver	BRL		mg/kg dry	1.32	1	EPA 200.7	06-Apr-0
7440-38-2	Arsenic	4.90		mg/kg dry	1.97	1	"	"
7440-41-7	Beryllium	0.375		mg/kg dry	0.263	1	"	"
7440-43-9	Cadmium	0.618		mg/kg dry	0.329	1	"	"
7440-47-3	Chromium	46.7		mg/kg dry	0.658	1	"	"
7440-50-8	Copper	73.6		mg/kg dry	0.658	1	"	"
7440-02-0	Nickel	6.06		mg/kg dry	0.658	1	"	"
7439-92-1	Lead	134		mg/kg dry	0.986	1	"	"
7440-36-0	Antimony	BRL		mg/kg dry	1.97	1	"	"
7782-49-2	Selenium	BRL		mg/kg dry	1.97	1	"	"
7440-28-0	Thallium	BRL		mg/kg dry	1.97	1	"	"
7440-66-6	Zinc	81.8		mg/kg dry	0.658	1	"	"
General Chemistry Parameters								
	% Solids	69.9		%		1	SM2540 G Mod.	05-Apr-06

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
TP5/S1 SA42943-02	1009825.01	Soil	03-Apr-06 00:00	04-Apr-06

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3550B											
83-32-9	Acenaphthene	BRL		µg/kg dry	193	1	SW846 8270C	06-Apr-06	07-Apr-06	6040277	M.B
208-96-8	Acenaphthylene	BRL		µg/kg dry	193	1	"	"	"	"	"
120-12-7	Anthracene	BRL		µg/kg dry	193	1	"	"	"	"	"
56-55-3	Benzo (a) anthracene	240		µg/kg dry	193	1	"	"	"	"	"
50-32-8	Benzo (a) pyrene	232		µg/kg dry	193	1	"	"	"	"	"
205-99-2	Benzo (b) fluoranthene	299		µg/kg dry	193	1	"	"	"	"	"
191-24-2	Benzo (g,h,i) perylene	203		µg/kg dry	193	1	"	"	"	"	"
207-08-9	Benzo (k) fluoranthene	BRL		µg/kg dry	193	1	"	"	"	"	"
218-01-9	Chrysene	357		µg/kg dry	193	1	"	"	"	"	"
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/kg dry	193	1	"	"	"	"	"
206-44-0	Fluoranthene	566		µg/kg dry	193	1	"	"	"	"	"
86-73-7	Fluorene	BRL		µg/kg dry	193	1	"	"	"	"	"
193-39-5	Indeno (1,2,3-cd) pyrene	BRL		µg/kg dry	193	1	"	"	"	"	"
90-12-0	1-Methylnaphthalene	BRL		µg/kg dry	193	1	"	"	"	"	"
91-57-6	2-Methylnaphthalene	BRL		µg/kg dry	193	1	"	"	"	"	"
91-20-3	Naphthalene	BRL		µg/kg dry	193	1	"	"	"	"	"
85-01-8	Phenanthrene	322		µg/kg dry	193	1	"	"	"	"	"
129-00-0	Pyrene	424		µg/kg dry	193	1	"	"	"	"	"
Surrogate recoveries:											
321-60-8	*2-Fluorobiphenyl*	*66.2*		*30-130 %*			"	"	"	"	"
1718-51-0	*Terphenyl-dl4*	*62.1*		*30-130 %*			"	"	"	"	"
Total Metals by EPA 6000/7000 Series Methods											
7439-97-6	Mercury	BRL		mg/kg dry	0.0577	1	SW846 7471A	06-Apr-06	07-Apr-06	6040307	YP
Total Metals by EPA 200 Series Methods											
7440-22-4	Silver	BRL		mg/kg dry	1.16	1	EPA 200.7	06-Apr-06	07-Apr-06	6040306	LR
7440-38-2	Arsenic	10.4		mg/kg dry	1.73	1	"	"	"	"	"
7440-41-7	Beryllium	0.405		mg/kg dry	0.231	1	"	"	"	"	"
7440-43-9	Cadmium	0.503		mg/kg dry	0.289	1	"	"	"	"	"
7440-47-3	Chromium	280		mg/kg dry	0.578	1	"	"	"	"	"
7440-50-8	Copper	23.6		mg/kg dry	0.578	1	"	"	"	"	"
7440-02-0	Nickel	9.39		mg/kg dry	0.578	1	"	"	"	"	"
7439-92-1	Lead	101		mg/kg dry	0.867	1	"	"	"	"	"
7440-36-0	Antimony	BRL		mg/kg dry	1.73	1	"	"	"	"	"
7782-49-2	Selenium	BRL		mg/kg dry	1.73	1	"	"	"	"	"
7440-28-0	Thallium	BRL		mg/kg dry	1.73	1	"	"	"	"	"
7440-66-6	Zinc	127		mg/kg dry	0.578	1	"	"	"	"	"
General Chemistry Parameters											
	% Solids	83.6		%		1	SM2540 G Mod.	05-Apr-06	05-Apr-06	6040254	BD

Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6040277 - SW846 3550B										
Blank (6040277-BLK1)										
Prepared & Analyzed: 06-Apr-06										
Acenaphthene	BRL		µg/kg wet	66.0						
Acenaphthylene	BRL		µg/kg wet	66.0						
Anthracene	BRL		µg/kg wet	66.0						
Benzo (a) anthracene	BRL		µg/kg wet	66.0						
Benzo (a) pyrene	BRL		µg/kg wet	66.0						
Benzo (b) fluoranthene	BRL		µg/kg wet	66.0						
Benzo (g,h,i) perylene	BRL		µg/kg wet	66.0						
Benzo (k) fluoranthene	BRL		µg/kg wet	66.0						
Chrysene	BRL		µg/kg wet	66.0						
Dibenzo (a,h) anthracene	BRL		µg/kg wet	66.0						
Fluoranthene	BRL		µg/kg wet	66.0						
Fluorene	BRL		µg/kg wet	66.0						
Indeno (1,2,3-cd) pyrene	BRL		µg/kg wet	66.0						
1-Methylnaphthalene	BRL		µg/kg wet	66.0						
2-Methylnaphthalene	BRL		µg/kg wet	66.0						
Naphthalene	BRL		µg/kg wet	66.0						
Phenanthrene	BRL		µg/kg wet	66.0						
Pyrene	BRL		µg/kg wet	66.0						
Surrogate: 2-Fluorobiphenyl	*4130*		µg/kg wet		*6670*		*61.9*	*30-130*		
Surrogate: Terphenyl-dl4	*3960*		µg/kg wet		*6670*		*59.4*	*30-130*		
LCS (6040277-BS1)										
Prepared & Analyzed: 06-Apr-06										
Acenaphthene	3910		µg/kg wet	66.0	6670		58.6	40-140		
Acenaphthylene	4340		µg/kg wet	66.0	6670		65.1	40-140		
Anthracene	4070		µg/kg wet	66.0	6670		61.0	40-140		
Benzo (a) anthracene	4160		µg/kg wet	66.0	6670		62.4	40-140		
Benzo (a) pyrene	3720		µg/kg wet	66.0	6670		55.8	40-140		
Benzo (b) fluoranthene	3300		µg/kg wet	66.0	6670		49.5	40-140		
Benzo (g,h,i) perylene	3960		µg/kg wet	66.0	6670		59.4	40-140		
Benzo (k) fluoranthene	3720		µg/kg wet	66.0	6670		55.8	40-140		
Chrysene	4030		µg/kg wet	66.0	6670		60.4	40-140		
Dibenzo (a,h) anthracene	3900		µg/kg wet	66.0	6670		58.5	40-140		
Fluoranthene	4030		µg/kg wet	66.0	6670		60.4	40-140		
Fluorene	4060		µg/kg wet	66.0	6670		60.9	40-140		
Indeno (1,2,3-cd) pyrene	4150		µg/kg wet	66.0	6670		62.2	40-140		
1-Methylnaphthalene	3850		µg/kg wet	66.0	6670		57.7	40-140		
2-Methylnaphthalene	3240		µg/kg wet	66.0	6670		48.6	40-140		
Naphthalene	2940		µg/kg wet	66.0	6670		44.1	40-140		
Phenanthrene	3800		µg/kg wet	66.0	6670		57.0	40-140		
Pyrene	3740		µg/kg wet	66.0	6670		56.1	40-140		
Surrogate: 2-Fluorobiphenyl	*4300*		µg/kg wet		*6670*		*64.5*	*30-130*		
Surrogate: Terphenyl-dl4	*4280*		µg/kg wet		*6670*		*64.2*	*30-130*		
Duplicate (6040277-DUP1)	Source: SA42835-04									
Prepared & Analyzed: 06-Apr-06										
Acenaphthene	BRL		µg/kg dry	136		BRL				50
Acenaphthylene	BRL		µg/kg dry	136		BRL				50
Anthracene	BRL		µg/kg dry	136		BRL				50
Benzo (a) anthracene	BRL		µg/kg dry	136		BRL				50
Benzo (a) pyrene	BRL		µg/kg dry	136		BRL				50
Benzo (b) fluoranthene	BRL		µg/kg dry	136		BRL				50
Benzo (g,h,i) perylene	BRL		µg/kg dry	136		BRL				50
Benzo (k) fluoranthene	BRL		µg/kg dry	136		BRL				50
Chrysene	BRL		µg/kg dry	136		BRL				50
Dibenzo (a,h) anthracene	BRL		µg/kg dry	136		BRL				50

Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6040277 - SW846 3550B										
Duplicate (6040277-DUP1)	Source: SA42835-04									
Prepared & Analyzed: 06-Apr-06										
Fluoranthene	BRL		µg/kg dry	136		BRL				50
Fluorene	BRL		µg/kg dry	136		BRL				50
Indeno (1,2,3-cd) pyrene	BRL		µg/kg dry	136		BRL				50
1-Methylnaphthalene	BRL		µg/kg dry	136		BRL				50
2-Methylnaphthalene	BRL		µg/kg dry	136		BRL				50
Naphthalene	BRL		µg/kg dry	136		BRL				50
Phenanthrene	BRL		µg/kg dry	136		BRL				50
Pyrene	BRL		µg/kg dry	136		BRL				50
Surrogate: 2-Fluorobiphenyl	*4580*		µg/kg dry		*6880*		*66.6*	*30-130*		
Surrogate: Terphenyl-dl4	*3830*		µg/kg dry		*6880*		*55.7*	*30-130*		
Matrix Spike (6040277-MS1)	Source: SA42835-04									
Prepared & Analyzed: 06-Apr-06										
Acenaphthene	4340		µg/kg dry	68.3	6900	BRL	62.9	40-140		
Pyrene	4030		µg/kg dry	68.3	6900	BRL	58.4	40-140		
Surrogate: 2-Fluorobiphenyl	*5030*		µg/kg dry		*6900*		*72.9*	*30-130*		
Surrogate: Terphenyl-dl4	*4980*		µg/kg dry		*6900*		*72.2*	*30-130*		
Matrix Spike Dup (6040277-MSD1)	Source: SA42835-04									
Prepared & Analyzed: 06-Apr-06										
Acenaphthene	4500		µg/kg dry	68.5	6910	BRL	65.1	40-140	3.44	30
Pyrene	4070		µg/kg dry	68.5	6910	BRL	58.9	40-140	0.853	30
Surrogate: 2-Fluorobiphenyl	*5060*		µg/kg dry		*6910*		*73.2*	*30-130*		
Surrogate: Terphenyl-dl4	*4950*		µg/kg dry		*6910*		*71.6*	*30-130*		

Total Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6040307 - EPA200/SW7000 Series										
Blank (6040307-BLK1)										
Prepared: 06-Apr-06 Analyzed: 07-Apr-06										
Mercury	BRL		mg/kg wet	0.0491						
Duplicate (6040307-DUP1)	Source: SA42943-01									
Prepared: 06-Apr-06 Analyzed: 07-Apr-06										
Mercury	0.447		mg/kg dry	0.0693		0.621			32.6	35
Matrix Spike (6040307-MS1)	Source: SA42943-02									
Prepared: 06-Apr-06 Analyzed: 07-Apr-06										
Mercury	0.498		mg/kg dry	0.0580	0.492	0.0422	92.6	75-125		
Matrix Spike (6040307-MS2)	Source: SA42979-08									
Prepared: 06-Apr-06 Analyzed: 07-Apr-06										
Mercury	0.468		mg/kg dry	0.0517	0.439	0.0342	98.8	75-125		
Post Spike (6040307-PS1)	Source: SA42943-02									
Prepared: 06-Apr-06 Analyzed: 07-Apr-06										
Mercury	0.514		mg/kg dry	0.0561	0.476	0.0422	99.1	75-125		
Reference (6040307-SRM1)										
Prepared: 06-Apr-06 Analyzed: 07-Apr-06										
Mercury	1.44	QC-3	mg/kg wet	0.0491	0.907		159	57.3-142.6		

Total Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6040306 - EPA 200 Series										
Blank (6040306-BLK1)										
Prepared: 06-Apr-06 Analyzed: 07-Apr-06										
Antimony	BRL		mg/kg wet	1.50						
Zinc	BRL		mg/kg wet	5.00						
Selenium	BRL		mg/kg wet	1.50						
Nickel	BRL		mg/kg wet	0.500						
Thallium	BRL		mg/kg wet	1.50						
Silver	BRL		mg/kg wet	1.00						
Copper	BRL		mg/kg wet	0.500						
Chromium	BRL		mg/kg wet	0.500						
Cadmium	BRL		mg/kg wet	0.250						
Beryllium	BRL		mg/kg wet	0.200						
Arsenic	BRL		mg/kg wet	1.50						
Lead	BRL		mg/kg wet	0.750						
LCS (6040306-BS1)										
Prepared: 06-Apr-06 Analyzed: 07-Apr-06										
Zinc	133		mg/kg wet	0.500	125		106	85-115		
Thallium	127		mg/kg wet	1.50	125		102	85-115		
Selenium	132		mg/kg wet	1.50	125		106	85-115		
Silver	132		mg/kg wet	1.00	125		106	85-115		
Antimony	120		mg/kg wet	1.50	125		96.0	85-115		
Nickel	131		mg/kg wet	0.500	125		105	85-115		
Arsenic	122		mg/kg wet	1.50	125		97.6	85-115		
Chromium	126		mg/kg wet	0.500	125		101	85-115		
Copper	124		mg/kg wet	0.500	125		99.2	85-115		
Beryllium	120		mg/kg wet	0.200	125		96.0	85-115		
Lead	132		mg/kg wet	0.750	125		106	85-115		
Cadmium	132		mg/kg wet	0.250	125		106	85-115		
Duplicate (6040306-DUP1)	Source: SA42943-01									
Prepared: 06-Apr-06 Analyzed: 07-Apr-06										
Antimony	BRL		mg/kg dry	2.08		1.08			10.4	35
Selenium	BRL		mg/kg dry	2.08		0.888				35
Thallium	BRL		mg/kg dry	2.08		BRL				35
Zinc	85.7		mg/kg dry	0.695		81.8			4.66	35
Silver	BRL		mg/kg dry	1.39		BRL				35
Nickel	6.34		mg/kg dry	0.695		6.06			4.52	35
Chromium	49.3		mg/kg dry	0.695		46.7			5.42	35
Copper	77.5		mg/kg dry	0.695		73.6			5.16	35
Lead	140		mg/kg dry	1.04		134			4.38	35
Cadmium	0.646		mg/kg dry	0.347		0.618			4.43	35
Beryllium	0.403		mg/kg dry	0.278		0.375			7.20	35
Arsenic	5.05		mg/kg dry	2.08		4.90			3.02	35
Matrix Spike (6040306-MS1)	Source: SA42943-02									
Prepared: 06-Apr-06 Analyzed: 07-Apr-06										
Antimony	140		mg/kg dry	1.77	147	0.734	94.7	70-130		
Nickel	160		mg/kg dry	0.589	147	9.39	102	70-130		
Selenium	162		mg/kg dry	1.77	147	1.43	109	70-130		
Thallium	141		mg/kg dry	1.77	147	BRL	95.9	70-130		
Zinc	340	QM-07	mg/kg dry	0.589	147	127	145	70-130		
Silver	160		mg/kg dry	1.18	147	BRL	109	70-130		
Beryllium	139		mg/kg dry	0.236	147	0.405	94.3	70-130		
Arsenic	162		mg/kg dry	1.77	147	10.4	103	70-130		
Lead	255		mg/kg dry	0.884	147	101	105	70-130		
Cadmium	153		mg/kg dry	0.295	147	0.503	104	70-130		
Chromium	410		mg/kg dry	0.589	147	280	88.4	70-130		

Total Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6040306 - EPA 200 Series										
Matrix Spike (6040306-MS1)	Source: SA42943-02									
Prepared: 06-Apr-06 Analyzed: 07-Apr-06										
Copper	185		mg/kg dry	0.589	147	23.6	110	70-130		
Matrix Spike (6040306-MS2)	Source: SA42979-08									
Prepared: 06-Apr-06 Analyzed: 07-Apr-06										
Silver	126		mg/kg dry	0.921	115	BRL	110	70-130		
Antimony	109		mg/kg dry	1.38	115	0.580	94.3	70-130		
Selenium	125		mg/kg dry	1.33	115	BRL	109	70-130		
Nickel	122		mg/kg dry	0.460	115	2.01	104	70-130		
Zinc	145		mg/kg dry	0.460	115	18.6	110	70-130		
Thallium	117		mg/kg dry	1.38	115	BRL	102	70-130		
Cadmium	121		mg/kg dry	0.230	115	0.106	105	70-130		
Beryllium	111		mg/kg dry	0.184	115	0.142	96.4	70-130		
Arsenic	117		mg/kg dry	1.38	115	1.30	101	70-130		
Lead	145		mg/kg dry	0.690	115	18.4	110	70-130		
Copper	131		mg/kg dry	0.460	115	5.80	109	70-130		
Chromium	123		mg/kg dry	0.460	115	3.36	104	70-130		
Post Spike (6040306-PS1)	Source: SA42943-02									
Prepared: 06-Apr-06 Analyzed: 07-Apr-06										
Thallium	133		mg/kg dry	1.65	138	BRL	96.4	85-115		
Silver	149		mg/kg dry	1.10	138	BRL	108	85-115		
Selenium	151		mg/kg dry	1.65	138	1.43	108	85-115		
Nickel	149		mg/kg dry	0.550	138	9.39	101	85-115		
Antimony	127		mg/kg dry	1.65	138	0.734	91.5	85-115		
Lead	245		mg/kg dry	0.825	138	101	104	85-115		
Copper	173		mg/kg dry	0.550	138	23.6	108	85-115		
Beryllium	127		mg/kg dry	0.220	138	0.405	91.7	85-115		
Arsenic	149		mg/kg dry	1.65	138	10.4	100	85-115		
Cadmium	141		mg/kg dry	0.275	138	0.503	102	85-115		
Reference (6040306-SRM1)										
Prepared: 06-Apr-06 Analyzed: 07-Apr-06										
Silver	107		mg/kg wet	1.00	76.7		140	31.5-169.3		
Nickel	93.8		mg/kg wet	0.500	90.2		104	81.7-118.3		
Antimony	91.6	QC-3	mg/kg wet	1.50	35.6		257	24.2-176.1		
Selenium	94.0		mg/kg wet	1.50	88.7		106	76.3-124.3		
Zinc	225		mg/kg wet	0.500	211		107	88.6-111.4		
Thallium	78.6		mg/kg wet	1.50	79.2		99.2	79.1-121.5		
Arsenic	106		mg/kg wet	1.50	109		97.2	59.9-140.6		
Beryllium	64.4		mg/kg wet	0.200	65.1		98.9	86.2-113.8		
Cadmium	127		mg/kg wet	0.250	126		101	86.5-113.1		
Chromium	162		mg/kg wet	0.500	150		108	76.3-123.7		
Copper	69.6		mg/kg wet	0.500	64.6		108	83.7-117.1		
Lead	77.0		mg/kg wet	0.750	75.2		102	85.3-115.3		

General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6040254 - General Preparation										
Duplicate (6040254-DUP1)	Source: SA42908-01									
Prepared & Analyzed: 05-Apr-06										
% Solids	69.6		%			70.1			0.716	20

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* Reportable Detection Limit BRL = Below Reporting Limit

Notes and Definitions

QC-3	The spike recovery is outside acceptable limits for the LCS. The batch was accepted based upon the MS and/or MSD meeting the LCS limits criteria.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
BRL	Below Reporting Limit - Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
NR	Not Reported
RPD	Relative Percent Difference

A plus sign (+) in the Method Reference column indicates the method is not accredited by NELAC.

Laboratory Control Sample (LCS): A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix.

Matrix Spike: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

Surrogate: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and

Validated by:
Hanibal C. Tayeh, Ph.D.
Nicole Brown

SA 42943 (mo)

SPECTRUM ANALYTICAL, INC.
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CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
- ☐ Standard TAT - 7 to 10 business days
- ☒ Rush TAT - Date Needed: 4/11/06
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: Jacques Whitford Co
24 Albion Rd. Suite 220
Lincoln, RI 02865

Project Mgr.: Joe Unsworth

Invoice To: Same

P.O. No.: 1009825.01 RQN:

Project No.: 1009825.01
Site Name: 198 Potter Hill Rd
Location: Westerly State: RI
Sampler(s): JTU

1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid
7=CH_3OH 8=$NaHSO_4$ 9=____ 10=____

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW=Surface Water SO=Soil SL=Sludge A=Air
X1=____ X2=____ X3=____

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Preservative	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic		PPB Metals	PAHs-8270						
SA42943-01	TP3/S1	4/3/06		G	SO			1				X	X						
↓ 02	TP5/S1	4/3/06		G	SO			1				X	X						

Containers: / Analyses:

QA Reporting Notes: (check if needed)
- ☐ Provide MA DEP MCP CAM Report
- ☐ Provide CT DPH RCP Report

QA/QC Reporting Level
☐ Standard ☐ No QC
☐ Other____

State specific reporting standards:

☐ Fax results when available to (____)
☒ E-mail to junswort@jacqueswhitford.com
EDD Format

Condition upon receipt: ☐ Iced ☐ Ambient ☐ °C 4.7°F 5

Relinquished by:	Received by:	Date:	Time:
[signature]	Bergeron	4/4/06	11:34 AM
Bergeron	[signature]	4/4/06	1430

Ref.

11 Almgren Drive • Agawam, Massachusetts 01001 • 413-789-9018 • Fax 413-789-4076 • www.spectrum-analytical.com

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* Reportable Detection Limit BRL = Below Reporting Limit

APPENDIX C

Release Notification Form

Jacques Whitford

Engineering, Scientific, Planning and Management Consultants

24 Albion Road
Suite 220
Lincoln RI
United States 02865

Bus 401 312 8005
Fax 401 312 8010

www.jacqueswhitford.com

September 27, 2006

Rhode Island Department of Environmental Management
Office of Waste Management
Attn.: Ms. Kelly Owens
235 Promenade Street
Providence, RI 02908-5767

RE: Former Pawcatuck Woolen Mill
198 Potter Hill Road
Westerly, RI
Jacques Whitford Company Job No. 1009825

Dear Ms. Owens,

Jacques Whitford is submitting the attached Hazardous Material Release Notification Form on behalf of our client, Renewable Resources Inc., owner of the above referenced property. Jacques Whitford has completed a Phase I Environmental Site Assessment (ESA), Phase II ESA, and additional soil sampling.

Arsenic and beryllium have been detected in soil samples at concentrations greater than the Residential Direct Exposure Criteria (RDEC). Beryllium was detected in one of two soil samples at a concentration of 0.405 parts per million (ppm) which is slightly greater than the RDEC of 0.40 ppm. Arsenic was detected in one of the soil samples collected as part of the Phase II ESA above the RDEC. Both the arsenic and beryllium exceedances were detected in a soil sample collected from a small mound located adjacent to the former boiler building. The soil in this area appears to contain coal ash and/or coal slag.

In order to assess the extent of the soil impacts near the observed mound of coal ash/slag, an additional seventeen soil samples were collected and analyzed for arsenic. Arsenic was detected in nine of the seventeen soil samples at concentrations greater than RDEC. The exceedances ranged from 7.71 ppm to 58.9 ppm.

Jacques Whitford will be collecting additional soil samples in the area of the coal ash/slag to fully delineate the extent of the impacts. Additionally, two monitoring wells will be installed adjacent to the impacted area to assess impacts to the groundwater. Groundwater samples will be collected and analyzed for RCRA 8 metals. Once the additional soil samples and groundwater samples are collected and analyzed, a Site Investigation Report (SIR) will be submitted within three weeks to the RIDEM in accordance with Section 7.0 of the *Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases*. The Phase I and II ESAs completed by Jacques Whitford will be submitted as part of the SIR.

Also, the owner of the property is currently in the process of hiring a contractor to remove debris associated with a collapsed building and buried debris that was observed in test pits completed in the northwest corner of the property. Jacques Whitford collected samples of shingles and building paper from the debris of the

100% Post Consumer Content

collapsed building and had the samples analyzed for asbestos. No asbestos was detected in any of the materials. Soil samples were collected from the area of buried debris and analyzed for metals and polynuclear aromatic hydrocarbons (PAHs). No metals or PAHs were detected in the soil samples at concentrations greater than the applicable RDEC. Therefore, the building debris and buried debris will be disposed of as solid waste.

Since the debris associated with the collapsed building is located adjacent to the Pawcatuck River, we are currently ascertaining whether any approvals are required from the wetlands permitting program at the RIDEM. If an approval from the wetlands program is required, a request for approval will be submitted to the RIDEM. The removal of the debris will be completed within two weeks of receiving the wetland program approval.

Should you have any questions or require additional information, please do not hesitate to contact the undersigned at (401) 312-8005.

Sincerely,
JACQUES WHITFORD

Joseph T. Unsworth P.E.
Project Manager

Enclosure: Hazardous Material Release Notification Form

CC: James Ashton, RIDEM
Dennis Esposito, Adler, Pollack & Sheehan

Appendix C

DIVISION OF SITE REMEDIATION
HAZARDOUS MATERIAL RELEASE NOTIFICATION FORM

THIS FORM IS NOT TO BE USED TO REPORT AN IMMINENT HAZARD

1. Notifier Information

Name: **Renewable Resources Inc.**
Address: **900 North Strafford, Suite 2428, Arlington, VA 22203**

Phone: **703-405-2336**

Status: X Owner ___ Operator ___ Secured Creditor ___ Voluntary

2. Property Information

Name of Site: **Pawcatuck Woolen Mill**
Site Address: **198 Potter Hill Road, Westerly, RI**

Plat/Lot Numbers: **Plat 8, Lot 23**

Site Contact Person: **Dr. Edward Carapezza**

Site Contact Phone: **703-405-2336**

Site Land Usage Type: ___ Residential X Industrial/Commercial **(currently vacant)**

Location of Release: **Surface soils**

(attach site sketch as necessary)

3. Release Information

Date of Discovery: **September 20, 2006**
Source : **former coal storage and usage**
Release Media: **soils**

Hazardous Materials and Concentrations: **Arsenic ND-58.9 ppm, Beryllium ND-0.405 ppm**

(attach certificates of analysis as necessary)

Extent of Contamination: **Surface soils in limited area**

4. Resource Information

		proposed future use
Site Land Usage:	X Industrial/Commercial	___ Residential
Adjacent Land Usage:	X Industrial/Commercial	X Residential
Site Groundwater Class:	X GA/GAA	___ GB

Adjacent Groundwater Class: X GA/GAA ___ GB
(if different than site groundwater classification within 500 feet)

Nearest Surface Water or Wetland:

X Less Than 500 Feet X Greater Than 500 Feet

Potential for adverse impact No Yes/No

5. Potentially Responsible Parties

Name: **Renewable Resources Inc.**
Address: **900 North Strafford, Suite 2428, Arlington, VA 22203**

Status: X Owner ___ Operator ___ Other:_____

Name: _____

Address: _____

Status: ___ Owner ___ Operator ___ Other:_____

6. Measures Taken or Proposed to be Taken in Response to Release

excavate and dispose of arsenic impacted soils

7. Other Significant Remarks About Release (Will a background determination be made?)

Signature: _____ Date 9/24/06

Title: President

APPENDIX D

Laboratory Certificates of Analysis

Report Date:
20-Sep-06 10:16

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

Jacques Whitford Company, Inc.
24 Albion Rd, Suite 220
Lincoln, RI 02865
Attn: Joe Unsworth

Project: Potter Hill Mill - Westerly, RI
Project 1009825.02

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SA50766-01	SS-1	Soil	05-Sep-06 00:00	07-Sep-06 15:05
SA50766-02	SS-2	Soil	05-Sep-06 00:00	07-Sep-06 15:05
SA50766-03	SS-3	Soil	05-Sep-06 00:00	07-Sep-06 15:05
SA50766-04	SS-4	Soil	05-Sep-06 00:00	07-Sep-06 15:05
SA50766-05	SS-5	Soil	05-Sep-06 00:00	07-Sep-06 15:05
SA50766-06	SS-6	Soil	05-Sep-06 00:00	07-Sep-06 15:05
SA50766-07	SS-7	Soil	05-Sep-06 00:00	07-Sep-06 15:05
SA50766-08	SS-8	Soil	05-Sep-06 00:00	07-Sep-06 15:05
SA50766-09	SS-9	Soil	05-Sep-06 00:00	07-Sep-06 15:05
SA50766-10	SS-10	Soil	05-Sep-06 00:00	07-Sep-06 15:05
SA50766-11	SS-11	Soil	05-Sep-06 00:00	07-Sep-06 15:05
SA50766-12	SS-12	Soil	05-Sep-06 00:00	07-Sep-06 15:05
SA50766-13	SS-13	Soil	05-Sep-06 00:00	07-Sep-06 15:05
SA50766-14	SS-14	Soil	05-Sep-06 00:00	07-Sep-06 15:05
SA50766-15	SS-15	Soil	05-Sep-06 00:00	07-Sep-06 15:05
SA50766-16	SS-16	Soil	05-Sep-06 00:00	07-Sep-06 15:05
SA50766-17	SS-17	Soil	05-Sep-06 00:00	07-Sep-06 15:05

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.
All applicable NELAC requirements have been met
Please note that this report contains 7 pages of analytical data plus Chain of Custody document(s).
This report may not be reproduced, except in full, without written approval from Spectrum Analytical, Inc

Massachusetts Certification # M-MA138/MA1110
Connecticut # PH-0777
Florida # E87600/E87936
Maine # MA138
New Hampshire # 2538/2972
New Jersey # MA011/MA012
New York # 11393/11840
Rhode Island # 98
USDA # S-51435
Vermont # VT-11393

ACCREDITED IN ACCORDANCE WITH nelac

Authorized by:

Hanibal C. Tayeh, Ph.D.
President/Laboratory Director

Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Spectrum is currently accredited for the specific method indicated. Please refer to our "Quality" webpage at www.spectrum-analytical.com for a full listing of our current certifications.

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-1 SA50766-01	1009825.02	Soil	05-Sep-06 00:00	07-Sep-06

CAS No. Analyte(s)	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Batch*	*Analyst*
Total Metals by EPA 200 Series Methods										
7440-38-2 Arsenic	1.71		mg/kg dry	1.57	1	EPA 200.7	11-Sep-06	12-Sep-06	6090571	TGP
General Chemistry Parameters										
% Solids	92.0		%		1	SM2540 G Mod.	15-Sep-06	15-Sep-06	6090977	YM

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-2 SA50766-02	1009825.02	Soil	05-Sep-06 00:00	07-Sep-06

CAS No. Analyte(s)	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Batch*	*Analyst*
Total Metals by EPA 200 Series Methods										
7440-38-2 Arsenic	BRL		mg/kg dry	1.43	1	EPA 200.7	11-Sep-06	12-Sep-06	6090571	TGP
General Chemistry Parameters										
% Solids	95.6		%		1	SM2540 G Mod.	15-Sep-06	15-Sep-06	6090977	YM

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-3 SA50766-03	1009825.02	Soil	05-Sep-06 00:00	07-Sep-06

CAS No. Analyte(s)	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Batch*	*Analyst*
Total Metals by EPA 200 Series Methods										
7440-38-2 Arsenic	18.9		mg/kg dry	1.70	1	EPA 200.7	11-Sep-06	13-Sep-06	6090571	TGP
General Chemistry Parameters										
% Solids	82.7		%		1	SM2540 G Mod.	15-Sep-06	15-Sep-06	6090977	YM

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-4 SA50766-04	1009825.02	Soil	05-Sep-06 00:00	07-Sep-06

CAS No. Analyte(s)	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Batch*	*Analyst*
Total Metals by EPA 200 Series Methods										
7440-38-2 Arsenic	19.4		mg/kg dry	2.24	1	EPA 200.7	11-Sep-06	13-Sep-06	6090571	TGP
General Chemistry Parameters										
% Solids	65.8		%		1	SM2540 G Mod.	15-Sep-06	15-Sep-06	6090977	YM

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-5 SA50766-05	1009825.02	Soil	05-Sep-06 00:00	07-Sep-06

CAS No. Analyte(s)	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Batch*	*Analyst*
Total Metals by EPA 200 Series Methods										
7440-38-2 Arsenic	58.9		mg/kg dry	1.70	1	EPA 200.7	11-Sep-06	13-Sep-06	6090571	TGP
General Chemistry Parameters										
% Solids	83.2		%		1	SM2540 G Mod.	15-Sep-06	15-Sep-06	6090977	YM

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-6 SA50766-06	1009825.02	Soil	05-Sep-06 00:00	07-Sep-06

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Total Metals by EPA 200 Series Methods											
7440-38-2	Arsenic	22.5		mg/kg dry	1.80	1	EPA 200.7	11-Sep-06	13-Sep-06	6090571	TGP
General Chemistry Parameters											
	% Solids	80.9		%		1	SM2540 G Mod.	15-Sep-06	15-Sep-06	6090977	YM

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-7 SA50766-07	1009825.02	Soil	05-Sep-06 00:00	07-Sep-06

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Total Metals by EPA 200 Series Methods											
7440-38-2	Arsenic	14.7		mg/kg dry	1.76	1	EPA 200.7	11-Sep-06	13-Sep-06	6090571	TGP
General Chemistry Parameters											
	% Solids	80.0		%		1	SM2540 G Mod.	15-Sep-06	15-Sep-06	6090977	YM

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-8 SA50766-08	1009825.02	Soil	05-Sep-06 00:00	07-Sep-06

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Total Metals by EPA 200 Series Methods											
7440-38-2	Arsenic	8.54		mg/kg dry	1.84	1	EPA 200.7	11-Sep-06	13-Sep-06	6090571	TGP
General Chemistry Parameters											
	% Solids	80.5		%		1	SM2540 G Mod.	15-Sep-06	15-Sep-06	6090977	YM

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-9 SA50766-09	1009825.02	Soil	05-Sep-06 00:00	07-Sep-06

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Total Metals by EPA 200 Series Methods											
7440-38-2	Arsenic	BRL		mg/kg dry	2.09	1	EPA 200.7	11-Sep-06	13-Sep-06	6090571	TGP
General Chemistry Parameters											
	% Solids	70.1		%		1	SM2540 G Mod.	15-Sep-06	15-Sep-06	6090977	YM

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-10 SA50766-10	1009825.02	Soil	05-Sep-06 00:00	07-Sep-06

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Total Metals by EPA 200 Series Methods											
7440-38-2	Arsenic	BRL		mg/kg dry	2.17	1	EPA 200.7	11-Sep-06	13-Sep-06	6090571	TGP
General Chemistry Parameters											
	% Solids	69.1		%		1	SM2540 G Mod.	15-Sep-06	15-Sep-06	6090977	YM

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-11 SA50766-11	1009825.02	Soil	05-Sep-06 00:00	07-Sep-06

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Total Metals by EPA 200 Series Methods											
7440-38-2	Arsenic	14.0		mg/kg dry	1.69	1	EPA 200.7	11-Sep-06	13-Sep-06	6090571	TGP
General Chemistry Parameters											
	% Solids	84.4		%		1	SM2540 G Mod.	15-Sep-06	15-Sep-06	6090977	YM

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-12 SA50766-12	1009825.02	Soil	05-Sep-06 00:00	07-Sep-06

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Total Metals by EPA 200 Series Methods											
7440-38-2	Arsenic	4.01		mg/kg dry	1.98	1	EPA 200.7	11-Sep-06	13-Sep-06	6090571	TGP
General Chemistry Parameters											
	% Solids	73.3		%		1	SM2540 G Mod.	15-Sep-06	15-Sep-06	6090977	YM

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-13 SA50766-13	1009825.02	Soil	05-Sep-06 00:00	07-Sep-06

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Total Metals by EPA 200 Series Methods											
7440-38-2	Arsenic	3.22		mg/kg dry	1.92	1	EPA 200.7	11-Sep-06	13-Sep-06	6090571	TGP
General Chemistry Parameters											
	% Solids	75.0		%		1	SM2540 G Mod.	15-Sep-06	16-Sep-06	6090979	YM

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-14 SA50766-14	1009825.02	Soil	05-Sep-06 00:00	07-Sep-06

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Total Metals by EPA 200 Series Methods											
7440-38-2	Arsenic	3.57		mg/kg dry	1.93	1	EPA 200.7	11-Sep-06	13-Sep-06	6090571	TGP
General Chemistry Parameters											
	% Solids	76.5		%		1	SM2540 G Mod.	15-Sep-06	16-Sep-06	6090979	YM

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-15 SA50766-15	1009825.02	Soil	05-Sep-06 00:00	07-Sep-06

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Total Metals by EPA 200 Series Methods											
7440-38-2	Arsenic	7.71		mg/kg dry	1.95	1	EPA 200.7	11-Sep-06	13-Sep-06	6090571	TGP
General Chemistry Parameters											
	% Solids	73.7		%		1	SM2540 G Mod.	15-Sep-06	16-Sep-06	6090979	YM

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-16 SA50766-16	1009825.02	Soil	05-Sep-06 00:00	07-Sep-06

CAS No. Analyte(s)	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Batch*	*Analyst*
Total Metals by EPA 200 Series Methods										
7440-38-2 Arsenic	13.1		mg/kg dry	1.82	1	EPA 200.7	11-Sep-06	13-Sep-06	6090571	TGP
General Chemistry Parameters										
% Solids	81.4		%		1	SM2540 G Mod.	15-Sep-06	16-Sep-06	6090979	YM

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-17 SA50766-17	1009825.02	Soil	05-Sep-06 00:00	07-Sep-06

CAS No. Analyte(s)	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Batch*	*Analyst*
Total Metals by EPA 200 Series Methods										
7440-38-2 Arsenic	4.88		mg/kg dry	1.72	1	EPA 200.7	11-Sep-06	13-Sep-06	6090571	TGP
General Chemistry Parameters										
% Solids	79.9		%		1	SM2540 G Mod.	15-Sep-06	16-Sep-06	6090979	YM

Total Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6090571 - EPA 200 Series										
Blank (6090571-BLK1)										
Prepared: 11-Sep-06 Analyzed: 12-Sep-06										
Arsenic	BRL		mg/kg wet	1.40						
LCS (6090571-BS1)										
Prepared: 11-Sep-06 Analyzed: 13-Sep-06										
Arsenic	123		mg/kg wet	1.50	125		98.4	85-115		
Duplicate (6090571-DUP1) Source: SA50766-01										
Prepared: 11-Sep-06 Analyzed: 12-Sep-06										
Arsenic	BRL		mg/kg dry	1.62		1.71			12.4	35
Matrix Spike (6090571-MS1) Source: SA50766-08										
Prepared: 11-Sep-06 Analyzed: 13-Sep-06										
Arsenic	149		mg/kg dry	1.80	150	8.54	93.6	70-130		
Post Spike (6090571-PS1) Source: SA50766-08										
Prepared: 11-Sep-06 Analyzed: 13-Sep-06										
Arsenic	160		mg/kg dry	1.83	152	8.54	99.6	85-115		
Reference (6090571-SRM1)										
Prepared: 11-Sep-06 Analyzed: 13-Sep-06										
Arsenic	129		mg/kg wet	1.50	131		98.5	79.8-120.2		

General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6090977 - General Preparation										
Duplicate (6090977-DUP1) Source: SA50727-02										
Prepared & Analyzed: 15-Sep-06										
% Solids	88.0		%			87.6			0.456	20
Batch 6090979 - General Preparation										
Duplicate (6090979-DUP1) Source: SA50766-13										
Prepared: 15-Sep-06 Analyzed: 16-Sep-06										
% Solids	75.4		%			75.0			0.532	20
Duplicate (6090979-DUP2) Source: SA50766-14										
Prepared: 15-Sep-06 Analyzed: 16-Sep-06										
% Solids	77.4		%			76.5			1.17	20

Notes and Definitions

BRL	Below Reporting Limit - Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
NR	Not Reported
RPD	Relative Percent Difference

A plus sign (+) in the Method Reference column indicates the method is not accredited by NELAC

Laboratory Control Sample (LCS): A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix

Matrix Spike: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure The method blank is used to document contamination resulting from the analytical process

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction Sample RDLs are highly matrix-dependent.

Surrogate: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

Validated by:
Hanibal C. Tayeh, Ph.D.
June O'Connor

MA 50766 @

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CHAIN OF CUSTODY RECORD

Page 1 of 2

Special Handling:
- ☒ Standard TAT - 7 to 10 business days
- ☐ Rush TAT - Date Needed: _____
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: Jacques Whitford
24 Albion Rd, Suite 220
Lincoln, RI 02865

Project Mgr.: Joe Unsworth

Invoice To: Same
WH601 3050 (QW)

P.O. No.: 1009825.02 RQN: _____

Project No.: 1009825.02
Site Name: Potter Hill Mill
Location: Westerly State: RI
Sampler(s): JTU

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid
7=CH_3OH 8= $NaHSO_4$ 9=_____ 10=_____

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1=_____ X2=_____ X3=_____

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Preservative	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analyses: Arsenic-Total	QA Reporting Notes: (check if needed)
50766-01	SS-1	9/5/06		G	SO	-		1			X	
-02	SS-2	9/5/06		G	SO	-		1			X	
-03	SS-3	9/5/06		G	SO	-		1			X	
-04	SS-4	9/5/06		G	SO	-		1			X	
-05	SS-5	9/5/06		G	SO	-		1			X	
-06	SS-6	9/5/06		G	SO	-		1			X	
-07	SS-7	9/5/06		G	SO	-		1			X	
-08	SS-8	9/5/06		G	SO	-		1			X	
-09	SS-9	9/5/06		G	SO	-		1			X	
-10	SS-10	9/5/06		G	SO	-		1			X	

QA Reporting Notes (check if needed):
- ☐ Provide MA DEP MCP CAM Report
- ☐ Provide CT DPH RCP Report

QA/QC Reporting Level
☐ Standard ☐ No QC
☐ Other _____

State specific reporting standards: _____

☐ Fax results when available to (_____) _____
☒ E-mail to junswort@jacqueswhitford.com
EDD Format _____

Condition upon receipt: ☐ Iced ☐ Ambient ☐ °C 2.8

Relinquished by:	Received by:	Date:	Time:
		9-7-06	13:15
		9/7/06	15:05

Gun 4 REF

11 Almgren Drive • Agawam, Massachusetts 01001 • 413-789-9018 • Fax 413-789-4076 • www.spectrum-analytical.com

50766

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Page 2 of 2

Special Handling:
☑ Standard TAT - 7 to 10 business days
☐ Rush TAT - Date Needed:_____
· All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
· Samples disposed of after 60 days unless otherwise instructed.

Report To: Jacques Whitford
24 Albion Rd, Suite 220
Lincoln, RI

Project Mgr.: Joe Unsworth

Invoice To: same

P.O. No.: 1009825.02 RQN:

Project No.: 1009825.02
Site Name: Potter Hill Mill
Location: Westerly State: RI
Sampler(s): JTU

1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid
7=CH_3OH 8= $NaHSO_4$ 9=_____ 10=_____

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1=_____ X2=_____ X3=_____

G=Grab C=Composite

Containers: | Analyses:

QA Reporting Notes: (check if needed)
☐ Provide MA DEP MCP CAM Report
☐ Provide CT DPH RCP Report
QA/QC Reporting Level
☐ Standard ☐ No QC
☐ Other_____
State specific reporting standards:

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Preservative	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic		Arsenic-Total							
50766-11	SS-11	9/05/06		G	SO	–		1				X							
-12	SS-12	9/05/06		G	SO	–		1				X							
-13	SS-13	9/05/06		G	SO	–		1				X							
-14	SS-14	9/05/06		G	SO	–		1				X							
-15	SS-15	9/05/06		G	SO	–		1				X							
-16	SS-16	9/05/06		G	SO	–		1				X							
-17	SS-17	9/05/06		G	SO	–		1				X							

☐ Fax results when available to (____) _____
☑ E-mail to junswort@jacqueswhitford.com
EDD Format _____

Condition upon receipt: ☐ Iced ☐ Ambient ☑ °C 2.8

Relinquished by:	Received by:	Date:	Time:
[signature]	[signature]	9-7-06	1315
[signature]	[signature]	9/7/06	15:15

Gv - 4 PEK

Report Date:
27-Oct-06 15:13

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

Jacques Whitford Company, Inc.
24 Albion Rd, Suite 220
Lincoln, RI 02865
Attn: Joe Unsworth

Project: Potter Hill Mill - Westerly, RI
Project 1009825.04/100

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SA53093-01	SS-18	Soil	23-Oct-06 00:00	24-Oct-06 15:25
SA53093-02	SS-19	Soil	23-Oct-06 00:00	24-Oct-06 15:25
SA53093-03	SS-20	Soil	23-Oct-06 00:00	24-Oct-06 15:25

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.
All applicable NELAC requirements have been met.
Please note that this report contains 10 pages of analytical data plus Chain of Custody document(s).
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Connecticut # PH-0777
Florida # E87600/E87936
Maine # MA138
New Hampshire # 2538/2972
New Jersey # MA011/MA012
New York # 11393/11840
Rhode Island # 98
USDA # S-51435
Vermont # VT-11393

Authorized by:

Hanibal C. Tayeh, Ph.D.
President/Laboratory Director

Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Spectrum is currently accredited for the specific method indicated. Please refer to our "Quality" webpage at www.spectrum-analytical.com for a full listing of our current certifications.

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-18	1009825.04/100	Soil	23-Oct-06 00:00	24-Oct-06
SA53093-01				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3550B											
83-32-9	Acenaphthene	BRL		µg/kg dry	172	1	SW846 8270C	26-Oct-06	27-Oct-06	6101942	M.B
208-96-8	Acenaphthylene	BRL		µg/kg dry	172	1	"	"	"	"	"
120-12-7	Anthracene	BRL		µg/kg dry	172	1	"	"	"	"	"
56-55-3	Benzo (a) anthracene	BRL		µg/kg dry	172	1	"	"	"	"	"
50-32-8	Benzo (a) pyrene	186		µg/kg dry	172	1	"	"	"	"	"
205-99-2	Benzo (b) fluoranthene	249		µg/kg dry	172	1	"	"	"	"	"
191-24-2	Benzo (g,h,i) perylene	BRL		µg/kg dry	172	1	"	"	"	"	"
207-08-9	Benzo (k) fluoranthene	254		µg/kg dry	172	1	"	"	"	"	"
218-01-9	Chrysene	230		µg/kg dry	172	1	"	"	"	"	"
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/kg dry	172	1	"	"	"	"	"
206-44-0	Fluoranthene	397		µg/kg dry	172	1	"	"	"	"	"
86-73-7	Fluorene	BRL		µg/kg dry	172	1	"	"	"	"	"
193-39-5	Indeno (1,2,3-cd) pyrene	BRL		µg/kg dry	172	1	"	"	"	"	"
90-12-0	1-Methylnaphthalene	BRL		µg/kg dry	172	1	"	"	"	"	"
91-57-6	2-Methylnaphthalene	BRL		µg/kg dry	172	1	"	"	"	"	"
91-20-3	Naphthalene	BRL		µg/kg dry	172	1	"	"	"	"	"
85-01-8	Phenanthrene	325		µg/kg dry	172	1	"	"	"	"	"
129-00-0	Pyrene	334		µg/kg dry	172	1	"	"	"	"	"
Surrogate recoveries:											
321-60-8	*2-Fluorobiphenyl*	*80.0*		*30-130 %*			"	"	"	"	"
1718-51-0	*Terphenyl-dl4*	*92.1*		*30-130 %*			"	"	"	"	"
Total Metals by EPA 6000/7000 Series Methods											
7439-97-6	Mercury	BRL		mg/kg dry	0.0341	1	SW846 7471A	26-Oct-06	27-Oct-06	6101865	Win
Total Metals by EPA 200 Series Methods											
7440-22-4	Silver	2.37		mg/kg dry	1.10	1	EPA 200.7	26-Oct-06	26-Oct-06	6101864	TGP
7440-38-2	Arsenic	10.3		mg/kg dry	1.66	1	"	"	"	"	"
7440-39-3	Barium	60.5		mg/kg dry	0.552	1	"	"	"	"	"
7440-43-9	Cadmium	0.441		mg/kg dry	0.276	1	"	"	"	"	"
7440-47-3	Chromium	12.9		mg/kg dry	0.552	1	"	"	"	"	"
7439-92-1	Lead	39.6		mg/kg dry	0.828	1	"	"	"	"	"
7782-49-2	Selenium	2.42		mg/kg dry	1.66	1	"	"	"	"	"
General Chemistry Parameters											
	% Solids	87.6		%		1	SM2540 G Mod.	25-Oct-06	25-Oct-06	6101910	BD

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-19 SA53093-02	1009825.04/100	Soil	23-Oct-06 00:00	24-Oct-06

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3550B											
83-32-9	Acenaphthene	BRL		µg/kg dry	177	1	SW846 8270C	26-Oct-06	27-Oct-06	6101942	M.B
208-96-8	Acenaphthylene	BRL		µg/kg dry	177	1	"	"	"	"	"
120-12-7	Anthracene	BRL		µg/kg dry	177	1	"	"	"	"	"
56-55-3	Benzo (a) anthracene	BRL		µg/kg dry	177	1	"	"	"	"	"
50-32-8	Benzo (a) pyrene	BRL		µg/kg dry	177	1	"	"	"	"	"
205-99-2	Benzo (b) fluoranthene	BRL		µg/kg dry	177	1	"	"	"	"	"
191-24-2	Benzo (g,h,i) perylene	BRL		µg/kg dry	177	1	"	"	"	"	"
207-08-9	Benzo (k) fluoranthene	179		µg/kg dry	177	1	"	"	"	"	"
218-01-9	Chrysene	231		µg/kg dry	177	1	"	"	"	"	"
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/kg dry	177	1	"	"	"	"	"
206-44-0	Fluoranthene	387		µg/kg dry	177	1	"	"	"	"	"
86-73-7	Fluorene	BRL		µg/kg dry	177	1	"	"	"	"	"
193-39-5	Indeno (1,2,3-cd) pyrene	BRL		µg/kg dry	177	1	"	"	"	"	"
90-12-0	1-Methylnaphthalene	BRL		µg/kg dry	177	1	"	"	"	"	"
91-57-6	2-Methylnaphthalene	BRL		µg/kg dry	177	1	"	"	"	"	"
91-20-3	Naphthalene	BRL		µg/kg dry	177	1	"	"	"	"	"
85-01-8	Phenanthrene	262		µg/kg dry	177	1	"	"	"	"	"
129-00-0	Pyrene	312		µg/kg dry	177	1	"	"	"	"	"
Surrogate recoveries:											
321-60-8	*2-Fluorobiphenyl*	*79.6*		*30-130 %*			"	"	"	"	"
1718-51-0	*Terphenyl-dl4*	*83.6*		*30-130 %*			"	"	"	"	"
Total Metals by EPA 6000/7000 Series Methods											
7439-97-6	Mercury	0.0507		mg/kg dry	0.0351	1	SW846 7471A	26-Oct-06	27-Oct-06	6101865	Win
Total Metals by EPA 200 Series Methods											
7440-22-4	Silver	BRL		mg/kg dry	1.18	1	EPA 200.7	26-Oct-06	26-Oct-06	6101864	TGP
7440-38-2	Arsenic	25.8		mg/kg dry	1.76	1	"	"	"	"	"
7440-39-3	Barium	68.1		mg/kg dry	0.588	1	"	"	"	"	"
7440-43-9	Cadmium	BRL		mg/kg dry	0.294	1	"	"	"	"	"
7440-47-3	Chromium	8.71		mg/kg dry	0.588	1	"	"	"	"	"
7439-92-1	Lead	28.1		mg/kg dry	0.882	1	"	"	"	"	"
7782-49-2	Selenium	3.91		mg/kg dry	1.76	1	"	"	"	"	"
General Chemistry Parameters											
	% Solids	84.9		%		1	SM2540 G Mod.	25-Oct-06	25-Oct-06	6101910	BD

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-20	1009825.04/100	Soil	23-Oct-06 00:00	24-Oct-06
SA53093-03				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3550B											
83-32-9	Acenaphthene	BRL		µg/kg dry	180	1	SW846 8270C	26-Oct-06	27-Oct-06	6101942	M.B
208-96-8	Acenaphthylene	BRL		µg/kg dry	180	1	"	"	"	"	"
120-12-7	Anthracene	BRL		µg/kg dry	180	1	"	"	"	"	"
56-55-3	Benzo (a) anthracene	224		µg/kg dry	180	1	"	"	"	"	"
50-32-8	Benzo (a) pyrene	215		µg/kg dry	180	1	"	"	"	"	"
205-99-2	Benzo (b) fluoranthene	228		µg/kg dry	180	1	"	"	"	"	"
191-24-2	Benzo (g,h,i) perylene	BRL		µg/kg dry	180	1	"	"	"	"	"
207-08-9	Benzo (k) fluoranthene	218		µg/kg dry	180	1	"	"	"	"	"
218-01-9	Chrysene	266		µg/kg dry	180	1	"	"	"	"	"
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/kg dry	180	1	"	"	"	"	"
206-44-0	Fluoranthene	413		µg/kg dry	180	1	"	"	"	"	"
86-73-7	Fluorene	BRL		µg/kg dry	180	1	"	"	"	"	"
193-39-5	Indeno (1,2,3-cd) pyrene	BRL		µg/kg dry	180	1	"	"	"	"	"
90-12-0	1-Methylnaphthalene	BRL		µg/kg dry	180	1	"	"	"	"	"
91-57-6	2-Methylnaphthalene	BRL		µg/kg dry	180	1	"	"	"	"	"
91-20-3	Naphthalene	BRL		µg/kg dry	180	1	"	"	"	"	"
85-01-8	Phenanthrene	319		µg/kg dry	180	1	"	"	"	"	"
129-00-0	Pyrene	424		µg/kg dry	180	1	"	"	"	"	"
Surrogate recoveries:											
321-60-8	*2-Fluorobiphenyl*	*76.0*		*30-130 %*			"	"	"	"	"
1718-51-0	*Terphenyl-dl4*	*86.3*		*30-130 %*			"	"	"	"	"
Total Metals by EPA 6000/7000 Series Methods											
7439-97-6	Mercury	0.152		mg/kg dry	0.0357	1	SW846 7471A	26-Oct-06	27-Oct-06	6101865	Win
Total Metals by EPA 200 Series Methods											
7440-22-4	Silver	BRL		mg/kg dry	1.16	1	EPA 200.7	26-Oct-06	26-Oct-06	6101864	TGP
7440-38-2	Arsenic	21.8		mg/kg dry	1.74	1	"	"	"	"	"
7440-39-3	Barium	116		mg/kg dry	0.581	1	"	"	"	"	"
7440-43-9	Cadmium	0.325		mg/kg dry	0.291	1	"	"	"	"	"
7440-47-3	Chromium	18.6		mg/kg dry	0.581	1	"	"	"	"	"
7439-92-1	Lead	156		mg/kg dry	0.872	1	"	"	"	"	"
7782-49-2	Selenium	3.00		mg/kg dry	1.74	1	"	"	"	"	"
General Chemistry Parameters											
	% Solids	83.4		%		1	SM2540 G Mod.	25-Oct-06	25-Oct-06	6101910	BD

Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6101942 - SW846 3550B										
Blank (6101942-BLK1)										
Prepared & Analyzed: 26-Oct-06										
Acenaphthene	BRL		µg/kg wet	66.0						
Acenaphthylene	BRL		µg/kg wet	66.0						
Anthracene	BRL		µg/kg wet	66.0						
Benzo (a) anthracene	BRL		µg/kg wet	66.0						
Benzo (a) pyrene	BRL		µg/kg wet	66.0						
Benzo (b) fluoranthene	BRL		µg/kg wet	66.0						
Benzo (g,h,i) perylene	BRL		µg/kg wet	66.0						
Benzo (k) fluoranthene	BRL		µg/kg wet	66.0						
Chrysene	BRL		µg/kg wet	66.0						
Dibenzo (a,h) anthracene	BRL		µg/kg wet	66.0						
Fluoranthene	BRL		µg/kg wet	66.0						
Fluorene	BRL		µg/kg wet	66.0						
Indeno (1,2,3-cd) pyrene	BRL		µg/kg wet	66.0						
1-Methylnaphthalene	BRL		µg/kg wet	66.0						
2-Methylnaphthalene	BRL		µg/kg wet	66.0						
Naphthalene	BRL		µg/kg wet	66.0						
Phenanthrene	BRL		µg/kg wet	66.0						
Pyrene	BRL		µg/kg wet	66.0						
Surrogate: 2-Fluorobiphenyl	*7680*		µg/kg wet		*13300*		*57.7*	*30-130*		
Surrogate: Terphenyl-dl4	*7770*		µg/kg wet		*13300*		*58.4*	*30-130*		
LCS (6101942-BS1)										
Prepared & Analyzed: 26-Oct-06										
Acenaphthene	4980		µg/kg wet	66.0	6670		74.7	40-140		
Acenaphthylene	5150		µg/kg wet	66.0	6670		77.2	40-140		
Anthracene	4750		µg/kg wet	66.0	6670		71.2	40-140		
Benzo (a) anthracene	5070		µg/kg wet	66.0	6670		76.0	40-140		
Benzo (a) pyrene	5100		µg/kg wet	66.0	6670		76.5	40-140		
Benzo (b) fluoranthene	5190		µg/kg wet	66.0	6670		77.8	40-140		
Benzo (g,h,i) perylene	5180		µg/kg wet	66.0	6670		77.7	40-140		
Benzo (k) fluoranthene	5390		µg/kg wet	66.0	6670		80.8	40-140		
Chrysene	4830		µg/kg wet	66.0	6670		72.4	40-140		
Dibenzo (a,h) anthracene	5570		µg/kg wet	66.0	6670		83.5	40-140		
Fluoranthene	5440		µg/kg wet	66.0	6670		81.6	40-140		
Fluorene	5340		µg/kg wet	66.0	6670		80.1	40-140		
Indeno (1,2,3-cd) pyrene	4680		µg/kg wet	66.0	6670		70.2	40-140		
1-Methylnaphthalene	4530		µg/kg wet	66.0	6670		67.9	40-140		
2-Methylnaphthalene	4440		µg/kg wet	66.0	6670		66.6	40-140		
Naphthalene	4630		µg/kg wet	66.0	6670		69.4	40-140		
Phenanthrene	5360		µg/kg wet	66.0	6670		80.4	40-140		
Pyrene	4260		µg/kg wet	66.0	6670		63.9	40-140		
Naphthalene-d8	40.0		µg/kg wet		40.0		66	50-200		
Acenaphthene-d10	40.0		µg/kg wet		40.0		69.3	50-200		
Phenanthrene-d10	40.0		µg/kg wet		40.0		70	50-200		
Chrysene-d12	40.0		µg/kg wet		40.0		79.3	50-200		
Perylene-d12	40.0		µg/kg wet		40.0		75.9	50-200		
Surrogate: 2-Fluorobiphenyl	*7690*		µg/kg wet		*6670*		*115*	*30-130*		
Surrogate: Terphenyl-dl4	*7210*		µg/kg wet		*6670*		*108*	*30-130*		
Duplicate (6101942-DUP1)	**Source: SA53146-02**									
Prepared & Analyzed: 26-Oct-06										
Acenaphthene	BRL		µg/kg dry	99.7		BRL				50
Acenaphthylene	BRL		µg/kg dry	99.7		BRL				50
Anthracene	BRL		µg/kg dry	99.7		BRL				50

Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6101942 - SW846 3550B										
Duplicate (6101942-DUP1)	**Source: SA53146-02**									
Prepared & Analyzed: 26-Oct-06										
Benzo (a) anthracene	BRL		µg/kg dry	99.7		BRL				50
Benzo (a) pyrene	BRL		µg/kg dry	99.7		BRL				50
Benzo (b) fluoranthene	BRL		µg/kg dry	99.7		BRL				50
Benzo (g,h,i) perylene	BRL		µg/kg dry	99.7		BRL				50
Benzo (k) fluoranthene	BRL		µg/kg dry	99.7		BRL				50
Chrysene	BRL		µg/kg dry	99.7		BRL				50
Dibenzo (a,h) anthracene	BRL		µg/kg dry	99.7		BRL				50
Fluoranthene	BRL		µg/kg dry	99.7		BRL				50
Fluorene	BRL		µg/kg dry	99.7		BRL				50
Indeno (1,2,3-cd) pyrene	BRL		µg/kg dry	99.7		BRL				50
1-Methylnaphthalene	BRL		µg/kg dry	99.7		BRL				50
2-Methylnaphthalene	BRL		µg/kg dry	99.7		BRL				50
Naphthalene	BRL		µg/kg dry	99.7		BRL				50
Phenanthrene	BRL		µg/kg dry	99.7		BRL				50
Pyrene	BRL		µg/kg dry	99.7		BRL				50
Surrogate: 2-Fluorobiphenyl	*2910*		µg/kg dry		*5030*		*57.9*	*30-130*		
Surrogate: Terphenyl-dl4	*2800*		µg/kg dry		*5030*		*55.7*	*30-130*		
Matrix Spike (6101942-MS1)	**Source: SA53146-02**									
Prepared & Analyzed: 26-Oct-06										
Acenaphthene	3120		µg/kg dry	50.5	5100	BRL	61.2	40-140		
Pyrene	3130		µg/kg dry	50.5	5100	BRL	61.4	40-140		
Naphthalene-d8	40.0		µg/kg dry		40.0		123	50-200		
Acenaphthene-d10	40.0		µg/kg dry		40.0		126	50-200		
Phenanthrene-d10	40.0		µg/kg dry		40.0		116	50-200		
Chrysene-d12	40.0		µg/kg dry		40.0		109	50-200		
Perylene-d12	40.0		µg/kg dry		40.0		97.6	50-200		
Surrogate: 2-Fluorobiphenyl	*4140*		µg/kg dry		*5100*		*81.2*	*30-130*		
Surrogate: Terphenyl-dl4	*4400*		µg/kg dry		*5100*		*86.3*	*30-130*		
Matrix Spike Dup (6101942-MSD1)	**Source: SA53146-02**									
Prepared & Analyzed: 26-Oct-06										
Acenaphthene	3410		µg/kg dry	50.7	5120	BRL	66.6	40-140	8.45	30
Pyrene	3220		µg/kg dry	50.7	5120	BRL	62.9	40-140	2.41	30
Surrogate: 2-Fluorobiphenyl	*4240*		µg/kg dry		*5120*		*82.8*	*30-130*		
Surrogate: Terphenyl-dl4	*4270*		µg/kg dry		*5120*		*83.4*	*30-130*		

Total Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6101865 - EPA200/SW7000 Series										
Blank (6101865-BLK1)										
Prepared: 26-Oct-06 Analyzed: 27-Oct-06										
Mercury	BRL		mg/kg wet	0.0291						
Duplicate (6101865-DUP1) **Source: SA53093-01**										
Prepared: 26-Oct-06 Analyzed: 27-Oct-06										
Mercury	0.0233	J,QR1	mg/kg dry	0.0342		0.0118			65.5	35
Matrix Spike (6101865-MS1) **Source: SA53093-02**										
Prepared: 26-Oct-06 Analyzed: 27-Oct-06										
Mercury	0.503		mg/kg dry	0.0348	0.484	0.0507	93.5	75-125		
Post Spike (6101865-PS1) **Source: SA53093-02**										
Prepared: 26-Oct-06 Analyzed: 27-Oct-06										
Mercury	0.507		mg/kg dry	0.0349	0.485	0.0507	94.1	75-125		
Reference (6101865-SRM1)										
Prepared: 26-Oct-06 Analyzed: 27-Oct-06										
Mercury	1.06		mg/kg wet	0.0300	1.09		97.2	68.2-132.1		

Total Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6101864 - EPA 200 Series										
Blank (6101864-BLK1)										
Prepared & Analyzed: 26-Oct-06										
Silver	BRL		mg/kg wet	0.942						
Selenium	BRL		mg/kg wet	1.41						
Lead	BRL		mg/kg wet	0.707						
Cadmium	BRL		mg/kg wet	0.236						
Chromium	BRL		mg/kg wet	0.471						
Arsenic	BRL		mg/kg wet	1.41						
Barium	BRL		mg/kg wet	0.471						
LCS (6101864-BS1)										
Prepared & Analyzed: 26-Oct-06										
Selenium	125		mg/kg wet	1.50	125		100	85-115		
Silver	138		mg/kg wet	1.00	125		110	85-115		
Lead	116		mg/kg wet	0.750	125		92.8	85-115		
Cadmium	122		mg/kg wet	0.250	125		97.6	85-115		
Arsenic	120		mg/kg wet	1.50	125		96.0	85-115		
Chromium	117		mg/kg wet	0.500	125		93.6	85-115		
Barium	137		mg/kg wet	0.500	125		110	85-115		
Duplicate (6101864-DUP1)	**Source: SA53093-01**									
Prepared & Analyzed: 26-Oct-06										
Selenium	2.43		mg/kg dry	1.71		2.42			0.412	35
Silver	2.46		mg/kg dry	1.14		2.37			3.73	35
Lead	35.6		mg/kg dry	0.855		39.6			10.6	35
Arsenic	9.46		mg/kg dry	1.71		10.3			8.50	35
Cadmium	0.359		mg/kg dry	0.285		0.441			20.5	35
Chromium	22.5	QR5	mg/kg dry	0.570		12.9			54.2	35
Barium	56.1		mg/kg dry	0.570		60.5			7.55	35
Matrix Spike (6101864-MS1)	**Source: SA53093-02**									
Prepared & Analyzed: 26-Oct-06										
Silver	168		mg/kg dry	1.16	145	BRL	116	70-130		
Selenium	153		mg/kg dry	1.74	145	3.91	103	70-130		
Arsenic	167		mg/kg dry	1.74	145	25.8	97.4	70-130		
Cadmium	143		mg/kg dry	0.291	145	0.282	98.4	70-130		
Chromium	150		mg/kg dry	0.581	145	8.71	97.4	70-130		
Lead	163		mg/kg dry	0.872	145	28.1	93.0	70-130		
Barium	244		mg/kg dry	0.581	145	68.1	121	70-130		
Post Spike (6101864-PS1)	**Source: SA53093-02**									
Prepared & Analyzed: 26-Oct-06										
Silver	161		mg/kg dry	1.17	146	BRL	110	85-115		
Selenium	153		mg/kg dry	1.75	146	3.91	102	85-115		
Arsenic	167		mg/kg dry	1.75	146	25.8	96.7	85-115		
Cadmium	142		mg/kg dry	0.292	146	0.282	97.1	85-115		
Chromium	150		mg/kg dry	0.584	146	8.71	96.8	85-115		
Lead	159		mg/kg dry	0.876	146	28.1	89.7	85-115		
Barium	233		mg/kg dry	0.584	146	68.1	113	85-115		
Reference (6101864-SRM1)										
Prepared & Analyzed: 26-Oct-06										
Silver	73.4		mg/kg wet	1.00	62.6		117	61.2-139		
Selenium	95.0		mg/kg wet	1.50	88.0		108	75.7-124.3		
Cadmium	60.0		mg/kg wet	0.250	59.5		101	81.5-118.8		
Arsenic	133		mg/kg wet	1.50	131		102	79.8-120.2		
Chromium	36.1		mg/kg wet	0.500	37.0		97.6	78.6-121.4		

Total Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6101864 - EPA 200 Series										
Reference (6101864-SRM1)										
Prepared & Analyzed: 26-Oct-06										
Lead	82.2		mg/kg wet	0.750	84.4		97.4	80.7-119.3		
Barium	265		mg/kg wet	0.500	240		110	82-118.1		

General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6101910 - General Preparation										
Duplicate (6101910-DUP1) **Source: SA52864-01**										
Prepared & Analyzed: 25-Oct-06										
% Solids	88.3		%			90.1			2.02	20

Notes and Definitions

QR1	Analyses are not controlled on RPD values from sample concentrations less than 10 times the reporting limit. QC batch accepted based on LCS and/or LCSD QC results.
QR5	RPD out of acceptance range.
BRL	Below Reporting Limit - Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
NR	Not Reported
RPD	Relative Percent Difference

A plus sign (+) in the Method Reference column indicates the method is not accredited by NELAC.

Laboratory Control Sample (LCS): A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix.

Matrix Spike: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

Surrogate: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

Validated by:
Hanibal C. Tayeh, Ph.D.
Nicole Brown

SA53093 mj

SPECTRUM ANALYTICAL, INC.
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HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
- ☐ Standard TAT - 7 to 10 business days
- ☒ Rush TAT - Date Needed: 10/27/06
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: Jacques Whitford Co
24 Albion Rd / Suite 220
Lincln, RI 02865

Project Mgr.: Joe Unsworth

Invoice To: Same

P.O. No.: 100925.03 1100 RQN:

Project No.: 100925.03 / 100
Site Name: Potter Hill Mill
Location: Westerly State: RI
Sampler(s): Joe Unsworth

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid
7=CH_3OH 8= $NaHSO_4$ 9=_____ 10=_____

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1=_____ X2=_____ X3=_____

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Preservative	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analyses: RCRA8/Metals	OA Hs 8270	QA Reporting Notes: (check if needed)
SA53093-01	SS-18	10/23/06		G	SO	1		1			X	X	
-02	SS-19	10/23/06		G	SO	1		1			X	X	
-03	SS-20	10/23/06		G	SO	1		1			X	X	

☐ Provide MA DEP MCP CAM Report
☐ Provide CT DPH RCP Report

QA/QC Reporting Level
☒ Standard ☐ No QC
☐ Other_____

State specific reporting standards:

☐ Fax results when available to (____) _____
☒ E-mail to junswort@jacobswhitford
EDD Format _____

Condition upon receipt: ☐ Iced ☐ Ambient ☐ °C 4.1.9 +0.2

Relinquished by:	Received by:	Date:	Time:
Joe Unsworth	Bergeron	10/24/06	11:11 A.M.
Bergeron	[illegible]	10-24-06	1525

Ref.

11 Almgren Drive • Agawam, Massachusetts 01001 • 413-789-9018 • Fax 413-789-4076 • www.spectrum-analytical.com

Report Date:
03-Nov-06 15:35

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

Jacques Whitford Company, Inc.
24 Albion Rd, Suite 220
Lincoln, RI 02865
Attn: Joe Unsworth

Project: Potter Hill Mill - Westerly, RI
Project 1009825.04/Phase 100

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SA53403-01	SS-21	Soil	23-Oct-06 00:00	31-Oct-06 15:10
SA53403-02	SS-22	Soil	23-Oct-06 00:00	31-Oct-06 15:10
SA53403-03	SS-23	Soil	23-Oct-06 00:00	31-Oct-06 15:10

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.
All applicable NELAC requirements have been met.
Please note that this report contains 6 pages of analytical data plus Chain of Custody document(s).
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New Hampshire # 2538/2972
New Jersey # MA011/MA012
New York # 11393/11840
Rhode Island # 98
USDA # S-51435
Vermont # VT-11393

ACCREDITED IN ACCORDANCE WITH nelac

Authorized by:

Hanibal C. Tayeh, Ph.D.
President/Laboratory Director

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Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-21 SA53403-01	1009825.04/Phase 100	Soil	23-Oct-06 00:00	31-Oct-06

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Total Metals by EPA 6000/7000 Series Methods											
7439-97-6	Mercury	0.154		mg/kg dry	0.0336	1	SW846 7471A	01-Nov-06	03-Nov-06	6102383	YP
Total Metals by EPA 200 Series Methods											
7440-22-4	Silver	3.08		mg/kg dry	1.07	1	EPA 200.7	01-Nov-06	02-Nov-06	6102382	LR
7440-38-2	Arsenic	13.5		mg/kg dry	1.60	1	"	"	"	"	"
7440-39-3	Barium	88.8		mg/kg dry	0.533	1	"	"	"	"	"
7440-43-9	Cadmium	0.341		mg/kg dry	0.266	1	"	"	"	"	"
7440-47-3	Chromium	9.73		mg/kg dry	0.533	1	"	"	"	"	"
7439-92-1	Lead	45.2		mg/kg dry	0.799	1	"	"	"	"	"
7782-49-2	Selenium	BRL		mg/kg dry	1.60	1	"	"	"	"	"
General Chemistry Parameters											
	% Solids	89.2		%		1	SM2540 G Mod.	02-Nov-06	02-Nov-06	6110149	YM

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-22 SA53403-02	1009825.04/Phase 100	Soil	23-Oct-06 00:00	31-Oct-06

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Total Metals by EPA 6000/7000 Series Methods											
7439-97-6	Mercury	0.0512		mg/kg dry	0.0345	1	SW846 7471A	01-Nov-06	03-Nov-06	6102383	YP
Total Metals by EPA 200 Series Methods											
7440-22-4	Silver	BRL		mg/kg dry	1.13	1	EPA 200.7	01-Nov-06	02-Nov-06	6102382	LR
7440-38-2	Arsenic	20.5		mg/kg dry	1.69	1	"	"	"	"	"
7440-39-3	Barium	83.8		mg/kg dry	0.563	1	"	"	"	"	"
7440-43-9	Cadmium	0.417		mg/kg dry	0.282	1	"	"	"	"	"
7440-47-3	Chromium	11.7		mg/kg dry	0.563	1	"	"	"	"	"
7439-92-1	Lead	69.8		mg/kg dry	0.845	1	"	"	"	"	"
7782-49-2	Selenium	2.08		mg/kg dry	1.69	1	"	"	"	"	"
General Chemistry Parameters											
	% Solids	86.3		%		1	SM2540 G Mod.	02-Nov-06	02-Nov-06	6110149	YM

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-23 SA53403-03	1009825.04/Phase 100	Soil	23-Oct-06 00:00	31-Oct-06

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Total Metals by EPA 6000/7000 Series Methods											
7439-97-6	Mercury	0.0516		mg/kg dry	0.0349	1	SW846 7471A	01-Nov-06	03-Nov-06	6102383	YP
Total Metals by EPA 200 Series Methods											
7440-22-4	Silver	1.16		mg/kg dry	1.11	1	EPA 200.7	01-Nov-06	02-Nov-06	6102382	LR
7440-38-2	Arsenic	6.05		mg/kg dry	1.67	1	"	"	"	"	"
7440-39-3	Barium	83.9		mg/kg dry	0.556	1	"	"	"	"	"
7440-43-9	Cadmium	0.428		mg/kg dry	0.278	1	"	"	"	"	"
7440-47-3	Chromium	128		mg/kg dry	0.556	1	"	"	"	"	"
7439-92-1	Lead	150		mg/kg dry	0.834	1	"	"	"	"	"
7782-49-2	Selenium	BRL		mg/kg dry	1.67	1	"	"	"	"	"
General Chemistry Parameters											
	% Solids	85.2		%		1	SM2540 G Mod.	02-Nov-06	02-Nov-06	6110149	YM

Total Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6102383 - EPA200/SW7000 Series										
Blank (6102383-BLK1)										
Prepared: 01-Nov-06 Analyzed: 03-Nov-06										
Mercury	BRL		mg/kg wet	0.0295						
Duplicate (6102383-DUP1) **Source: SA53384-03**										
Prepared: 01-Nov-06 Analyzed: 03-Nov-06										
Mercury	BRL		mg/kg dry	0.0307		BRL				35
Matrix Spike (6102383-MS1) **Source: SA53384-16**										
Prepared: 01-Nov-06 Analyzed: 03-Nov-06										
Mercury	0.428		mg/kg dry	0.0321	0.446	0.0120	93.3	75-125		
Matrix Spike (6102383-MS2) **Source: SA53403-01**										
Prepared: 01-Nov-06 Analyzed: 03-Nov-06										
Mercury	0.577		mg/kg dry	0.0336	0.467	0.154	90.6	75-125		
Post Spike (6102383-PS1) **Source: SA53384-16**										
Prepared: 01-Nov-06 Analyzed: 03-Nov-06										
Mercury	0.448		mg/kg dry	0.0316	0.439	0.0120	99.3	75-125		
Reference (6102383-SRM1)										
Prepared: 01-Nov-06 Analyzed: 03-Nov-06										
Mercury	1.06		mg/kg wet	0.0300	1.07		99.1	68.2-132.1		

Total Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6102382 - EPA 200 Series										
Blank (6102382-BLK1)										
Prepared: 01-Nov-06 Analyzed: 02-Nov-06										
Silver	BRL		mg/kg wet	0.920						
Selenium	BRL		mg/kg wet	1.38						
Chromium	BRL		mg/kg wet	0.460						
Lead	BRL		mg/kg wet	0.690						
Cadmium	BRL		mg/kg wet	0.230						
Arsenic	BRL		mg/kg wet	1.38						
Barium	BRL		mg/kg wet	0.460						
LCS (6102382-BS1)										
Prepared: 01-Nov-06 Analyzed: 02-Nov-06										
Silver	131		mg/kg wet	1.00	125		105	85-115		
Selenium	127		mg/kg wet	1.50	125		102	85-115		
Chromium	129		mg/kg wet	0.500	125		103	85-115		
Lead	121		mg/kg wet	0.750	125		96.8	85-115		
Arsenic	125		mg/kg wet	1.50	125		100	85-115		
Cadmium	128		mg/kg wet	0.250	125		102	85-115		
Barium	131		mg/kg wet	0.500	125		105	85-115		
Duplicate (6102382-DUP1) **Source: SA53384-03**										
Prepared: 01-Nov-06 Analyzed: 02-Nov-06										
Selenium	BRL		mg/kg dry	1.45		BRL				35
Silver	1.32		mg/kg dry	0.969		1.72			26.3	35
Chromium	4.75		mg/kg dry	0.485		4.44			6.75	35
Lead	4.54		mg/kg dry	0.727		4.98			9.24	35
Cadmium	0.160	J	mg/kg dry	0.242		0.150			6.45	35
Arsenic	3.89		mg/kg dry	1.45		4.54			15.4	35
Barium	11.3		mg/kg dry	0.485		14.0			21.3	35
Matrix Spike (6102382-MS1) **Source: SA53384-16**										
Prepared: 01-Nov-06 Analyzed: 02-Nov-06										
Selenium	121		mg/kg dry	1.55	129	BRL	93.8	70-130		
Silver	126		mg/kg dry	1.03	129	1.56	96.5	70-130		
Arsenic	126		mg/kg dry	1.55	129	4.53	94.2	70-130		
Cadmium	121		mg/kg dry	0.258	129	0.315	93.6	70-130		
Lead	127		mg/kg dry	0.773	129	10.9	90.0	70-130		
Chromium	144		mg/kg dry	0.516	129	15.1	99.9	70-130		
Barium	144		mg/kg dry	0.516	129	13.2	101	70-130		
Matrix Spike (6102382-MS2) **Source: SA53403-01**										
Prepared: 01-Nov-06 Analyzed: 02-Nov-06										
Selenium	129		mg/kg dry	1.62	135	BRL	95.6	70-130		
Silver	129		mg/kg dry	1.08	135	3.08	93.3	70-130		
Lead	171		mg/kg dry	0.809	135	45.2	93.2	70-130		
Chromium	146		mg/kg dry	0.539	135	9.73	101	70-130		
Cadmium	126		mg/kg dry	0.270	135	0.341	93.1	70-130		
Arsenic	139		mg/kg dry	1.62	135	13.5	93.0	70-130		
Barium	219		mg/kg dry	0.539	135	88.8	96.4	70-130		
Post Spike (6102382-PS1) **Source: SA53384-16**										
Prepared: 01-Nov-06 Analyzed: 02-Nov-06										
Chromium	129		mg/kg dry	0.526	132	15.1	86.3	85-115		
Barium	133		mg/kg dry	0.526	132	13.2	90.8	85-115		
Reference (6102382-SRM1)										
Prepared: 01-Nov-06 Analyzed: 02-Nov-06										
Silver	67.8		mg/kg wet	1.00	62.5		108	61.2-139		

Total Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6102382 - EPA 200 Series										
Reference (6102382-SRM1)										
Prepared: 01-Nov-06 Analyzed: 02-Nov-06										
Selenium	84.6		mg/kg wet	1.50	87.9		96.2	75.7-124.3		
Arsenic	123		mg/kg wet	1.50	131		93.9	79.8-120.2		
Cadmium	58.2		mg/kg wet	0.250	59.5		97.8	81.5-118.8		
Chromium	34.4		mg/kg wet	0.500	37.0		93.0	78.6-121.4		
Lead	77.2		mg/kg wet	0.750	84.4		91.5	80.7-119.3		
Barium	231		mg/kg wet	0.500	240		96.2	82-118.1		

General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6110149 - General Preparation										
Duplicate (6110149-DUP1) **Source: SA53440-04**										
Prepared & Analyzed: 02-Nov-06										
% Solids	95.4		%			94.9			0.525	20

Notes and Definitions

BRL	Below Reporting Limit - Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
NR	Not Reported
RPD	Relative Percent Difference

A plus sign (+) in the Method Reference column indicates the method is not accredited by NELAC.

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Surrogate: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

Validated by:
Hanibal C. Tayeh, Ph.D.
Nicole Brown

SAS3403 / BM

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
- ☐ Standard TAT - 7 to 10 business days
- ☒ Rush TAT - Date Needed: 11/3/06
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: Jacques Whitford Co Inc
24 Albion Rd
Suite 220
Lincoln, RI 02865
Project Mgr.: Joe Unsworth

Invoice To: WHC015569 (W)
SAME
P.O. No.: 1009825.04 ~~RQN~~ Phase 100

Project No.: 1009825.04 / Phase 100
Site Name: Potter Hill Mill
Location: Westerly State: RI
Sampler(s): Joe Unsworth

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid
7=CH_3OH 8= $NaHSO_4$ 9=_____ 10=_____

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1=_____ X2=_____ X3=_____

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Preservative	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic		RCRA 8 Metals							
S3403-01	SS-21	10/23/06		G	SO		X	1				X							
02	SS-22	10/23/06		G	SO		X	1				X							
03	SS-23	10/23/06		G	SO		X	1				X							

Containers: # of VOA Vials, # of Amber Glass, # of Clear Glass, # of Plastic

Analyses: RCRA 8 Metals

QA Reporting Notes: (check if needed)
- ☐ Provide MA DEP MCP CAM Report
- ☐ Provide CT DPH RCP Report

QA/QC Reporting Level
- ☒ Standard ☐ No QC
- ☐ Other_____

State specific reporting standards:

☐ Fax results when available to (____) _____
☒ E-mail to Junswort@JacquesWhitford.com
EDD Format _____

Condition upon receipt: ☐ Iced ☐ Ambient ☒ °C 5.1

Relinquished by:	Received by:	Date:	Time:
[signature]	Bergeron	10/31/06	11:58 AM
Bergeron	[signature]	10/31/06	15 10

11 Almgren Drive • Agawam, Massachusetts 01001 • 413-789-9018 • Fax 413-789-4076 • www.spectrum-analytical.com

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: Jacques Whitford Co. Inc.
Client Project ID: Potter Hill Mill
Client Sample ID: SS-24
Date Sampled: 11/20/06 00:00
Percent Solids: 90

ESS Laboratory Work Order: 0611342
ESS Laboratory Sample ID: 0611342-01
Sample Matrix: Soil

3050B/6000/7000 Total Metals

Analyte	Results	Units	MRL	Method	DF	Analyst	Analyzed	I/V	F/V
Arsenic	ND	mg/kg dry	5.9	6010B	1	SVD	11/20/06	1.89	100

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: Jacques Whitford Co. Inc.
Client Project ID: Potter Hill Mill
Client Sample ID: SS-25
Date Sampled: 11/20/06 00:00
Percent Solids: 85

ESS Laboratory Work Order: 0611342
ESS Laboratory Sample ID: 0611342-02
Sample Matrix: Soil

3050B/6000/7000 Total Metals

Analyte	Results	Units	MRL	Method	DF	Analyst	Analyzed	I/V	F/V
Arsenic	**16.6**	mg/kg dry	6.0	6010B	1	SVD	11/20/06	1.97	100

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: Jacques Whitford Co. Inc.
Client Project ID: Potter Hill Mill
Client Sample ID: SS-26
Date Sampled: 11/20/06 00:00
Percent Solids: 84

ESS Laboratory Work Order: 0611342
ESS Laboratory Sample ID: 0611342-03
Sample Matrix: Soil

3050B/6000/7000 Total Metals

Analyte	Results	Units	MRL	Method	DF	Analyst	Analyzed	I/V	F/V
Arsenic	ND	mg/kg dry	6.2	6010B	1	SVD	11/20/06	1.91	100

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

Page 1 of 1

Turn Time 2 days Standard Other
If faster than 5 days, prior approval by laboratory is required #
State where samples were collected from: MA (RI) CT NH NJ NY ME Other
Is this project for any of the following: MA-MCP* Navy USACE Other

Reporting Limits: RIDEM Residential
ESS LAB PROJECT ID: 061342
Electronic Deliverable: Y Yes No Format pdf

Co. Name	Project #	Project Name (20 Char. or less)
Jacques Whitford Co.	1098825.02/100	Potter Hill Mill

Contact Person	Address
Joe Unsworth	24 Albion Rd.

City	State	Zip	PO#
Lincoln	RI	02865	1098825.02/100

Telephone #	Fax #	Email Address
401-812-8005	401-812-8010	junswort@jacqueswhitford

ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Number of Containers	Type of Containers	8260 624 524.2	8021 MTBE/BTEX 8015 GRO VPH	8100 TPH 8015 DRO EPH	8081 Pesticides 8082 PCB No Targets	8270 625 PAH only	RCRA5 RCRA8 PP13 TAL23	TCLP8 MCP MCPw/Hg NBC7	Total Arsenic	608 PCB 608 Pesticides
1	11/20/06			X	S	SS-24	1	G								X	
2	11/20/06			X	S	SS-25	1	G								X	
3	11/20/06			X	S	SS-26	1	G								X	

Circle and/or Write Required Analysis

Container Type: P-Poly G-Glass S-Sterile V-VOA
Matrix: S-Soil SD-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present Y Yes No
Seals Intact Yes No NA:
Cooler Temp: 5.3

Internal Use Only
[ ] Pickup
[ ] Technicians

Comments:

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
Michael Ryan	11/20/06 11:36AM	J. Davis	11-20-06 11:36				
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time

*MADEP requires that all additional calibrated analytes found during analysis be disclosed.

Please fax all changes to Chain of Custody in writing.

1 (White) Lab Copy 2 (Yellow) Client Receipt

Report Date:
02-Nov-06 16:29

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

Jacques Whitford Company, Inc.
24 Albion Rd, Suite 220
Lincoln, RI 02865
Attn: Joe Unsworth

Project: Potter Hill Mill - Westerly, RI
Project 1009825.02/100

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SA53278-01	MW-1	Ground Water	26-Oct-06 10:00	26-Oct-06 14:41
SA53278-02	MW-2	Ground Water	26-Oct-06 10:30	26-Oct-06 14:41

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.
All applicable NELAC requirements have been met.
Please note that this report contains 7 pages of analytical data plus Chain of Custody document(s).
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New Hampshire # 2538/2972
New Jersey # MA011/MA012
New York # 11393/11840
Rhode Island # 98
USDA # S-51435
Vermont # VT-11393

ACCREDITED IN ACCORDANCE WITH nelac

Authorized by:

Hanibal C. Tayeh, Ph.D.
President/Laboratory Director

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Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-1 SA53278-01	1009825.02/100	Ground Water	26-Oct-06 10:00	26-Oct-06

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3510C											
83-32-9	Acenaphthene	BRL		µg/l	5.56	1	SW846 8270C	30-Oct-06	30-Oct-06	6102204	M.B
208-96-8	Acenaphthylene	BRL		µg/l	5.56	1	"	"	"	"	"
120-12-7	Anthracene	BRL		µg/l	5.56	1	"	"	"	"	"
56-55-3	Benzo (a) anthracene	BRL		µg/l	5.56	1	"	"	"	"	"
50-32-8	Benzo (a) pyrene	BRL		µg/l	5.56	1	"	"	"	"	"
205-99-2	Benzo (b) fluoranthene	BRL		µg/l	5.56	1	"	"	"	"	"
191-24-2	Benzo (g,h,i) perylene	BRL		µg/l	5.56	1	"	"	"	"	"
207-08-9	Benzo (k) fluoranthene	BRL		µg/l	5.56	1	"	"	"	"	"
218-01-9	Chrysene	BRL		µg/l	5.56	1	"	"	"	"	"
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/l	5.56	1	"	"	"	"	"
206-44-0	Fluoranthene	BRL		µg/l	5.56	1	"	"	"	"	"
86-73-7	Fluorene	BRL		µg/l	5.56	1	"	"	"	"	"
193-39-5	Indeno (1,2,3-cd) pyrene	BRL		µg/l	5.56	1	"	"	"	"	"
90-12-0	1-Methylnaphthalene	BRL		µg/l	5.56	1	"	"	"	"	"
91-57-6	2-Methylnaphthalene	BRL		µg/l	5.56	1	"	"	"	"	"
91-20-3	Naphthalene	BRL		µg/l	5.56	1	"	"	"	"	"
85-01-8	Phenanthrene	BRL		µg/l	5.56	1	"	"	"	"	"
129-00-0	Pyrene	BRL		µg/l	5.56	1	"	"	"	"	"
Surrogate recoveries:											
321-60-8	*2-Fluorobiphenyl*	*75.0*		*30-130 %*			"	"	"	"	"
1718-51-0	*Terphenyl-dl4*	*76.1*		*30-130 %*			"	"	"	"	"
Total Metals by EPA 6000/7000 Series Methods											
7440-22-4	Silver	BRL		mg/l	0.0050	1	SW846 6010B	30-Oct-06	31-Oct-06	6102169	LR
7440-38-2	Arsenic	BRL		mg/l	0.0040	1	"	"	"	"	"
7440-39-3	Barium	0.0200		mg/l	0.0050	1	"	"	"	"	"
7440-43-9	Cadmium	BRL		mg/l	0.0025	1	"	"	"	"	"
7440-47-3	Chromium	BRL		mg/l	0.0050	1	"	"	"	"	"
7439-92-1	Lead	BRL		mg/l	0.0075	1	"	"	"	"	"
7782-49-2	Selenium	BRL		mg/l	0.0150	1	"	"	"	"	"
Total Metals by EPA 200 Series Methods											
7439-97-6	Mercury	BRL		mg/l	0.00030	1	EPA 245.1/7470A	30-Oct-06	01-Nov-06	6102170	YP

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-2 SA53278-02	1009825.02/100	Ground Water	26-Oct-06 10:30	26-Oct-06

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3510C											
83-32-9	Acenaphthene	BRL		µg/l	6.25	1	SW846 8270C	30-Oct-06	31-Oct-06	6102204	M.B
208-96-8	Acenaphthylene	BRL		µg/l	6.25	1	"	"	"	"	"
120-12-7	Anthracene	BRL		µg/l	6.25	1	"	"	"	"	"
56-55-3	Benzo (a) anthracene	BRL		µg/l	6.25	1	"	"	"	"	"
50-32-8	Benzo (a) pyrene	BRL		µg/l	6.25	1	"	"	"	"	"
205-99-2	Benzo (b) fluoranthene	BRL		µg/l	6.25	1	"	"	"	"	"
191-24-2	Benzo (g,h,i) perylene	BRL		µg/l	6.25	1	"	"	"	"	"
207-08-9	Benzo (k) fluoranthene	BRL		µg/l	6.25	1	"	"	"	"	"
218-01-9	Chrysene	BRL		µg/l	6.25	1	"	"	"	"	"
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/l	6.25	1	"	"	"	"	"
206-44-0	Fluoranthene	BRL		µg/l	6.25	1	"	"	"	"	"
86-73-7	Fluorene	BRL		µg/l	6.25	1	"	"	"	"	"
193-39-5	Indeno (1,2,3-cd) pyrene	BRL		µg/l	6.25	1	"	"	"	"	"
90-12-0	1-Methylnaphthalene	BRL		µg/l	6.25	1	"	"	"	"	"
91-57-6	2-Methylnaphthalene	BRL		µg/l	6.25	1	"	"	"	"	"
91-20-3	Naphthalene	BRL		µg/l	6.25	1	"	"	"	"	"
85-01-8	Phenanthrene	BRL		µg/l	6.25	1	"	"	"	"	"
129-00-0	Pyrene	BRL		µg/l	6.25	1	"	"	"	"	"
Surrogate recoveries:											
321-60-8	*2-Fluorobiphenyl*	*58.9*		*30-130 %*			"	"	"	"	"
1718-51-0	*Terphenyl-dl4*	*59.5*		*30-130 %*			"	"	"	"	"
Total Metals by EPA 6000/7000 Series Methods											
7440-22-4	Silver	BRL		mg/l	0.0050	1	SW846 6010B	30-Oct-06	31-Oct-06	6102169	LR
7440-38-2	Arsenic	BRL		mg/l	0.0040	1	"	"	"	"	"
7440-39-3	Barium	0.0166		mg/l	0.0050	1	"	"	"	"	"
7440-43-9	Cadmium	BRL		mg/l	0.0025	1	"	"	"	"	"
7440-47-3	Chromium	BRL		mg/l	0.0050	1	"	"	"	"	"
7439-92-1	Lead	BRL		mg/l	0.0075	1	"	"	"	"	"
7782-49-2	Selenium	BRL		mg/l	0.0150	1	"	"	"	"	"
Total Metals by EPA 200 Series Methods											
7439-97-6	Mercury	BRL		mg/l	0.00030	1	EPA 245.1/7470A	30-Oct-06	01-Nov-06	6102170	YP

Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6102204 - SW846 3510C										
Blank (6102204-BLK1)										
Prepared & Analyzed: 30-Oct-06										
Acenaphthene	BRL		µg/l	2.50						
Acenaphthylene	BRL		µg/l	2.50						
Anthracene	BRL		µg/l	2.50						
Benzo (a) anthracene	BRL		µg/l	2.50						
Benzo (a) pyrene	BRL		µg/l	2.50						
Benzo (b) fluoranthene	BRL		µg/l	2.50						
Benzo (g,h,i) perylene	BRL		µg/l	2.50						
Benzo (k) fluoranthene	BRL		µg/l	2.50						
Chrysene	BRL		µg/l	2.50						
Dibenzo (a,h) anthracene	BRL		µg/l	2.50						
Fluoranthene	BRL		µg/l	2.50						
Fluorene	BRL		µg/l	2.50						
Indeno (1,2,3-cd) pyrene	BRL		µg/l	2.50						
1-Methylnaphthalene	BRL		µg/l	2.50						
2-Methylnaphthalene	BRL		µg/l	2.50						
Naphthalene	BRL		µg/l	2.50						
Phenanthrene	BRL		µg/l	2.50						
Pyrene	BRL		µg/l	2.50						
Surrogate: 2-Fluorobiphenyl	*70.0*		µg/l		*100*		*70.0*	*30-130*		
Surrogate: Terphenyl-dl4	*70.1*		µg/l		*100*		*70.1*	*30-130*		
LCS (6102204-BS1)										
Prepared & Analyzed: 30-Oct-06										
Acenaphthene	71.7		µg/l	2.50	100		71.7	40-140		
Acenaphthylene	71.4		µg/l	2.50	100		71.4	40-140		
Anthracene	75.7		µg/l	2.50	100		75.7	40-140		
Benzo (a) anthracene	77.2		µg/l	2.50	100		77.2	40-140		
Benzo (a) pyrene	77.3		µg/l	2.50	100		77.3	40-140		
Benzo (b) fluoranthene	71.4		µg/l	2.50	100		71.4	40-140		
Benzo (g,h,i) perylene	77.7		µg/l	2.50	100		77.7	40-140		
Benzo (k) fluoranthene	78.4		µg/l	2.50	100		78.4	40-140		
Chrysene	77.4		µg/l	2.50	100		77.4	40-140		
Dibenzo (a,h) anthracene	77.0		µg/l	2.50	100		77.0	40-140		
Fluoranthene	80.7		µg/l	2.50	100		80.7	40-140		
Fluorene	73.2		µg/l	2.50	100		73.2	40-140		
Indeno (1,2,3-cd) pyrene	77.1		µg/l	2.50	100		77.1	40-140		
1-Methylnaphthalene	71.1		µg/l	2.50	100		71.1	40-140		
2-Methylnaphthalene	64.0		µg/l	2.50	100		64.0	40-140		
Naphthalene	69.5		µg/l	2.50	100		69.5	40-140		
Phenanthrene	73.5		µg/l	2.50	100		73.5	40-140		
Pyrene	73.2		µg/l	2.50	100		73.2	40-140		
Surrogate: 2-Fluorobiphenyl	*74.3*		µg/l		*100*		*74.3*	*30-130*		
Surrogate: Terphenyl-dl4	*78.3*		µg/l		*100*		*78.3*	*30-130*		

Total Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6102169 - SW846 3005A										
Blank (6102169-BLK1)										
Prepared: 30-Oct-06 Analyzed: 31-Oct-06										
Lead	BRL		mg/l	0.0075						
Selenium	BRL		mg/l	0.0150						
Barium	BRL		mg/l	0.0050						
Silver	BRL		mg/l	0.0050						
Arsenic	BRL		mg/l	0.0040						
Cadmium	BRL		mg/l	0.0025						
Chromium	BRL		mg/l	0.0050						
LCS (6102169-BS1)										
Prepared: 30-Oct-06 Analyzed: 31-Oct-06										
Selenium	0.451		mg/l	0.0150	0.500		90.2	85-115		
Lead	0.483		mg/l	0.0075	0.500		96.6	85-115		
Barium	0.522		mg/l	0.0050	0.500		104	85-115		
Chromium	0.483		mg/l	0.0050	0.500		96.6	85-115		
Arsenic	0.466		mg/l	0.0040	0.500		93.2	85-115		
Cadmium	0.500		mg/l	0.0025	0.500		100	85-115		
Silver	0.479		mg/l	0.0050	0.500		95.8	85-115		
LCS Dup (6102169-BSD1)										
Prepared: 30-Oct-06 Analyzed: 31-Oct-06										
Lead	0.485		mg/l	0.0075	0.500		97.0	85-115	0.413	20
Selenium	0.453		mg/l	0.0150	0.500		90.6	85-115	0.442	20
Cadmium	0.504		mg/l	0.0025	0.500		101	85-115	0.797	20
Chromium	0.493		mg/l	0.0050	0.500		98.6	85-115	2.05	20
Arsenic	0.463		mg/l	0.0040	0.500		92.6	85-115	0.646	20
Barium	0.534		mg/l	0.0050	0.500		107	85-115	2.27	20
Silver	0.494		mg/l	0.0050	0.500		98.8	85-115	3.08	20
Duplicate (6102169-DUP1) **Source: SA53278-01**										
Prepared: 30-Oct-06 Analyzed: 31-Oct-06										
Lead	BRL		mg/l	0.0075		BRL				20
Selenium	BRL		mg/l	0.0150		BRL				20
Silver	BRL		mg/l	0.0050		BRL				20
Chromium	BRL		mg/l	0.0050		BRL				20
Cadmium	0.0006	J	mg/l	0.0025		0.0005			18.2	20
Arsenic	0.0025	J	mg/l	0.0040		BRL				20
Barium	0.0225		mg/l	0.0050		0.0200			11.8	20
Matrix Spike (6102169-MS1) **Source: SA53279-06**										
Prepared: 30-Oct-06 Analyzed: 31-Oct-06										
Lead	0.472		mg/l	0.0075	0.500	BRL	94.4	75-125		
Selenium	0.444		mg/l	0.0150	0.500	BRL	88.8	75-125		
Silver	0.473		mg/l	0.0050	0.500	BRL	94.6	75-125		
Arsenic	0.450		mg/l	0.0040	0.500	BRL	90.0	75-125		
Barium	0.519		mg/l	0.0050	0.500	BRL	104	75-125		
Cadmium	0.492		mg/l	0.0025	0.500	BRL	98.4	75-125		
Chromium	0.476		mg/l	0.0050	0.500	BRL	95.2	75-125		
Matrix Spike Dup (6102169-MSD1) **Source: SA53279-06**										
Prepared: 30-Oct-06 Analyzed: 31-Oct-06										
Selenium	0.446		mg/l	0.0150	0.500	BRL	89.2	75-125	0.449	20
Lead	0.474		mg/l	0.0075	0.500	BRL	94.8	75-125	0.423	20
Arsenic	0.447		mg/l	0.0040	0.500	BRL	89.4	75-125	0.669	20
Barium	0.528		mg/l	0.0050	0.500	BRL	106	75-125	1.72	20
Chromium	0.482		mg/l	0.0050	0.500	BRL	96.4	75-125	1.25	20

Total Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6102169 - SW846 3005A										
Matrix Spike Dup (6102169-MSD1) **Source: SA53279-06**										
Prepared: 30-Oct-06 Analyzed: 31-Oct-06										
Cadmium	0.493		mg/l	0.0025	0.500	BRL	98.6	75-125	0.203	20
Silver	0.489		mg/l	0.0050	0.500	BRL	97.8	75-125	3.33	20
Post Spike (6102169-PS1) **Source: SA53279-06**										
Prepared: 30-Oct-06 Analyzed: 31-Oct-06										
Lead	0.453		mg/l	0.0075	0.500	BRL	90.6	80-120		
Selenium	0.425		mg/l	0.0150	0.500	BRL	85.0	80-120		
Cadmium	0.467		mg/l	0.0025	0.500	BRL	93.4	80-120		
Barium	0.495		mg/l	0.0050	0.500	BRL	99.0	80-120		
Arsenic	0.429		mg/l	0.0040	0.500	BRL	85.8	80-120		
Silver	0.439		mg/l	0.0050	0.500	BRL	87.8	80-120		
Chromium	0.458		mg/l	0.0050	0.500	BRL	91.6	80-120		

Total Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6102170 - EPA200/SW7000 Series										
Blank (6102170-BLK1)										
Prepared: 30-Oct-06 Analyzed: 01-Nov-06										
Mercury	BRL		mg/l	0.00030						
LCS (6102170-BS1)										
Prepared: 30-Oct-06 Analyzed: 01-Nov-06										
Mercury	0.00204		mg/l	0.00030	0.00250		81.6	80-120		
Duplicate (6102170-DUP1) **Source: SA53278-01**										
Prepared: 30-Oct-06 Analyzed: 01-Nov-06										
Mercury	BRL		mg/l	0.00030		BRL				20
Matrix Spike (6102170-MS1) **Source: SA53279-06**										
Prepared: 30-Oct-06 Analyzed: 01-Nov-06										
Mercury	0.00229		mg/l	0.00030	0.00250	BRL	91.6	75-125		
Matrix Spike Dup (6102170-MSD1) **Source: SA53279-06**										
Prepared: 30-Oct-06 Analyzed: 01-Nov-06										
Mercury	0.00208		mg/l	0.00030	0.00250	BRL	83.2	75-125	9.61	20
Post Spike (6102170-PS1) **Source: SA53279-06**										
Prepared: 30-Oct-06 Analyzed: 01-Nov-06										
Mercury	0.00231		mg/l	0.00030	0.00250	BRL	92.4	75-125		

Notes and Definitions

FP	Field Preserved
BRL	Below Reporting Limit - Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
NR	Not Reported
RPD	Relative Percent Difference

A plus sign (+) in the Method Reference column indicates the method is not accredited by NELAC.

Laboratory Control Sample (LCS): A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix.

Matrix Spike: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

Surrogate: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

Validated by:
Hanibal C. Tayeh, Ph.D.
Nicole Brown

SA 5270 [illegible]

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HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
- ☐ Standard TAT - 7 to 10 business days
- ☒ Rush TAT - Date Needed: 11/2/06
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: Jacques Whitford Co
24 Albion Rd. Suite 220
Lincoln, RI 02865

Project Mgr.: Joe Unsworth

Invoice To: Same
WH6015402(90)

P.O. No.: 1009825.02/100 RQN:

Project No.: 1009825.02/100
Site Name: Potter Hill Mill
Location: Westerly State: RI
Sampler(s): Robert Snyder

1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid
7=CH_3OH 8= $NaHSO_4$ 9=_____ 10=_____

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1=_____ X2=_____ X3=_____

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Preservative	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic		RCRA8 Metals	PAHs 8270						
S3278-01	MW-1	10/26/06	1000	G	GW	4/-		1		1		X	X						
↓ 02	MW-2	10/26/06	1030	G	GW	4/-		1		1		X	X						

Containers: Analyses:

QA Reporting Notes: (check if needed)
- ☐ Provide MA DEP MCP CAM Report
- ☐ Provide CT DPH RCP Report

QA/QC Reporting Level
☒ Standard ☐ No QC
☐ Other_____

State specific reporting standards:

☐ Fax results when available to (____) _____
☒ E-mail to junswort@jacqueswhitford.com
EDD Format _____

Condition upon receipt: ☐ Iced ☐ Ambient ☒ ~~°C~~ 4

Relinquished by:	Received by:	Date:	Time:
[signature]	[signature]	10/26/06	1210
[signature]	[signature]	10/26/06	1441

11 Almgren Drive • Agawam, Massachusetts 01001 • 413-789-9018 • Fax 413-789-4076 • www.spectrum-analytical.com

[illegible]



WESTERLY WOOLEN MILL

SR-38-1074



WESTERLY WOOLEN MILL

SR. 38-1074



WESTERLY WOOLEN MILL

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WESTERLY WOOLEN MILL

SR-38-1074

FUSS & O'NEILL
Disciplines to Deliver

November 16, 2007

Mr. Geoffrey Marchant
Community Development Consortium
125 Main Street
P.O. Box 111
East Greenwich, RI 02818-0111

RE: Summary of Documented Environmental Activities
Former Pawcatuck Woolen Mill (Potter Hill Mill)
198 Potter Hill Road
Westerly, Rhode Island

Dear Mr. Marchant:

The purpose of this letter is to submit a summary of environmental activities documented at the Rhode Island Department of Environmental Management (RIDEM) concerning the above-referenced site. We understand that the Town of Westerly (Town) is interested in clarifying the environmental status of the former Pawcatuck Woolen Mill (aka Potter Mill Hill) property (the "subject site") prior to initiating further activities at the site.

We understand the subject site consists of a 4.55-acre parcel identified by the Town of Westerly Tax Assessor as Plat 8, Lot 23. The site is currently owned by Renewable Resources, Inc. (RRI). Our scope of services consisted of a review of files available at the RIDEM Office of Waste Management (OWM) for the subject site. This summary letter addresses major environmental issues identified at the subject site, pertinent RIDEM correspondence, an assessment of potential response actions remaining to be performed, and an assessment of potential remediation activities which may be required to bring the subject site into compliance with RIDEM regulations.

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North Carolina
South Carolina

1.0 RIDEM FILES

Fuss & O'Neill reviewed files maintained by RIDEM OWM on November 2, 2007. The following is a summary and discussion of reports and correspondence documented in the RIDEM file.

Hazardous Materials Release Notification

- September 27, 2006: Jacques Whitford (JW), on behalf of the site owner, RRI, notified RIDEM of a hazardous materials release of arsenic and beryllium to soil on the subject site.

- October 16, 2006: RIDEM issued a Letter of Responsibility to RRI and directed the completion of a Site Investigation in accordance with the *Rules and Regulations for the Investigation and Remediation of Hazardous Materials Releases* (*Remediation Regulations*).

Site Investigation Report

- November 28, 2006: JW, on behalf of RRI, submitted a Site Investigation Report (SIR) to RIDEM for the subject site. The SIR included the following documents:
  - March 14, 2006: Phase I Environmental Site Assessment (ESA) performed by JW. The Phase I ESA identified several recognized environmental conditions (RECs) on the subject site, including:
    - Potential asbestos-containing material in the site buildings.
    - Potential lead-based paint.
    - A potential on-site septic system, according to Town records. However, the property owner believed that all wastewater was directly discharged to the Pawcatuck River.
    - Potential use of coal for fuel on the subject site.
    - A waste disposal area in the northwestern portion of the site that contained miscellaneous debris, including several empty, rusty, 55-gallon drums.
    - Several former buildings that appeared to have been demolished on-site.
    - Electrical equipment potentially containing polychlorinated bi-phenyls (PCBs) and mercury.
  - April 26, 2006: Limited Phase II ESA performed by JW. The Limited Phase II ESA contained a conceptual site model identifying two areas of concern (AOCs) - AOC #1: northwestern debris area, and AOC #2: a potential former coal storage area. The location of AOC #2 was identified as "west of the building near the former boiler building." A total of six test pits were excavated at the two AOCs. A total of two soil samples were collected and submitted for laboratory analysis for the Priority Pollutant Metals (PP13 metals) and polycyclic aromatic hydrocarbons (PAHs). Arsenic and beryllium were reported at concentrations greater than their respective RIDEM Residential Direct Exposure Criteria (R-DEC) in the sample collected from AOC #2. Additionally, the Limited Phase II ESA stated that "groundwater flow at the property is estimated to be in an easterly/northeasterly direction."
- The SIR also included information from additional soil sampling performed in September, October, and November 2006, and groundwater sampling performed in October 2006. Twenty six surficial soil samples were collected in the vicinity of AOC #2. All samples were analyzed for arsenic, six samples were analyzed for RCRA 8 metals, and three samples were analyzed for PAHs. Fifteen soil samples

contained arsenic at levels greater than the RIDEM R-DEC, and two soil samples contained lead at concentrations that met or exceeded the R-DEC.

- Additionally, two one-inch monitoring wells were installed at the subject site in October 2006, and groundwater was sampled from these wells and analyzed for RCRA 8 metals and PAHs. Groundwater was reportedly encountered approximately at five feet below grade. However, in a subsequent letter, groundwater was estimated to be located ten to fifteen feet below grade. The two groundwater samples did not contain exceedances of RIDEM criteria for the analyzed parameters.
- Based on the observations made during the test pit excavations in AOC #2 and the results of the soil and groundwater sampling, JW concluded that:
  - "The subject property and surrounding area are serviced by municipal water and sewer."
  - "Metals and polynuclear aromatic hydrocarbons (PAHs) exist in surficial soils at concentrations greater than RIDEM's R-DEC. The impacted soils appear to be limited to an area near a mound containing coal ash and slag." JW determined that approximately 9,750 square feet of soil at AOC #2 were impacted by mounded coal ash and slag. JW further stated that "the only environmental concern at the site is the soil impacted by the coal ash and slag."
  - "No impacts from the coal ash and slag to groundwater were detected."
- The SIR included three remedial alternatives as required by the *Remediation Regulations*, and soil capping over the impacted soil at AOC #2 was chosen as the preferred remedial alternative in conjunction with an Environmental Land Use Restriction (ELUR).

Solid Waste

- January 11, 2007: RIDEM notified RRI that, as a result of compliance inspections conducted by RIDEM, solid waste had been disposed of on the subject site. RIDEM summarized materials observed during site inspections of the subject site as:
  - 30 cubic yards of construction and demolition (C&D) debris from a collapsed building
  - 298 cubic yards of solid waste including scrap metals, deteriorated lumber, an abandoned automobile, C&D debris from collapsed buildings, and landfilled solid waste, including empty steel drums, scrap metal, and bottles and cans
  - 90 cubic yards of solid waste consisting of scrap metal, deteriorated lumber, asphalt shingles, discarded metal pipe, and C&D debris from collapsed buildings.

- RIDEM indicated that to achieve compliance with Rhode Island General Laws, RRI needed to demonstrate that all solid waste from the property was removed within 60 days of January 11, 2007 and disposed of at a licensed solid waste management facility.
- Correspondence from JW on July 5, 2007 indicated that "All the buried debris has been excavated from the area [AOC #1] and disposed under the oversight of the RIDEM." However, further documentation of the solid waste disposal was not included in the RIDEM file.

SIR Review and Additional Investigations

- January 26, 2007: RIDEM notified RRI that the SIR did not meet the requirements for an SIR as set forth in the *Remediation Regulations* and provided comments on the deficiencies. As one of RIDEM's general comments, information regarding the historic activities on the subject site, which operated as a wool manufacturing facility, were not included in the SIR (wool mills typically used dyes containing heavy metals, dye-aids which may have chlorinated solvents, and lubricants in the machinery itself). RIDEM also included specific comments regarding deficiencies in the SIR. The most significant comments included the following:
  - Clarification was required for whether the site contained an on-site septic field, or discharged directly to the river. RIDEM indicated that piping leading to the river should be investigated, and that sediment sampling at each of the outfalls be conducted. RIDEM also required a determination regarding whether the site had ever utilized heating oil.
  - The soil sampling conducted as part of the Phase II ESA investigation and the additional soil sampling conducted as part of the SIR were insufficient to fully characterize the site, potential impacts to off-site properties, or to sensitive areas, including the Pawcatuck River.
  - RIDEM recommended conducting a geophysical survey in order to attempt to locate the former septic system, underground storage tanks, or other buried debris which would be considered an AOC. RIDEM also indicated that AOC #1 had not been adequately characterized and that additional soil sampling was necessary to characterize the site.
  - RIDEM indicated that additional monitoring wells should be installed on the property in order to adequately characterize for groundwater contamination, and that groundwater samples should be analyzed for the parameters listed in Table 3 of the *Remediation Regulations*. RIDEM also indicated that they had determined that private drinking water wells for adjoining properties were present on the subject site, and that additional investigation into private drinking water wells on properties adjoining the subject site should be conducted in order to characterize potential impacts off-site and/or to private drinking water wells.

- The groundwater flow direction identified in the SIR was inadequate. RIDEM stated that further subsurface investigation and a hydrogeological survey were required to determine actual groundwater flow direction, and as part of that investigation, additional monitoring wells should be installed, and a groundwater contour map developed.
- Additional soil sampling should be performed at the identified AOCs, at newly identified AOCs (based on additional investigations described above), and also from across the site. RIDEM also requested a comparison of analytical results to the RIDEM GA-Leachability Criteria (GA-LC).
- RIDEM concluded that a determination regarding environmental concerns on the site could not be made until additional investigations are conducted, and requested updated conclusions at that time.
- RIDEM did not review the remedial alternatives, but recommended that remedial alternatives should "address the fact that the site is within a flood zone and how this impacts the use of impermeable caps and stormwater management."

In response to RIDEM on July 5, 2007, JW, on behalf of RRI, indicated that:

- Based on observed conditions, they believed that coal was always used on site and that no evidence of heating oil tanks was observed on the site.
- Sediment sampling of the Pawcatuck River was planned at observed pipe discharges.
- "All the buried debris has been excavated from the area [AOC #1] and disposed under the oversight of the RIDEM." Further documentation of the solid waste disposal was not included in the RIDEM file.
- Three additional monitoring wells were proposed to be installed at the site, and the five on-site monitoring wells were proposed to be re-sampled.
- Subsequent to the completion of the additional proposed activities, a revised SIR was planned for RIDEM submission. Documentation of the completion of these activities or the submission of a revised SIR was not included in the available files reviewed at RIDEM.

In response to the July 5, 2007 letter prepared by JW, RIDEM prepared a letter dated July 31, 2007. The letter recommended that RRI submit a work plan for RIDEM approval for the additional work to be performed at the site. JW submitted a work plan to RIDEM on August 13, 2007. RIDEM responded to the work plan in a letter dated September 7, 2007, and JW further discussed the work plan in a letter dated October 19, 2007.

Based on information available in the RIDEM file, approval of the work plan for additional investigation has not been granted, and no additional environmental investigations have been performed at the site subsequent to the investigations documented in the SIR.

2.0 REMAINING ASSESSMENT ACTIVITIES

Based on our review of the above documentation, at a minimum, RIDEM will require the following assessment activities to be performed at the site in order to achieve approval of the SIR:

- Conduct further research on the historical operational history of the site to determine its former uses and potential use of hazardous materials.
- Conduct a geophysical survey at the site to attempt to locate the former septic system, underground storage tanks, or other buried debris
- Collect groundwater samples from one, possibly two, drinking water wells located on or adjacent to the site.
- Install additional soil borings and groundwater monitoring wells and collect soil samples from the soil borings.
- Collect groundwater samples from new and existing groundwater monitoring wells on the site.
- Conduct soil sampling in the vicinity of AOC #2 to evaluate for compliance with the GA-LC.
- Conduct sediment sampling at/near the outfall pipes leading from the site to the Pawcatuck River.
- Perform an elevation survey of the groundwater monitoring wells and develop a groundwater contour map for the site, indicating the direction of likely groundwater flow.
- Review site development plans and potential future uses to determine additional sampling requirements, potentially including under existing or former buildings.
- Update the SIR to reflect information obtained during the recommended investigations, and prepare conclusions based on the findings of the recommended investigations, including identification of three potential remedial alternatives for the subject site.

3.0 POTENTIAL REMEDIATION ACTIVITIES

Based on the information available in the RIDEM file, substantial assessment activities remain to be completed in order to determine the environmental quality of the site. Therefore, a meaningful evaluation of remedial options and opinions of cost is not feasible at this time. However, given the information available in the RIDEM, potential

remediation activities that will bring the site into compliance with RIDEM regulations must, at a minimum, include the following:

- Completion of assessment activities to satisfy RIDEM's requirement for a full Site Investigation.
- Development of a Remedial Action Work Plan (RAWP) for RIDEM submission that will detail remediation activities to be conducted at the site.
- Coordination with the RIDEM Office of Water Resources to discuss potential remediation activities that may be required within the floodplain of the Pawcatuck River.
- Potential removal action and off-site disposal of coal, coal ash, and slag from AOC #2 and other potential areas at the site.
- Collection and off-site disposal of solid waste and construction and demolition debris from throughout the site.
- Construction of a soil cap over AOC #2, and potentially over the entire 4.55-acre site.
- Potential closure of underground injection structures in accordance with the RIDEM *Underground Injection Control Rules and Regulations.*
- Based on the results of additional groundwater sampling, including sampling from adjacent private wells, potentially conduct groundwater remediation activities.
- Based on the results of sediment sampling of the Pawcatuck River, potentially conduct sediment remediation activities.
- Implementation of an ELUR that will restrict future uses of the site and establish guidelines for site maintenance and soil management.

4.0 CONCLUSIONS AND RECOMMENDATIONS

1. Based on assessment activities conducted to date, the site is currently regulated under the RIDEM *Remediation Regulations*, and substantial additional response actions are required to bring the site into compliance. Currently, the site owner is identified as the responsible party to address these requirements, and any future owners of the site may be considered a responsible party for these activities upon acquisition of the site.

2. Currently, additional site assessment and remediation activities are required by RIDEM, and the results of those activities may trigger additional assessment and remediation requirements. Accurate estimations of the overall costs of the activities necessary to bring the site into compliance with the *Remediation Regulations* can not be determined, based on the incomplete assessment conducted to date.

3. We recommend further assessment activities to collect information necessary to understand long-term environmental liability and associated costs that will be necessary to bring the site into compliance with the RIDEM *Remediation Regulations*. Fuss & O'Neill has extensive experience in securing and utilizing federal grants for the assessment of brownfields properties, similar to the site, to identify environmental liabilities and to facilitate productive re-use of the site. We recommend a further discussion of the options that may be available to facilitate the completion of the required activities.

Please contact us if you have any questions or require any clarifications regarding the above information.

Sincerely,

Brian E. Kortz
Senior Hydrogeologist

John A. Chambers, PG, LSP
Associate/Hydrogeologist

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WASTE MANAGEMENT
FIELD INVESTIGATION REPORT

SITE NAME:	Pawcatuck Woolen Mill (Potter Hill Mill)
SITE LOCATION:	198 Potter Hill Road, Westerly, RI
DATE OF INVESTIGATION:	September 11, 2009
TIME OF ARRIVAL:	1000 hrs
DEM Personnel:	Shelley Ducharme
Weather:	Overcast, misty rain ~65

Reason for field visit: Pre-bid site walk for building demolition.

Findings

RIDEM personnel, Shelley Ducharme arrived at the site. A following is a list of the attendees from the bid walk.

Jon Pratt, Engineer	Town of Westerly
Steven Hartford, Town Manager	Town of Westerly
Richard Greenwood, Ph.D., Deputy Director	RI Historical Preservation & Heritage Commission
Roger Lizotte	Northeast Engineer
Scott Hobson	Caputo and Wick Ltd.
Jim Gallagher & Daniel Simas	RI Analytical
Steve Richtarik	Beta Group, Inc.
Tim Regan & Nate Lauder	Cherenzia & Associates
Sean Cassidy	EFI Global
Paul Uzgiris	Weston & Sampson
Robin Dyer	Maguire Group
Michael Rongione	Pare Corp.
Greg Sampson	LFR
Dean Audet & Bob May	Fuss & O'Neill

The Town had condemned the property structures and since the owner has not moved forward, the Town took out an RFP for design services to bid on a demo plan for the Mill site. A letter was sent to the owner to notify of the proceedings, 10 days prior to the bid walk and no response has been received. So the Town moved forward with the site walkover. Police presence was observed during the bid walk.

During the site visit, personnel entered through the gate on the fenced in property. A brick building with spillway was viewed upon entering through the gate, with the river on the right side of the building and a pathway on the left side of the building. Personnel continued on the pathway and past the granite building to another brick building with chimney stack. Old

equipment was observed from the doorways of the building. None of the buildings were entered due to their condition. A pile of bricks was located outside of the chimney brick building and a flush mounted monitoring well was observed in this area as well. Old equipment and what appeared to be a kiln, with ash still in the kilns and piled on the floors was observed. Several wooden structures with falling roofs were observed on the property, including but not limited to one located to the left of the pathway, across from the chimney brick building and two located past the chimney building.

The RI Historical Preservation & Heritage Commission representative, Richard Greenwood inquired about the structural integrity of the granite building, located between the two brick buildings. According to Mr. Greenwood, this building has historic value and if structurally sound should remain.

Personnel exited the site crossed to the other side of the river, opposite the mill. Several spillways were observed, a fish ladder and a boom in the river. The boom in the river had been previously used when the owner was removing debris from a falling building. As noted in RIDEM Fish & Wildlife's letter to the Federal Energy Regulatory Committee dated August 19, 2009, work was conducted on the site to remove debris that had fallen into the river on the left side of the dam and also to remove debris that had fallen into the raceways in December 2006. A crane was used and a debris boom was placed in the water downstream of the work being conducted. For several years this debris boom stayed in place. In the winter of 2008-2009, this boom became dislodged and moved upstream and alternated between floating back and forth above a deep pool downstream of the dam and surrounding a vegetated island in the middle of the river. RIDEM's Office of Compliance and Inspection has called the owner requesting that the boom be removed. The owner has been non-responsive to date, as observed during this site walk.

RIDEM answered questions concerning the status of the site in the State Program, that an SIR Draft was submitted but has not been completed for the Site, since final comments have not been addressed. A complete SIR would need to be compiled, using data that has been submitted.

A follow up to the site walk: Contact information for John Brown from the Narragansett Indian Tribe was sent to the Town of Westerly. The Narragansett Indian Tribe would be interested in specifications for the project, disturbance of the area and where the materials are going for the proposed demo, should work be carried out at Potter Mill, Westerly, Rhode Island.

Time of Departure: 1115 hrs

Shelly Ducharme

Signature

cc: Matthew DeStefano, RIDEM-OWM
Kelly Owens, RIDEM-OWM
Cynthia Gianfrancesco, RIDEM-OWM

DIGITAL PHOTOGRAPHS

Site Name: Pawcatuck Woolen Mill / Potter Hill Mill

Site Address: 198 Potter Hill Road, Westerly, RI

Date Photographs Taken: 9/11/09

Inspector(s) Shelley Ducharme

Photo #

1



Description:

First Building viewed after entering gate

Photo #

2



Description:

First building viewed after entering the gate

DIGITAL PHOTOGRAPHS

Site Name: Pawcatuck Woolen Mill / Potter Hill Mill

Site Address: 198 Potter Hill Road, Westerly, RI

Date Photographs Taken: 9/11/09

Inspector(s) Shelley Ducharme

Photo #

3



Description:

Spillway under first building viewed upon entering through the gate

Photo #

4



Description:

Spillway entrance under first building viewed upon entering through the gate

DIGITAL PHOTOGRAPHS

Site Name: Pawcatuck Woolen Mill / Potter Hill Mill

Site Address: 198 Potter Hill Road, Westerly, RI

Date Photographs Taken: 9/11/09

Inspector(s) Shelley Ducharme

Photo #

3



Description:

Old Equipment located in building with chimney stack

Photo #

4



Description:

Chimney stack view

DIGITAL PHOTOGRAPHS

Site Name: Pawcatuck Woolen Mill / Potter Hill Mill

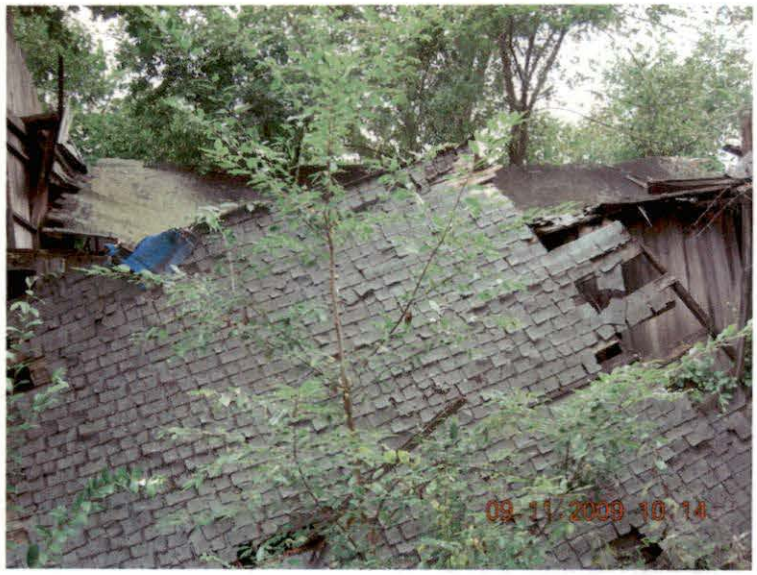
Site Address: 198 Potter Hill Road, Westerly, RI

Date Photographs Taken: 9/11/09

Inspector(s) Shelley Ducharme

Photo #

5



Description:

Building on other side of walking path across from the building with the chimney stack. Falling Roof

Photo #

6



Description:

Bricks pile near brick building with chimney stack

DIGITAL PHOTOGRAPHS

Site Name: Pawcatuck Woolen Mill / Potter Hill Mill

Site Address: 198 Potter Hill Road, Westerly, RI

Date Photographs Taken: 9/11/09

Inspector(s) Shelley Ducharme

Photo #

7



Description:

Kilns inside the building with the chimney stack. Ash like material was viewed coming out of the kiln.

Photo #

8



Description:

Area behind kiln

DIGITAL PHOTOGRAPHS

Site Name: Pawcatuck Woolen Mill / Potter Hill Mill

Site Address: 198 Potter Hill Road, Westerly, RI

Date Photographs Taken: 9/11/09

Inspector(s) Shelley Ducharme

Photo #

9



Description:

Debris in building

Photo #

10



Description:

Monitoring well outside of building

DIGITAL PHOTOGRAPHS

Site Name: Pawcatuck Woolen Mill / Potter Hill Mill

Site Address: 198 Potter Hill Road, Westerly, RI

Date Photographs Taken: 9/11/09

Inspector(s) Shelley Ducharme

Photo #

11



Description:

Wooden Structure furthest from the road

Photo #

12



Description:

Wooden structure furthest from the road

DIGITAL PHOTOGRAPHS

Site Name: Pawcatuck Woolen Mill / Potter Hill Mill

Site Address: 198 Potter Hill Road, Westerly, RI

Date Photographs Taken: 9/11/09

Inspector(s) Shelley Ducharme

Photo #

13



Description:

Wooden Structure furthest from the road

Photo #

14



Description:

Granite building that the State of Rhode Island Historical Preservation & Heritage Commission is interested in.
The town engineer says that the foundation has spread and it may no longer be worth rehabilitating.

DIGITAL PHOTOGRAPHS

Site Name: Pawcatuck Woolen Mill / Potter Hill Mill

Site Address: 198 Potter Hill Road, Westerly, RI

Date Photographs Taken: 9/11/09

Inspector(s) Shelley Ducharme

Photo #

15



Description:

Fish ladder and dam across the river from the mill

Photo #

16



Description:

Dam located before the granite mill building

DIGITAL PHOTOGRAPHS

Site Name: Pawcatuck Woolen Mill / Potter Hill Mill

Site Address: 198 Potter Hill Road, Westerly, RI

Date Photographs Taken: 9/11/09

Inspector(s) Shelley Ducharme

Photo #

17



Description:

Brick building attached to beginning of the granite building. Outlet of spillway under building seen here.

Photo #

18



Description:

View of Potter Mill from across the river

DIGITAL PHOTOGRAPHS

Site Name: Pawcatuck Woolen Mill / Potter Hill Mill

Site Address: 198 Potter Hill Road, Westerly, RI

Date Photographs Taken: 9/11/09

Inspector(s) Shelley Ducharme

Photo #

19



Description:

Boom that had been used for taking out some debris. Boom was left in the river.
Owner has been asked by OC&I to remove the boom from the river.

Photo #

20



Description:

Downstream view of Potter Mill and the river

DIGITAL PHOTOGRAPHS

Site Name: Pawcatuck Woolen Mill / Potter Hill Mill

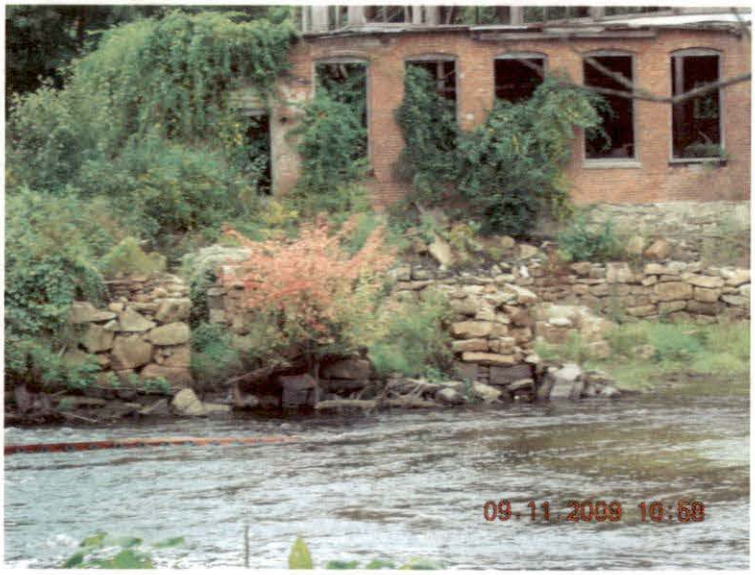
Site Address: 198 Potter Hill Road, Westerly, RI

Date Photographs Taken: 9/11/09

Inspector(s) Shelley Ducharme

Photo #

21



Description:

View from across the river of the first brick building from Photo 1

Photo #

22

Description:

Wooden structure furthest from the road

Aug. 3, 2009

Outline of issues to be addressed in RIDEM Comments and Study Requests

Comments

Fish passage – preferred options:
- new fishway on left side of river
- tailrace discharge should be parallel to flow not perpendicular
- will reiterate downstream passage conditions with angled bar racks and low approach velocities.
- kaplan turbine okay
- bypass flow – bypass flow study or ABF=170cfs (August median)
- Keep existing fishway and allow some of bypass flow to be used for continued functioning

Vortex turbine (VT)
- Oppose VT on right bank due to an additional, confusing attraction flow and potential detrimental effects of installation on existing fishway.
- For VT on left bank additional attraction will be another problem.

Water Quality
- Outline existing problems with dissolved oxygen
- Describe state's antidegredation regulations
- Describe rationale for bypass flow prescription.
- Requirement for owner to apply for a Freshwater Wetlands Permit and a 401 Water Quality Cert.

Recreation
- Canoe and kayak portage across property
- Fishing access

Other DEM issues
-Office of Waste Management
-Office of Compliance and Inspection

Study Requests

Model DO in river
Bypass flow study

Potter Hill/ Swift River Mill Hydropower Proposal
RIDEM Foundry Offices, Providence, RI
August 3, 2009

Meeting Notes

Attendees:
Al Blott, NMFS
Alisa Richardson, RIDEM, Water Quality Cert. Program
Christine Dudley, RIDEM, Fish and Wildlife
Phil Edwards, RIDEM, Fish and Wildlife
Chuck Horbert, RIDEM Freshwater Wetlands Program
Terry Walsh, RIDEM, Water Quality Cert. Program
Chris Fox, Wood Pawcatuck Watershed Association
Melissa Grader, USFWS
Steve Gephard, CTDEP
Veronica Masson, RIDEM, Fish and Wildlife

This meeting was held in order to discuss the Swift River Mill Hydroelectric project. The property owner recently submitted his application for exemption for licensing and a request of continuation of the existing preliminary permit including the existing project number (12622). FERC has issues a notice for study requests. We will additionally be providing extensive comments on the project as well. The deadline to submit comments and study requests to FERC is August 31, 2009. Melissa suggested that comments be provided in a letter and study requests be provided in an appendix.

Zoning
The zoning issue was raised because the property is currently zoned as rural residential. Nancy Hess wrote in an email: "FERC may supersede the issue of hydro installation in the river but only in the river. It does not supersede local authority on the land based uses. Those activities must be consistent with Westerly Zoning per RI Enabling State Law. If he gets permission to put hydro in the river per FERC he will still have to get local approval for what ever is going to happen with the related buildings. RI Law requires consistency with local zoning and all federal and state permits for any land based activity." Melissa stated that the USFWS solicitor said the owner would be able to develop hydro regardless of local zoning. It was suggested that the Town of Westerly write a letter to FERC to find out who has jurisdiction. Chris agreed to work with the Westerly Land Trust and the Town to answer this question.

Fishways
Al suggested that the best solution would be to put a fishway on the left side of the river. Melissa summarized Dick Quinn's assessment of the proposal. He stated that there is substantial attraction flow on the left side of the river that would significantly impact the functioning of the existing fishway to effectively pass target fish species. In order to mitigate these impacts a new fishway must be built on the left side of the river. He could

not provide guidance on the location because the owner has not decided on the location of the turbine discharge. Steve suggested that the entrance to the new fishway should not be by the spillway but rather adjacent to the hydro discharge for attraction purposes.

Fish passage – preferred options:
- upstream passage
- kaplan turbine okay
- tailrace discharge should be parallel to flow not perpendicular
- as close to spillway as possible
- bypass flow – bypassflow study or ABF=170cfs (August median)

Water Quality
Alisa will require a DO modeling study, same as Slatersville and Royal Mills (QUAL2E model). This study should show no net loss according to the state's antidegredation regulations. Also required, will be continuous post installation monitoring and if necessary post aeration.

Bypass flows ABF=147cfs, Median August Flow= 170cfs. The latter is preferred by RIDEM.

Vortex turbine
Melissa suggested requiring screening and proper velocities to minimize entrainment and impingement of fish. Phil has several issues with the vortex turbines. The proposed vortex turbines would provide additional attraction flow, contributing to the confusion of attraction flows. The intake structure for the vortex turbine at the base of the existing fishway is problematic. The applicant proposed to put the pipe between the wall of the existing fishway and the retaining wall. This could potentially affect the structural integrity of the existing fishway. Additionally, intake structure needs to be far enough away from the exit of the fishway especially taking into consideration that fish may be tired after passing up the ladder. Phil feels it important that each vortex turbine be addressed separately so that maybe one or the other, if not both may be eliminated from the plan.

Operation and maintenance
Melissa: DEM may require in the terms and conditions full access to the site and to be able to perform work as historically done including enumerating and moving fish as necessary. Additionally, DEM could enter into a Memorandum of Agreement that would allow DEM to maintain and operate site as historically performed (need access for Atlantic salmon, enumeration, stocking fish etc.). If the owner does not comply with this (e.g. locks DEM out) then a compliance investigation can be initiated through FERC and ultimately FERC can rescind the exemption. The MOA would go through all of the possible scenarios.

Additionally, should require an effectiveness study for no less than 3 years.

Recreation
Wood Pawcatuck Watershed Association is requesting public access for a canoe and kayak portage through the property. The access would begin from a take-out location on the left side of the river which is owned by the Westerly Land Trust. The portage access would cross the road and enter the Swift River Mill property and continue to a suitable location for launching the canoes and kayaks once again. This location would have to be determine between all of the interested properties. Currently, the canoe portage around the dam consists of taking out at the Westerly Land Trust site and portaging across a narrow, heavily trafficked bridge and continuing along a narrow two-way road that had poor visibility. The proposed new access would be a similar distance but would be much more safe. Additional fishing access would be a plus.

Other Miscellaneous
RIDEM will summarize any past non-compliance for solid waste violations for the administrative record.

The owner has proposed to automate the site. It is possible that on one will be there on a daily basis but they must prove that there is a dedicated station operator who is on-call.

The owner must prove that no changes will occur to the level of the head pond. A reduction in the level of the head pond could potentially affect fish passage in the upstream reach. The entrance to Chapman Pond is located along this upstream reach and a significant fluctuation could affect out-migrating juvenile herring and shad.

Rhode Island Department of Environmental Management
Division of Fish and Wildlife
Oliver Stedman Government Center
4808 Tower Hill Road
Wakefield, RI 02879

Office of Water Resources
235 Promenade Street
Providence, RI 02908

August 19, 2009

Honorable Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, DC 20426

RE: COMMENTS AND STUDY REQUESTS
Swift River Mill Hydroelectric Project, FERC No. 12662
Pawcatuck River, Washington County, Rhode Island

Dear Secretary Bose:

This letter is in response to your public notice dated July 8, 2009, soliciting additional study requests, and establishing procedural schedule for licensing and deadline submission of final amendments for the Swift River Mill Hydroelectric Project, located at the Potter Hill Dam on the Pawcatuck River in Washington County, Rhode Island. The applicant for the project, Renewable Resources, Inc. (RRI) has proposed to redevelop an existing mill site and dam including changes to the intake, power canal, flume, four turbines and three tailrace channels, and to the existing fishway. The application states that the project will be operated run-of-river, with no flashboards or operations that would change the water level of the impoundment and will not be used for peaking purposes.

The Rhode Island Department of Environmental Management (RIDEM) has some serious concerns with the project as presented and these are detailed below. This is the first time the public has been presented with a plan that was substantial enough for comments and RIDEM will provide extensive comments to that end. In particular the issues of most concern continue to be fish passage for anadromous and catadromous species, and water quality. RIDEM has provided RRI written comments dated June 14, 2006, exchanged information via email, copies of which are included in the application, and met with the applicant on more than one occasion. Several representatives of RIDEM attended the public meeting held June 23, 2009.

A. Importance of fisheries resources at this site

Before specific comments are described, The RIDE M, Division of Fish and Wildlife, (RIDEM DFW) would like to stress the utmost importance of the fisheries resources in the Pawcatuck River. The Swift River Mill and the Potter Hill Dam site is the gateway to

Rhode Island's most pristine watershed, the Wood-Pawcatuck River Watershed. It is host to over 50 fish species including the anadromous Atlantic salmon, American shad, gizzard shad, alewife, blueback herring and the catadromous American eel.

The Pawcatuck River has numerous governmental and non-governmental organizations actively involved in restoration projects in the river. Millions of dollars in Federal, State and private monies, including funding from The American Recovery and Reinvestment Act, are being spent in evaluating, planning and constructing fishways and dam removals at several dams upstream of Potter Hill. Any activity, including construction and operation of hydropower at Swift River Mill/ Potter Hill Dam will directly affect the fisheries resources utilizing these upstream restoration measures.

The RIDEM DFW has operated a Denil fishway with a fish trap at this site since 1973. The funding for construction was provided by the National Oceanic and Atmospheric Administration (NOAA), National Marine Fisheries Service (NMSF) and by the United States Fish and Wildlife Service (USFWS), Federal Aid Program. The funding for upgrades and maintenance for the past 36 years has been provided by the State of Rhode Island and the USFWS, Federal Aid Program. Over the years, an enormous amount of personnel time has been expended at this location. Activities include monitoring spawning stock size, sampling fish for biological data, and transplanting adult broodstock to depleted and restored areas.

Under the Federal Aid in Sportfish Restoration Program, the RIDEM DFW is working to restore a number of fish species in the Pawcatuck River. The Potter Hill fishway and fish trap are central to these programs. The programs include the following species: Atlantic salmon, American shad, river herring, sea-run brown trout and American eel. We have a more than 30 year data set, which is added to every year and is invaluable. Additionally, a cooperative program between RIDEM DFW, the USFWS, and the Connecticut River working group to stock American Shad was instituted in 2009. American shad were stocked in the reach of the Pawcatuck River just upstream of the proposed project.

While the RIDEM DFW does not oppose hydropower, and we have, in fact, worked closely with several dam owners on developing and operating hydropower while protecting the fisheries resources, potential impacts to and losses of the fisheries resources at the Swift River Mill/ Potter Hill Dam site would be far greater than the minimal gains in clean energy at this very important site. The new projects recently approved and in progress include Royal Mills and Slatersville Hydro. We have also recently worked cooperatively with the owner/operator at Arctic Hydro to develop a low cost plan to solve a problem and to protect the fisheries resources in that stretch of the South branch of the Pawtuxet River. The difference between these projects and the Swift River Mill project is that these are located much further upstream, in already impacted areas where diadromous fish restoration efforts are in the initial stages and Swift Mill River Hydro is located at the keystone of the Pawcatuck River for all migratory fish species in the Pawcatuck River. In most cases, fish passage conditions improve with these new and existing hydroelectric projects by incorporating fish passage and bypass

flow requirements, this proposed project will detrimentally affect existing fisheries restoration efforts.

The RIDEM DFW respectfully requests that the importance of the migratory and resident fisheries resources is given strong weight when FERC considers the exemption from licensure at this location.

B. Proposed Project

The proposed project includes the installation of four new turbines. This includes two Francis turbines and two prototype vortex turbine units on opposite sides of the river. Additionally, a resident fish bypass is proposed on the left side of the dam. The applicant proposes to keep the existing fishway and add five additional, different attraction flows in the area. The proposed bypass flow is 45.5 cfs, this would include flows to the existing fishway, the proposed eel ramp, the downstream resident bypass and spill over the dam. The first turbine would be operational when flows reach 130.5 cfs and the second turbine would be turned operational when flows reach 215.5 cfs. The vortex turbine on the right side of the river, next to the existing fishway, will use 10.75cfs. The vortex turbine located on the left side of the river will use flows when excess flows are available.

C. Estimated project flows

The applicant has determined that, 100% of the time, flow does not go below 215 cfs, (2nd paragraph under Run of River Operation). This was calculated using the average monthly flow but this is a gross overestimation. Continuous flow data from 1941 to the present are available on the USGS website. According to the USGS data for the gage in Westerly, 23% of the time flows were equal to or fell below 200cfs, 19% of the time flows were equal to or fell below 175 cfs, 14.4% of the time flows were equal to or fell below 150 cfs, 9.9% of the time flows were equal to or fell below 125 cfs, and 5.5% of the time the flows were equal to or below 100cfs.

It is strongly recommended that the flow estimations and the calculation for power generation, turbine size and capacity, and turbine on/off schedules be recalculated in order to accurately reflect the actual flow conditions at the site. These recalculations should include the bypass flow of 139.8 cfs (discussed below).

D. Bypass flow

The bypass reach is proposed to be 150 to 250 feet long. The proposed bypass flow of 45.5cfs is inadequate. With the proposed configuration of discharges, the majority of which are 150-250 feet downstream, in order to maintain habitat quality in the bypass reach, the Division will require a standard bypass aquatic base flow of 120.5cfs. If the applicant chooses to do so, RRI may decide to conduct a bypass reach flow study to determine the appropriate flow regime to protect aquatic resources in this reach of the project. This flow study is outlined in Attachment A, Study Request 1.

The aquatic base flow of 120.5 is based on the USFWS standard aquatic base flow calculation of 0.50 times the watershed area and has been required at all new hydropower installations in the State of Rhode Island. The Westerly gage encompasses flow from

additional streams downstream of the project location. According to our RIDEM GIS Specialist, the watershed at the project location encompasses 241 square miles.

It is appropriate to include flows to fishways and fish bypasses in the total flow for the bypass reach.

E. Fishways

The current Swift River Mill/ Potter Hill Dam proposal maintains the existing fishway while adding to attraction flow in several areas. The attraction flow will be primarily altered in that the discharge from the turbines will be on the opposite (left) side of the river at a distance further downstream from the existing fishway (right). Additional distraction flows will be caused by vortex turbines on both sides of the river. The discharge from the vortex turbine on the right side of the river will be downstream of the fishway and the vortex turbine on the left side of the river will be much further downstream from the turbine discharge. Also there will be a resident bypass on the left side of the dam. All of these discharges serve to confuse migrating fish.

The RIDEM DFWbelieves that the proposed configuration will create distraction flows in too many locations (5 in total) and, as a result, migratory fish will not be able to find the entrance to the fishway. The option that would be most attractive to fish would be a complete dam removal at this site. Given that this is a proposal for hydropower, it is prudent to address the proposal as it stands. The engineer for the USFWS, Dick Quinn, has determined that a new fishway on the left side of the river is the only way to mitigate the impact the proposed hydro project would have to the current fishway. If this proposal is granted an exemption from licensing by FERC the Rhode Island Division of Fish and Wildlife will require a new fishway to be built on the left side of the river, concurrent with development of the project, as close to the turbine discharge as possible to capitalize on the significant attraction flow generated there.

Plans for a new fishway must be approved by a USFWS fishway engineer and the RIDEM DFW. A Memorandum of Agreement would need to be in place between RRI and the RIDEM DFW to establish maintenance procedures, access issues and troubleshooting along with which parties are responsible for which actions. There is concern that cooperation on the part of the applicant may be difficult to acquire either prior to the hydro/fishway installation and/or during operation of both. These concerns are detailed in section J of this letter.

Additionally, the RIDEM DFW would insist on maintaining the existing fishway as is, would continue to operate and maintain this fishway and would continue to monitor fish passage, if any were to continue at this ladder. It would be an excellent alternative for any fish that may overshoot the turbine discharge and find themselves at the base of the dam. As stated above, a significant amount of state and federal funds have been spent at this fishway on construction, modification and monitoring and it is important to continue to utilize the results of this funding. The amount of flow to this fishway is trivial overall and, as stated above, may be included as part of the bypass flows. Admittedly, there is a problem regarding the effectiveness of the existing fishway. This is primarily caused by

attraction flow on the opposite side of the river that is coming from a series of broken sluice gates. Pervious requests from the Division to repair these gates have been ignored by the current owner.

Any new fishway installation will require a pre- and post operation multi-species effectiveness study. This study would be designed to determine the effectiveness of the fishway in passing American shad, Atlantic salmon, river herring, sea-run brown trout and other species of note. An effectiveness study will be required for any American eel passage facility as well.

F. Vortex turbines

The vortex turbines employ a new technology that has not been tested in this country. In fact, there is only one existing in the world. No data have been provided that ensure the vortex turbines are "fish friendly". Additionally no data have been provided that detail the effectiveness of aeration by vortex turbines.

Right side vortex turbine

The proposed vortex turbine on the right side of the river, immediately downstream of the existing fishway causes the Division concern for several reasons. The discharge from this vortex turbine is located on the end of the fishway – away from the current fishway entrance. This is an additional attraction flow that will distract migrating fish away from the existing fishway, which is unacceptable. RRI proposes to run this turbine virtually all the time to allow for a small amount of power generation when flows are low, creating a constant distraction flow.

Additionally, the proposal shows the installation of the intake and pipe for the vortex turbine would be along the side of the fishway between the wall of the existing fishway and a very large retaining wall. There is much concern that this construction will affect the integrity of the wall of the fishway and the retaining wall. Additionally, the intake would be located very close to the exit of the fishway and it is possible that fish, tired from their travels up the fishway, could become entrained or impinged in the intake screening.

Left side vortex turbine

The proposed vortex turbine on the left side of the river is located downstream of the turbine discharge and in one of the dilapidated buildings on the property. It is proposed to run this vortex turbine only when flows in the river are very high, which directly coincides with the timing of anadromous fish migration. The concern with this vortex turbine is again, the additional attraction flow provided by the discharge, which will serve to confuse fish further. Additionally, there are concerns about contaminated waste in the buildings that must be removed. There are issues with the construction plans that have been submitted to RIDEM Office of Waste Management. The concerns are linked to this turbine because this is located in one of the buildings that is proposed to be restored.

G. Site design and specifications

Design plans are provided for some of the engineering on the site however, the majority of plans, including locations and sizes of the Kaplan turbines and vortex turbines do not appear to be scaled correctly. Accurate drawings are necessary to enable resource agencies to provide constructive comments on the project. For the vortex turbine in particular, as drawn, the intake pipe appears to be much larger than the known available space.

H. Water Quality

The Pawcatuck River is listed in the RIDEM 288 303(d) List of Impaired Waters as not supporting for dissolved oxygen in the tidal reach of the Pawcatuck River. Because the tidal portion of the Pawcatuck River is not supporting for dissolved oxygen, the regulations state that no further degredation can occur to that downstream segment. The applicant must confirm that there would be no impact to the impaired water in accordance with the State's antidegredation regulations. Further details are provided in the comments from the Office of Water Resources. A water quality study is requested and detailed in Appendix A, Study Request 2.

I. Recreation

Currently, the canoe portage around the dam consists of taking out on the left side of the river, which is owned by the Westerly Land Trust, and portaging across a narrow, heavily trafficked bridge and continuing along a narrow two-way road that has poor visibility and no shoulder, forcing foot traffic into the travel lanes. The proposed new access would be a similar distance but would be much safer. We would like to request public access for a canoe and kayak portage through the property. The access would begin from a take-out location on the left side of the river at the Westerly Land Trust site. The portage access would cross Potter Hill Road and enter the Swift River Mill property and continue to a suitable location for launching the canoes and kayaks once again. This location would have to be determined between all of the interested properties.

Additionally, we would like to request fishing access at the canoe and kayak launch site.

J. RIDEM's compliance history with the applicant

Shortly after the owner purchased the property site, a letter dated September 23, 1993, was sent to the applicant by Dean Albro, RIDEM Division of Freshwater Wetlands, Dam Safety. This letter requested that the leaking broken gates on the left side of the dam be repaired. These gates were, and still are, leaking extensively and causing attraction flow away from the existing fishway. A response was received, dated November 1, 1993 and assurances were made by the applicant that repairs to the gates and operating structures of the gates would be repaired is a reasonable amount of time. An additional letter was sent on March 13, 1995 by Dean Albro requesting an update on the progress of the repairs. This letter states that there were attempts to contact the applicant with no response. If these gates had been repaired in a timely manner at that time the fishway would have had improved effectiveness for 15 years.

Additionally, in 1994, there were requests from the RIDEM DFW to reposition stones at the base of the fishway to improve access for anadromous fish. The details are outlined

in a memo from John O'Brien, Deputy Chief for Freshwater Fisheries to David Borden Chief of Fish, Wildlife and Estuarine Resources. This states that there was an initial meeting, a consent agreement that was received by the applicant and several phone calls to inquire as to whether the applicant would sign the agreement. The work was opened for bidding by contractors and a contract was awarded. Ultimately, the applicant refused to allow access to his property. This work, suggested and recommended by RIDEM DFW15 years ago, was included in this application as a suggestion of ways to improve fish passage for the project for current conditions. These changes would not be sufficient to mitigate impacts if the site were developed for hydropower.

In December of 2006 work was conducted on the site to remove debris that had fallen into the river on the left side of the dam and also to remove debris that had fallen into the raceways. A crane was used and a debris boom was placed in the water downstream of the work being conducted. For several years this debris boom stayed in place. In the winter of 2008-2009 this boom became dislodged and moved upstream, and alternated between floating back and forth above a deep pool downstream of the dam and surrounding a vegetated island in the middle of the river.

Patrick Hogan from the RIDEM Office of Compliance and Inspection requested the applicant to remove the boom. Here is his account "In this case, I had spoken with Mr. Carapezza on two occasions. After several phone messages (4/29/09, 4/30/09, 5/5/09, 5/7/09) Mr. Carapezza called me (5/7/09) and said that he needed the boom for upcoming project and would have his contractor reinstall it properly within a couple of days.

In July, the boom was still in the river in its abandoned state, I contacted Mr. Carapezza a second time (7/3/09). Mr. Carapezza told me that it was the 5" plus rain storm that dislodged the boom that he had installed properly. As months had passed and the boom was still not actually in use, I told Mr. Carapezza that it is either to be used or it must be removed from the river. Mr. Carapezza claimed that he needed the boom very soon to do some brush cutting. I requested that he send an e-mail to DEM giving us his plans for using the boom with actual dates for the proposed work. He said that he would. He did not send an e-mail. Five days later (7/8/09) I decided that he is simply non-responsive and that I would call him back and require him to remove the boom. I called Mr. Carapezza many times. Sometimes an answering machine was available in which case I left detailed messages. Often times there was no option to leave a voicemail. Once I was able to leave a message with a woman who answered. I called on the following dates: 7/9/09, 7/10/09, 7/15/09, 7/17/09, and 7/20/09. Mr. Carapezza has not returned my call to date. I consider him non-responsive and think that you should keep this in mind while reviewing any of his proposals."

Finally, at the public meeting and site visit, held on June 23 2009, at the headquarters for the Wood-Pawcatuck Watershed Association and the project site, respectively, an altercation occurred between the applicant, Edward Carapezza, and a woman who was apparently a local neighbor. RIDEM personnel observed the applicant denying access to this individual at the site visit after she attended the entire public meeting without incident. He physically shoved her out of the gate to the property and then locked the

gate. The incident was not reported to the police, however, a detailed report was provided to supervisors in RIDEM.

This information is provided, for the record, to underscore concerns RIDEM has regarding the cooperation of the applicant in operations, maintenance and accessibility of fishways at the project site.

K. PRELIMINARY TERMS AND CONDITIONS

Pursuant to 18 CFR 4.106(b), any case-specific exemption from licensing granted for a small hydroelectric power project requires inclusion in the exemption of all terms and conditions that are prescribed by state and federal fish and wildlife agencies to prevent loss of, or damage to, fish and wildlife resources, and to otherwise carry out the purposes of the Fish and Wildlife Coordination Act.

Consistent with this office's responsibilities, the Rhode Island Department of Environmental Management, Division of Fish and Wildlife hereby submits its preliminary terms and conditions for the proposed project. These terms and conditions may be modified based on supplemental information provided by the applicant and/or the Commission during the exemption from licensing process.

1. The Exemptee shall operate the project in a run-of-river mode, whereby inflow to the project will equal outflow from the project on an instantaneous basis and water levels above the dam are not drawn down for the purpose of generating power. Instantaneous run-of-river operation may be temporarily modified if required by operating emergencies beyond the control of the Exemptee, or for short periods upon mutual agreement between the Exemptee, the Rhode Island Department of Environmental Management, and the U.S. Fish and Wildlife Service.

2. The Exemptee shall discharge a minimum flow of 121 cfs, or inflow, if less, over the dam at all times for the protection of instream habitat, water quality and aesthetics; a portion of this flow shall be passed through a downstream bypass weir, the existing fish ladder, a new fish ladder, and an upstream eelway, with the remainder discharged across the spillway. The amount of flow to be released through the fish passage facilities shall be determined pursuant to Conditions 4-6 below.

3. The Exemptee shall install full-depth trashracks for all intake structures that meet the following criteria: (1) are installed at an angle 45° to the flow of water; (2) have an approach velocity $\leq$ 1.5 fps (as measured six inches in front of the racks); and (3) have clear spacing of 3/4 inch or less. The racks shall be kept free of debris and maintained to design specifications. The trashracks shall be installed and operational concurrent with project start-up.

4. The Exemptee shall be responsible for constructing, operating, maintaining and evaluating a downstream fish passage system to facilitate the movement of diadromous and riverine fish. The bypass system (location, dimensions, flow, etc.) shall be designed in consultation with, and the designs shall require approval by, the

U.S. Fish and Wildlife Service and the Rhode Island Department of Environmental Management, Division of Fish and Wildlife. The bypass system shall be operational concurrent with the commencement of project operation and shall remain open year-round. Effectiveness study plans shall be developed in consultation with, and shall require approval by, the U.S. Fish and Wildlife Service and the Rhode Island Department of Environmental Management.

5. The Exemptee shall be responsible for constructing, operating, maintaining and evaluating new upstream fish passage facilities for anadromous fish. The upstream fishway (location, dimensions, flow, etc.) shall be designed in consultation with, and the designs shall require approval by, the U.S. Fish and Wildlife Service and the RIDEM Division of Fish and Wildlife. The fishway shall be operational concurrent with the commencement of project operation and shall remain open year-round. Effectiveness study plans shall be developed in consultation with, and shall require approval by, the U.S. Fish and Wildlife Service and the RIDEM Division of Fish and Wildlife. The Exemptee shall allow representatives of the U.S. Fish and Wildlife Service and the Rhode Island Department of Environmental Management, Division of Fish and Wildlife to access the fishway year-round for fisheries management purposes.

6. The Exemptee shall be responsible for constructing, operating, maintaining and evaluating upstream fish passage facilities for American eel. The upstream eelway(s) (location, dimensions, flow, etc.) shall be designed in consultation with, and the designs shall require approval by, the U.S. Fish and Wildlife Service. The fishway shall be operational concurrent with the commencement of project operation and shall remain open year-round. Effectiveness study plans shall be developed in consultation with, and shall require approval by, the U.S. Fish and Wildlife Service. The Exemptee shall allow representatives of the U.S. Fish and Wildlife Service and the Rhode Island Department of Environmental Management, Division of Fish and Wildlife to access the fishway year-round during daylight hours for fisheries management purposes.

7. Recognizing that spill over the Potter Hill Dam adds oxygen to the Pawcatuck River, the amount of which changes seasonally, the project shall cause no net loss in dissolved oxygen, as measured downstream of the tailrace (at a location determined by the Rhode Island Department of Environmental Management). The Exemptee shall provide data to the Rhode Island Department of Environmental Management sufficient to verify compliance with this anti-degradation standard within one (1) year of the commencement of hydropower operations. The Exemptee shall summarize the data in a report, including a description of the operating protocols necessary to achieve water quality compliance.

8. The Exemptee shall, within three (3) months of the date of issuance of an exemption from licensing, prepare and file for approval by the U.S. Fish and Wildlife Service, a plan for maintaining and monitoring run-of-river operation and bypass flows at the project. The plan shall include a description of the mechanisms and structures that will be used, the level of manual and automatic operation, the methods to be used for

recording data on run-of-river operation and bypass reach flows, an implementation schedule, and a plan for maintaining the data for inspection by the U.S. Fish and Wildlife Service.

9. The Exemptee shall implement a refill procedure whereby, during impoundment refilling after drawdowns for maintenance or emergency purposes, 90% of inflow is passed downstream and the headpond is refilled on the remaining 10% of inflow to the project. This refill procedure may be modified on a case-by-case basis with the prior approval of the U.S. Fish and Wildlife Service.

10. The Exemptee shall notify the U.S. Fish and Wildlife Service in writing when the project commences operation. Such notice shall be sent within 30 days of start-up to Supervisor, New England Field Office, 70 Commercial Street, Suite 300, Concord, New Hampshire 03301. The Exemptee shall furnish the U.S. Fish and Wildlife Service with a set of as-built drawings concurrent with filing said plans with the Federal Energy Regulatory Commission.

11. The Exemptee shall allow the U.S. Fish and Wildlife Service to inspect the project area at any time while the project operates under an exemption from licensing to monitor compliance with their terms and conditions.

12. The U.S. Fish and Wildlife Service reserves the right to add to and alter terms and conditions for this exemption as appropriate to carry out its responsibilities with respect to fish and wildlife resources. The Exemptee shall, within thirty (30) days of receipt, file with the Federal Energy Regulatory Commission any additional terms and conditions imposed by the U.S. Fish and Wildlife Service.

13. The Exemptee shall incorporate the aforementioned terms and conditions in any conveyance—by lease, sale or otherwise—of its interests so as to legally assure compliance with said conditions for as long as the project operates under an exemption from licensing.

Thank you very much for this opportunity to comment and provide study requests. Please contact this office if you have any questions regarding this letter or series of study requests.

Sincerely,

Veronica Masson,
RIDEM, Fish and Wildlife

Alisa Richardson, PE,
RIDEM, Water Quality Cert

Cc: Edward Carapezza
P.O. Box 365
Hopkinton, RI 02833
USFWS, Melissa Grader

NMFS, Sue Tuxbury
RI DEM/OTA, Joe Antonio
John Brown
Tribal Historic Preservation Officer
Narragansett Tribal Nation
P.O. Box 700
Wyoming, RI 02898
Michael J. Thomas, Chairman
Mashantucket-Pequot Tribal Nation
2 Matts Path
P.O. Box 3060
Mashantucket, CT 06339

Attachment A

Study Request 1: Bypass Reach Flow Study

(1) Goals and Objectives

The goal of this study is to determine an appropriate flow regime that will protect and enhance the aquatic resources from the base of the Potter Hill Dam downstream to the tailrace discharge.

The objective of the study will be to evaluate the relationship between flow and habitat suitability for target fish species in the Pawcatuck River below the dam.

(2) Relevant Resource Management Goals

The RIDEM seeks the accomplishment of a number of resource goals and objectives through the permitting process for the Project. General goals include the following:

1. Ensure that protection, mitigation and enhancement measures are commensurate with Project effects and help meet regional fish and wildlife objectives for the basin.
2. Conserve, protect, and enhance the habitats for fish, wildlife, and plants that will be affected by the Project.
3. Protect, enhance, or restore, diverse high quality aquatic and riparian habitats for plants, animals, food webs, and communities in the watershed and mitigate for loss or degradation of these habitats.
4. Provide an instream flow regime that meets the life history requirements of riverine fish and wildlife (including invertebrates such as freshwater mussels) throughout the area impacted by Project operations.
5. Minimize potential negative project operation effects on water quality and aquatic habitat.

Our study requests are intended to facilitate the collection of information necessary to conduct effects analyses and to develop reasonable and prudent conservation measures, and protection, mitigation, and enhancement measures pursuant to the Clean Water Act.

(3) Background and Existing Information

Presently all inflow passes over the dam or through the existing fish ladder. If developed, the project would create a bypass reach somewhere between 150 and 250-feet-long. RRI has proposed to release approximately 45 cfs at the dam through spill, fish passage structures, and a new vortex turbine. No information exists regarding the adequacy of the proposed flow to protect aquatic resources and maintain habitat quality in the bypass reach. An empirical study is needed to provide information on the relationship between flow and habitat in the bypass reach for the Service to use in determining a flow regime requirement.

(4) Project Nexus

Under existing conditions, all inflow to the impoundment created by the Potter Hill Dam passes over the dam or through the fish ladder. If the proposed project is developed, during those times when inflow is within the hydraulic capacity of the generating units,

nearly all of the river flow would be routed through a new intake and discharged 150-250 feet downstream of the dam. The project clearly will have an impact on aquatic resources in the bypassed reach of river by altering the magnitude, duration and timing of flow to the area relative to existing conditions.

(5) Proposed methodology

The RIDEM requests that a bypass flow study be conducted at the Project. Given the length of the river reach, we believe a study methodology along the lines of an Incremental Demonstration Flow (IDF) is appropriate for this site. This same protocol was used during the relicensing of the Housatonic River Project (FERC No. 2576).[1] This approach is a modification on the "Wisconsin method" (Simonson et al. 1994), and variations on the IDF design have been accepted by the Commission in a number of other licensing proceedings.[2]

At a minimum, the study design should involve collecting wetted perimeter, depth, velocity, and substrate data along transects located within the bypass. The measurements should be taken over a range of test flows. This information then should be synthesized to quantify habitat suitability of each test flow for target species identified by the fisheries agencies.

(6) Level of effort and cost

The expected level of effort and anticipated costs will be comparable to that experienced on similar FERC projects of this size.

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[1] Housatonic River Project License Application, Volume 4, Appendix G, Pages 7-9. Connecticut Light and Power Company, August 1999.

[2] Vail Project (FERC No. 3090) Final Bypass Reach Aquatic Flow Study Report. Village of Lyndonville Electric Department, Lyndon, Vermont. April 21, 2000; Final Bypass Reach Aquatic Habitat and Aesthetic Flow Study in Barton Village Hydroelectric Project Application for Subsequent License (FERC No. 7725), Volume 2, Appendix C.

Study Request 2: Water Quality Survey

(1) Goals and Objectives

The goal of this study is to determine whether the project will meet State water quality standards and antidegradation requirements under the proposed operational protocol.

The objective of the study will be to collect water temperature and dissolved oxygen (DO) data during the low flow / high water temperature season and compare those measurements with state threshold criteria for Class B surface waters.

(2) Relevant Resource Management Goals

The RIDEM seeks the accomplishment of a number of resource goals and objectives through the permitting process for the Project. General goals include the following:

1. Ensure that protection, mitigation and enhancement measures are commensurate with Project effects and help meet regional fish and wildlife objectives for the basin.
2. Conserve, protect, and enhance the habitats for fish, wildlife, and plants that will be affected by the Project.

Specific to aquatic resources, the RIDEM's goals are:

1. Protect, enhance, or restore, diverse high quality aquatic and riparian habitats for plants, animals, food webs, and communities in the watershed and mitigate for loss or degradation of these habitats.
2. Provide an instream flow regime that meets the life history requirements of resident fish and wildlife (including invertebrates such as freshwater mussels) throughout the area impacted by Project operations.
3. Minimize potential negative project operation effects on water quality and aquatic habitat.

Our study requests are intended to facilitate the collection of information necessary to conduct effects analyses and to develop reasonable and prudent conservation measures, and protection, mitigation, and enhancement measures pursuant to the Clean Water Act.

(4) Background and Existing Information

The Pawcatuck River from the Route 3 bridge crossing upstream of the Potter Hill Dam, downstream to the Route 1 bridge crossing in Westerly, is designated as Class B/Cold Water Fish Habitat. In part, Class B Cold waters must have DO content of not less than 75% saturation, and an instantaneous minimum DO concentration of at least 5 mg/l, except as naturally occurs.

The PAD cites historical water quality information taken from the USGS Westerly Gauge 01118500. However, those data are from a long-term monitoring station that collects information about once per month, and typically not during early morning (when worst-case DO conditions would be expected). No site-specific surveys have been conducted to determine whether waters within the Project area meet State standards. This information

gap needs to be filled so that resource agencies can evaluate properly the potential impact of project operations on water quality.

(5) Project Nexus

Under existing conditions, all inflow to the impoundment created by the Potter Hill Dam passes over the dam or through the fish ladder. This spill has been estimated to add between 0.50 and 0.75 mg/l of dissolved oxygen to the river, depending on flow conditions. The tidal portions of the Pawcatuck River are on the 303(d) list due to impairments of dissolved oxygen and pathogens. Because the Pawcatuck River provides oxygenated water to the tidal areas, and particularly because the Potter Hill Dam is the last point of significant re-aeration, any small changes in oxygen can exacerbate the DO problem downstream.

If the proposed project is developed, during those times when inflow is within the hydraulic capacity of the generating units, nearly all of the river flow would be routed through a new intake and discharged 150-250 feet downstream of the dam. This will result in much less spill at the dam relative to current conditions. Also, depending on where the intake will be located and whether the headpond stratifies, deeper, less oxygenated water may be drawn for generation purposes. These factors could contribute to reducing DO levels.

The RIDEM requests that RRI conduct a water quality survey of the impoundment, bypass reach and tailrace area to gather data necessary to determine if the project will meet State water quality standards and antidegradation requirements.

(6) Proposed methodology

The applicant has two options of study methodology. The first option is to conduct pre- and post-project water quality monitoring. The monitoring would entail collecting continuous DO and temperature readings from May 1 through October 31 at a minimum of three locations: at the deepest point in the impoundment, in the bypass reach, and below the tailrace. Headpond bathymetry would be collected to determine the thalweg. At the impoundment station, vertical profiles would be collected monthly, with readings taken at surface, mid-level, and bottom (or every meter if the depth is greater than five meters).

Post-project data would be compared to pre-project data. If data show a net loss of DO, the applicant would be required to implement mitigative measures such as turbine aspiration, increased spillage, etc. This study approach is similar to the one used in the ongoing relicensing of the Scotland Project (FERC No. 2662).[3]

The second option is to conduct a water quality model designed to predict the change in oxygen that would occur under the proposed project operation. The Rhode Island Department of Environmental Management has a calibrated dissolved oxygen model that can be used to predict the effect the Swift River Mill Project will have on DO during low

[3] Revised Study Plan for the Scotland Hydroelectric Project, FERC Project Number 2662. June 2008. FirstLight Power Resources, pages 18-24.

flow conditions and on antidegradation of DO during high flow conditions. The model must be interpreted to define the operating regimes and shutoff conditions. This study approach is similar to the one used during the permitting process for the Natick Dam (FERC No. 3013), located on the Pawtuxet River, Rhode Island.

These same study options were given to applicants of the Royal Mills Hydro Project (FERC No. 12557) on the South Branch Pawtuxet River, RI, and the Slatersville Project (FERC No. 13356) on the Branch River, RI in their exemption from licensing proceedings.

(7) Level of effort and cost

The expected level of effort and anticipated costs will be comparable to that experienced on similar FERC projects of this size.

RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
235 Promenade Street, Providence, RI 02908-5767 TDD 401-222-4462

Dr. Edward Carapezza
Renewable Resources, Inc
PO Box 365
Hopkinton, RI 02833

14 July 2008

Mr. Joseph T. Unsworth, P.E.
Project Manager
Jacques Whitford Company, Inc.
24 Albion Road, Suite 220
Lincoln, RI 02865

RE: Pawcatuck Woolen Mill (a.k.a. Potter Hill Mill)
Revised Site Investigation Report Received 31 March 2008
198 Potter Hill Road, Westerly, RI,

Dear Mr. Carapezza and Mr. Unsworth:

The Rhode Island Department of Environmental Management (Department or RIDEM) is in receipt of the above referenced report. As a result of our review of that report, we have generated the attached comments and recommend that these comments be responded to in the form of a Supplemental Site Investigation Report (SIR).

Pursuant to the RIDEM letter of 29 February 2008, RIDEM concurred with your pervious correspondence to provide RIDEM with a revised SIR which includes all additional data collected and provides a response to all previous comments issued pertaining to the SIR submitted 5 December 2006. This is necessary in order for the Department to have a complete SIR document. As you will note, many of the attached comments pertain to previously issued RIDEM comments and your subsequent responses, which were not adequately reflected in the 31 March 2008 Revised SIR. These previous comments and responses, as well as a current comments, must be fully addressed in a Supplemental SIR in order for the RIDEM to issue a Program Letter for the site.

Please feel free to contact me if you have any questions regarding this letter at (401) 222-4700 X 7126 or Cynthia.Gianfrancesco@dem.ri.gov.

Sincerely,

Cynthia M. Gianfrancesco

Cynthia M. Gianfrancesco
Principal Environmental Scientist
Office of Waste Management

cc: Matthew DeStefano, RIDEM OWM
Marilyn Sheller, Westerly Town Planner

30% post-consumer fiber

PAWCATUCK WOOLEN MILL (former Potter Hill Mill)
198 Potter Hill Road
Westerly, RI

Office of Waste Management Comments on the Revised Site Investigation Report dated March 17, 2008

General Comments:

A. As discussed in the 17 January 2008 letter report from Jacques Whitford and concurred with in the RIDEM letter 29 February 2008, Renewable Resources was to submit a revised SIR which includes a response to all previous comments issued pertaining to the SIR submitted 5 December 2006. Many of the previous responses to RIDEM comments have not been adequately reflected in the revised SIR. Please review all of the following response and comment letters and include all final, accepted responses in a Supplemental SIR: RIDEM Comment letter dated 26 January, 2007; Jacques Whitford response dated 5 July 2007; RIDEM comment letter dated 31 July 2007; Jacques Whitford response dated 31 August 2007; RIDEM comment letter dated 7 September 2007; Jacques Whitford response dated 19 October 2007; Jacques Whitford Additional Investigation letter report dated 17 January 2008; RIDEM comment letter dated 29 February 2008.

Responses to be included in the Supplemental SIR are to include, but not be limited to:

<u>RIDEM Comment Letter dated 26 January 2007</u>:

Comment A: Please include documentation of all public notices conducted pursuant to Rule 7.07 of the Remediation Regulations

Comment C: Please include additional historic information included in your 5 July 2007 response, particularly the information in the second paragraph of your response.

Comment #1: Please include photos provided in the 5 July 2007 response to comments in the supplemental SIR.

Comment #2 : Please include justification previously provided for why certain parameters were not sampled for or only limited samples were taken, to include justification for not sampling for PCBs and justification for which samples were analyzed for compliance with GA Leachability Criteria.

Comment #6: RIDEM requested that all soil boring logs and monitoring well installation logs must be provided. Your response dated 5 July 2007 indicated "Soil boring logs will be included in the revised SIR." Appendix E of the revised SIR included only monitoring well installation logs for MW-3, MW-4 and MW-5. Please provide all soil boring logs and also the monitoring well logs for MW-1 and MW-2.

Comment #13: Please see comment #6 below.

Comment #17: Please see comment # 1 below

Comment #20: SIR Checklist 7.03 H: RIDEM asked for locations of the former onsite drinking water well and 2 abutting private drinking water wells to be shown on the site plan. Only one of the private wells was shown on the site plan. Please show all 3 wells and provide a symbol for these wells in the legend, as well as a symbol for all pipes in the legend, a north arrow and a scale. Also, SS-21, SS-32 and SS-33 are not identified on the site plan. Please include these sample locations on the site plan.

Comment # 21: SIR Checklist 7.03 I : the citation for the location and distance to all public water supplies is incorrect – the check list indicates section 7.0, page 11, when it is actually in Section 8.0, page 12. Also, the location of the public water supply is not provided (only the distance was provided) - please provide the location.

In addition, the information regarding the determination as to whether the release impacted any off-site areas utilized for residential or industrial/commercial properties or both is confusing. The information in Section 8.0, page 12 indicates "no manmade structures" are impacted, but it does not clarify whether abutting properties are impacted. Please provide clarification. Also, see Comment 5 below.

Revised SIR Specific Comments:

1. 2.0 Specific Objectives:

   As indicated in the 26 January 2007 RIDEM comment letter (comment 17), the SIR must state specific remedial objectives and must include more specific information, listing the objectives for each media and each AOC. Your response dated July 5, 2007 indicated "Section will be revised as appropriate in the revised SIR."; however, that section was not revised. Due to the fact that the site is being proposed for mixed/residential use and is in a GA Groundwater Classification, the remedial objectives must meet RIDEM Residential Direct Exposure Criteria (RDEC), GA Leachability Criteria, and GA Groundwater Objectives. Please revise and resubmit this section to reflect the appropriate objectives.

2. 4.1 Soil Sampling

   This section indicates that: "The samples collected on October 23, 2003 were collected using a Geoprobe that was used to install the monitoring wells, as discussed in Section 3.2.3." RIDEM believes there is a typo in that date, and it should be October 23, 200**6,** as indicated in Section 4.2. There is no mention of Geoprobe monitoring well installation in Section 3.2.3. Please clarify this section.

3. 4.4 groundwater Flow Direction, page 7

   Please provide all monitoring well gauging data.

4. 5.0 Results, page 8

   This section indicates beryllium was detected in 2 soil samples, TP5/S1 and SS-25, above RDEC. Beryllium in SS-25 was detected at 16.6 ppm, which also exceeds the

Industrial/Commercial Direct Exposure Criteria (I/CDEC). In addition, that level of beryllium is high enough that it could represent an exceedance of GA Leachability Criteria (greater than 20 times the GA Leachability Criteria for beryllium). These issues must be noted and addressed in the report. The Department requires that the beryllium I/CDEC exceedances be further delineated and compliance with GA Leachability Criteria be determined, either as part of the Supplemental SIR, as part of a remedial investigation, or during remediation.

5. 6.0 Summary of Environmental Data, page 9

   This section indicates that arsenic, barium and lead were detected at concentrations greater than RDEC. RIDEM believes the sentence should actually read beryllium instead of barium, and should also indicate an exceedance of I/CDEC for beryllium.

6. 8.0 Conclusions, page 12:

   This section indicates that no manmade structures have been impacted by a release of hazardous materials; however, it does not appear that any samples were collected from within manmade structures on site. Please clarify this statement, particularly as it pertains to the RIDEM Comment #4 issued in the 7 September 2007 comment letter regarding potential additional investigations under existing or former building areas.

   Also, indicate if any offsite impacts from the site are occurring in this section.

   In addition, this section should indicate that there are exceedances of I/CDEC for beryllium and potentially exceedances of GA Leachability Criteria for beryllium.

7. 9.0 Development of Remedial Alternatives:

   As indicated in the 26 January 2007 RIDEM comment letter (comment 13), according to RIGIS, a large portion of the site is within the FEMA floodplain, which appears to include the area proposed to be capped. In accordance with the RIDEM Wetlands regulations, filling within a floodplain is prohibited without providing an equivalent amount of floodplain compensation. Therefore, Remedial Alternative # 2 as it is presented, capping impacted soil without first removing an equivalent amount, is not acceptable as a proposed remedial alternative. Please provide a site map showing the FEMA Floodplain overlaid over the site and proposed capping area. If all or some of the area to be capped is within the floodplain, either a combination of Remedial Alternatives #2 and #3 must be selected as the proposed remedial alternative, or floodplain compensation must be included in the proposed remedial alternative.

   In addition, exceedances of all remedial objectives, including I/C DEC and GA Leachability Criteria, must be addressed in the proposed remedial alternative. Also, the proposed remedial alternative must include remediation or an impermeable engineered cap over areas where GA Leachability Criteria exceedances exist.

Shelley DuCharme

From: Chuck Horbert
Sent: Thursday, September 10, 2009 8:49 AM
To: Shelley DuCharme
Cc: Cynthia Gianfrancesco
Subject: RE: Potter Hill Mill Demolition

Hi Shelley:

Demolition of structures is generally exempt from obtaining a permit. Provided that all criteria under Rule 6.04 are met, and all conditions under Rule 6.01 are followed, we have no concerns.

-Chuck

-----Original Message-----
From: Shelley DuCharme
Sent: Wednesday, September 09, 2009 4:26 PM
To: Chuck Horbert
Cc: Cynthia Gianfrancesco
Subject: FW: Potter Hill Mill Demolition

Hi Chuck,

The Town of Westerly is planning a site walkover this Friday at the Potter Hill Mill/Former Pawcatuck Woolen Mill. The Town had condemned certain property structures and since the owner has not moved forward, the Town has taken out an RFP for design services to bid on a demo plan for the Mill site. A letter was sent to the owner to notify of the proceedings, 10 days prior and no response has been received. So the Town is moving forward with the site walkover, however, things could change based on the owner.

I was just wondering what concerns Water Resources may have with the potential demo project, given its proximity to the Pawcatuck River? It's still in the early stages, as the Town is going through the bid process and the owner has not yet responded to the Town's letter to proceed with the demo.

Thanks,

Shelley

-----Original Message-----
From: Shelley DuCharme
Sent: Wednesday, September 09, 2009 4:02 PM
To: jpratt@westerly.org
Subject: RE: Potter Hill Mill Demolition

Hi Jon,

See you Friday at 10AM, unless plans change. Who else will be attending the site walk this Friday? Veronica Masson from Fish and Wildlife has been involved with the FERC process. Her contact information is below. I've included our latest correspondences, related to FERC and a very brief summary of some of the information in our files.

Veronica Masson Principal Fisheries Biologist
RIDEM Division of Fish and Wildlife Great Swamp Field Headquarters
277 Great Neck Road West Kingston, RI 02892
T 401.789.0281 F 401.783.7490

Thank you,

Shelley Ducharme

Rhode Island Dept. of Environmental Management
Office of Waste Management

235 Promenade
Providence, RI 02908
Tel: 401.222.2797 ext. 7158
shelley.ducharme@dem.ri.gov

RI DEM/Office of Waste Management Homepage

-----Original Message-----
From: Jonathan Pratt [mailto:jpratt@westerly.org]
Sent: Wednesday, September 09, 2009 10:20 AM
To: Cynthia Gianfrancesco
Cc: Shelley DuCharme
Subject: RE: Potter Hill Mill Demolition

Thank you.

Ms. DuCharme, are you available to attend?

Jon R. Pratt, P.E.
Town Engineer
Town of Westerly, RI
(401) 348-2562
(401) 596-9512 Fax

-----Original Message-----
From: Cynthia Gianfrancesco [mailto:cynthia.gianfrancesco@dem.ri.gov]
Sent: Wednesday, September 09, 2009 9:50 AM
To: jonathan pratt
Cc: Shelley DuCharme
Subject: RE: Potter Hill Mill Demolition

Jonathan,

There is a new project manager for the Potter Hill site. Her name is Shelley Ducharme, and I have copied her on this email so you have her contact information. You may want to contact her to see if she is available on Friday.

Cynthia

Cynthia M. Gianfrancesco

Principal Environmental Scientist

RI DEM - Office of Waste Management

235 Promenade Street, Providence, RI 02908

401-222-4700 X7126

cynthia.gianfrancesco@dem.ri.gov

www.dem.ri.gov

From: Jonathan Pratt [mailto:jpratt@westerly.org]
Sent: Tuesday, September 08, 2009 4:01 PM
To: Cynthia Gianfrancesco
Subject: Potter Hill Mill Demolition

Ms. Gianfrancesco:

The Westerly Town Manager, Steven Hartford wanted me to notify you that we are planning a site visit to the Potter Hill Mill on Friday (9/11) at 10:00 AM. We have advertised to obtain proposals from engineering consultants to provide services to develop demolition plans and specifications. This site visit will serve as a Pre-proposal conference.

We would like to have you attend if you are able. We would be interested in keeping you involved with the project and in your input. Please let me know if you are available. Thank you.

Jon R. Pratt, P.E.
Town Engineer
Town of Westerly, RI
(401) 348-2562
(401) 596-9512 Fax

No virus found in this incoming message.
Checked by AVG - www.avg.com
Version: 8.5.409 / Virus Database: 270.13.87/2356 - Release Date: 09/09/09 06:53:00

Shelley DuCharme

From: Veronica Masson
Sent: Monday, August 31, 2009 4:52 PM
To: Shelley DuCharme
Cc: Cynthia Gianfrancesco
Subject: RE: Potter Hill & RIDEM Site Remediation Program Process

Hi Shelley,

I submitted the attached letter to FERC at 3 this afternoon. I made some general comments regarding the waste issues and am glad to have your summary to back up the claims I have made.

Thank you very much for your efforts in this regard.

Veronica

Veronica Masson Principal Fisheries Biologist
RIDEM Division of Fish and Wildlife Great Swamp Field Headquarters
277 Great Neck Road West Kingston, RI 02892 T 401.789.0281 F 401.783.7490

From: Shelley DuCharme
Sent: Monday, August 31, 2009 4:18 PM
To: Veronica Masson
Cc: Cynthia Gianfrancesco; Shelley DuCharme
Subject: Potter Hill & RIDEM Site Remediation Program Process

Hi Veronica:

Cleaning a contaminated site requires investigation, planning and action. The Remediation Regulations define these specific documents that are needed, or may be needed, as part of that process. The Program Process, outlined below, is available on RIDEM's website:
http://www.dem.ri.gov/programs/benviron/waste/topicrem.htm

I have provided some dates for when each of the following completed documents have been submitted for the Pawcatuck Woolen Mill Site, located in Westerly, Rhode Island. I have also attached some supporting documents as well for your files.

Program Process:

- **Notification of Release** – submitted September 21, 2006 by Jaques Whitford (JW) on behalf of their client and owner, Renewable Resources Inc. RIDEM responded with a Letter of Responsibility dated October 16, 2006.

- **Site Investigation Work Plan (SIWP)** – See Site Investigation Report bullet below.

- **Public Notice of Investigation** – dated December 20, 2006. No additional public notice letters have been submitted to RIDEM for work completed in November 2007, per RIDEM's December 3, 2008 comment letter.

- **Site Investigation Report** – submitted by JW on November 28, 2006. RIDEM provided comments in a letter dated January 26, 2007. A response from JW was received July 5, 2007. RIDEM responded in a letter dated July 31, 2007 and requested submittal of a workplan for review and approval. A letter response was submitted by JW on August 13, 2007. RIDEM responded to the work plan in a letter dated September 7, 2007 and JW further discussed the work plan in a letter dated October 19, 2007. RIDEM approved the site work in a response sent via email on October 30, 3007.

The additional investigation results were submitted on January 17, 2008. RIDEM responded to JW in a letter dated February 29, 2008, requesting a revised SIR. A revised SIR was submitted on March 17, 2008. RIDEM responded in a letter dated July 14, 2008, requesting a Supplemental SIR. A Supplemental SIR was submitted August 13, 2008. RIDEM responded with comments via email to JW on December 3, 2008. No response was received and no further progress has been made to complete remaining document submittals or address RIDEM's December 3, 2008 comments.

- **Site Investigation Report Checklist** – submitted January 2, 2007. An updated SIR checklist is not available to reflect changes in the revised and Supplemental SIR.

- **Public Notice of Completed Site Investigation & Comment Period on Technical Feasablity of Proposed Remedy** – Not complete as RIDEM has not issued a Program Letter. A Program Letter is only issued by RIDEM once the SI is complete. RIDEM's comments, dated December 3, 2008 were sent to JW and owner. No response received.

- **Remedial Action Work Plan (RAWP)** – Not Complete as the SIR & Public Notice are not complete. A RAWP is not submitted until RIDEM issues a **Remedial Decision Letter**, indicating that the SIR and Public Notice are complete.

- **Remedial Action** – Not Complete

- **Closure Report** – Not Complete

- **Environmental Land Use Restriction** (if applicable) –

- **Remedial Agreement**

Shelley Ducharme
Rhode Island Dept. of Environmental Management
Office of Waste Management

235 Promenade
Providence, RI 02908
Tel: 401.222.2797 ext. 7158
shelley.ducharme@dem.ri.gov

RI DEM/Office of Waste Management Homepage

concerns, please contact me so we can discuss.

Cynthia

Cynthia M. Gianfrancesco
Principal Environmental Scientist
RIDEM - Office of Waste Management
(401) 222-4700 X 7126
cynthia.gianfrancesco@dem.ri.gov
www.dem.ri.gov

From: Unsworth, Joseph [mailto:Joseph.Unsworth@JacquesWhitford.com]
Sent: Thursday, October 02, 2008 10:23 AM
To: Cynthia Gianfrancesco
Subject: Potter Mill

Cindy,

Mr. Carapezza asked that I inquire about the status of your review of our last submittal. Any information would be appreciated, thanks.

Joseph T. Unsworth, P.E.
Project Manager
Jacques Whitford Company, Inc.
24 Albion Road, Suite 220
Lincoln, RI 02865
(401)-312-8005
(401)-312-8010 (fax)
(401)-465-2173 (cell)
joseph.unsworth@jacqueswhitford.com
www.jacqueswhitford.com

CarbonNeutralBanner

****
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Cynthia Gianfrancesco

From: Cynthia Gianfrancesco
Sent: Wednesday, December 03, 2008 11:38 AM
To: 'Unsworth, Joseph'
Cc: Matthew Destefano; 'edward.carapezza.rri@gmail.com'
Subject: Potter Mill

Joe,

I am in the process of reviewing the 8-13-08 Supplemental SIR and have some questions /comments, as follows:

RIDEM Comment Letter dated 1/26/07

Response 1 (Comment A): You indicated that copies of all abutters notices are enclosed. The only notices enclosed are dated December 2006 and indicates work would be completed within 3 months. However, additional investigatory work was conducted in November 2007. I had recommended in my October 30, 2007 email to you that additional notifications to abutters be provided for the additional work. Was that done and if so can you please send me documentation of it? If no additional abutters notification was conducted can you please explain why not?

Response #5 (comment 6) : Can you please confirm the number of soil borings which were conducted? In reading the revised SIR is appears there are B1-B5 (which includes SS-27 - SS-29) and SS-30 and SS-31, but boring logs were only submitted for B1 - B5. Can you please clarify?

Response #8 (comment #20) - I have ask several times for the location of the former on-site supply well to be identified on the site plan, but it is still not there. Do you have any idea where it was? Is there a reason why it still isn't depicted on the site plan?

Response # 9 (Comment #21) - Rule 7.03. I. iv. asks for " The location and distance of all public water supplies which have been active within the previous 2 years and within one (1) mile of the contaminated-site." (as opposed to the location of the nearest Well Head Protection Area which is what you provided). Your response indicates that the nearest public water supply will is located approximately 250 feet northeast of the property. According to RIGIS there may be as many as eleven (11) public water supply wells within one mile of the site. The SIR must identify these in a list, verify that they have all been active within the last 2 years and provide the location (i.e.: address, latitude & longitude, etc) and distance to each water supply well (not the edge of the WHPA). Please provide this information.

Revised SIR Specific Comments

Response #7 (comment #7) - The DEM comment letter of 14 July 2008 indicates that remedial alternative #2 is not acceptable as it is presented because it did not mention the issue of the floodplain. The DEM comment did not indicate that the alternative is invalid, only that it must include information indicating that some excavation or floodplain compensation must be included in order to meet the requirements of the Wetland Regulations. It did not ask for calculations of flood plain impacts at this point - only a site map showing the FEMA floodplain overlaid over the site and proposed capping area, which we have not received. We just want it to be clear in the proposed remedial alternative, and be sure that **everyone** (i.e. the property owner, the Town, the abutting residents, etc) understands that if the floodplain is an issue, it will be addressed in the RAWP. All we're asking for is one more sentence in the proposed remedial alternative that says floodplain compensation will be addressed either through excavation or compensation elsewhere on site, and a revised site plan showing the proposed approximate area of capping and floodplain line. If for some reason this is not feasible, can you please call me so we can discuss? Otherwise, can you please respond accordingly?

Once these comments are addressed, I am prepared to issue a Program Letter. If you have any questions or

RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF LAND REVITALIZATION & SUSTAINABLE MATERIALS MANAGEMENT
235 Promenade Street, Providence, Rhode Island 02908

REQUEST FOR STATUS UPDATE
File No. SR-38-1074
(Formerly Case No. 2006-082)

November 2, 2020

Edward Carapezza
Renewable Resources, Inc.
P.O. Box 365
Hopkinton, RI 02833

RE: Pawcatuck Woolen Mill (Potter Hill Mill)
198 Potter Hill Road
Westerly, Rhode Island
Plat Map 8 / Lot 23

Dear Mr. Carapezza:

Effective April 22, 2020, the Rhode Island Department of Environmental Management's (the Department) Office of Waste Management has changed the office name to the Office of Land Revitalization and Sustainable Materials Management (LRSMM), as reflected in the re-codified 250-RICR-140-30-1, Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases (the Remediation Regulations). The purpose of these regulations is to create an integrated program requiring reporting, investigation, and remediation of contaminated sites in order to eliminate and/or control threats to human health and the environment in a timely and cost-effective manner.

The Department's Office of Land Revitalization and Sustainable Materials Management's (LRSMM) Site Remediation Program has recently been performing an administrative review of open cases and has determined that the Site listed above has never officially been closed out. As such, provision of a status update is required at this property.

On August 13, 2008, the Department received a Supplemental Site Investigation Report (SIR) from Jacques Whitford (JW), on behalf of the owner. The Department subsequently issued comments via e-mail to JW on December 3, 2008. No response was received for the comments. In 2009 and 2016, meetings were held with the Department staff and stakeholders about demolishing the buildings on site. No reports were received detailing these demolitions. As such, provision of a status update is required at this property.

As of November 2, 2020, Renewable Resources, Inc. is identified as the current owner of the Site by the Town of Westerly Tax Assessor's Office and as such, Renewable Resources, Inc. is a Responsible Party as defined by Section 1.4(A)(70) of the Remediation Regulations.

In order to complete the requirements of the Remediation Regulations, the Department is requiring that you submit, in writing, Renewable Resources, Inc.'s intentions to bring this site into compliance

in accordance with the Remediation Regulations by December 2, 2020. Furthermore, the Department is requiring that Renewable Resources, Inc. submit a SIR Response to Comments that responds to the December 3, 2008 comments (attached) and contains a status update on the site since the last SIR submission (August 13, 2008) by February 2, 2021.

If you have any questions regarding this letter, please contact me by telephone at (401) 222-2797 ext. 2030, or by E-mail at Stephanie.Cappelli@dem.ri.gov.

Sincerely,

Stephanie Cappelli
Environmental Engineer I
Office of Land Revitalization &
Sustainable Materials Management

cc: Kelly Owens, RIDEM/LRSMM
Rachel Simpson, RIDEM/LRSMM
Town of Westerly

Attachments: SIR Comment Letter, December 3, 2008

RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF LAND REVITALIZATION & SUSTAINABLE MATERIALS MANAGEMENT
235 Promenade Street, Providence, Rhode Island 02908

LETTER OF NON-COMPLIANCE June 16, 2021
File No. SR-38-1074
(Formerly Case No. 2006-082)
LNC No. OWM-SR-684

CERTIFIED MAIL 91 7199 9991 7039 7986 8694
91 7199 9991 7039 7986 8687

> Both not delivered
> also emailed

Edward Carapezza
Renewable Resources, Inc.
P.O. Box 365
Hopkinton, RI 02833

RE: Pawcatuck Woolen Mill (Potter Hill Mill)
198 Potter Hill Road
Westerly, Rhode Island
Plat Map 8 / Lot 23

Dear Mr. Carapezza:

On October 16, 2006, the Department of Environmental Management (the Department) issued a Letter of Responsibility (LOR) to Renewable Resources, Inc. for the above-referenced property (the Site) pursuant to 250-RICR-140-30-1, the Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases (the Remediation Regulations). The LOR required that Renewable Resources, Inc., as owner of the property, bring the Site into compliance in accordance with the Remediation Regulations and, if necessary, be prepared to conduct remediation of hazardous materials at the Site.

On August 13, 2008, the Department received a Supplemental Site Investigation Report (SIR) from Jacques Whitford (JW), on behalf of the owner, Renewable Resources, Inc. The Department subsequently issued comments via e-mail to JW on December 3, 2008. No response was received for the comments. In 2009 and 2016, meetings were held with the Department staff and stakeholders to discuss demolishing the buildings on site. No reports were received detailing these demolitions.

On November 2, 2020, the Department issued a Request for Status Update Letter to Renewable Resources, Inc., as owner of the property. The Request for Status Update Letter required that Renewable Resources, Inc. submit written intentions to bring the site into compliance by December 2, 2020. Moreover, the Department required a SIR Response to Comments submittal by February 2, 2021 that contained both a status update of the site and a response to the outstanding December 3, 2008 comments. On December 2, 2020, the owner of the site e-mailed the Department with Renewable Resources Inc.'s intentions to complete the required work. However, the Department has not received any further correspondences from the owner or the required SIR Response to Comments submittal. Therefore, the site is out-of-compliance.

As of June 16, 2021, Renewable Resources, Inc. is identified as the current owner of the Site by the Town of Westerly Tax Assessor's Office and as such, Renewable Resources, Inc. is a Responsible Party as defined by Section 1.4(A)(70) of the Remediation Regulations.

In order to complete the requirements of the Remediation Regulations, the Department is requiring that you submit, in writing, Renewable Resources, Inc.'s intentions to bring this site into compliance in accordance with the Remediation Regulations by July 16, 2021. Furthermore, the Department is requiring that Renewable Resources, Inc. submit a SIR Response to Comments as required by the Request for Status Update Letter by September 16, 2021.

If you do not fully comply with the aforementioned requirements, the Department will initiate the appropriate enforcement actions that may include administrative penalties for non-compliance.

If you have any questions regarding this letter or would like the opportunity to meet with Department personnel, please contact me by telephone at (401) 222-2797, ext. 72030, or by E-mail at Stephanie.Cappelli@dem.ri.gov.

Sincerely,

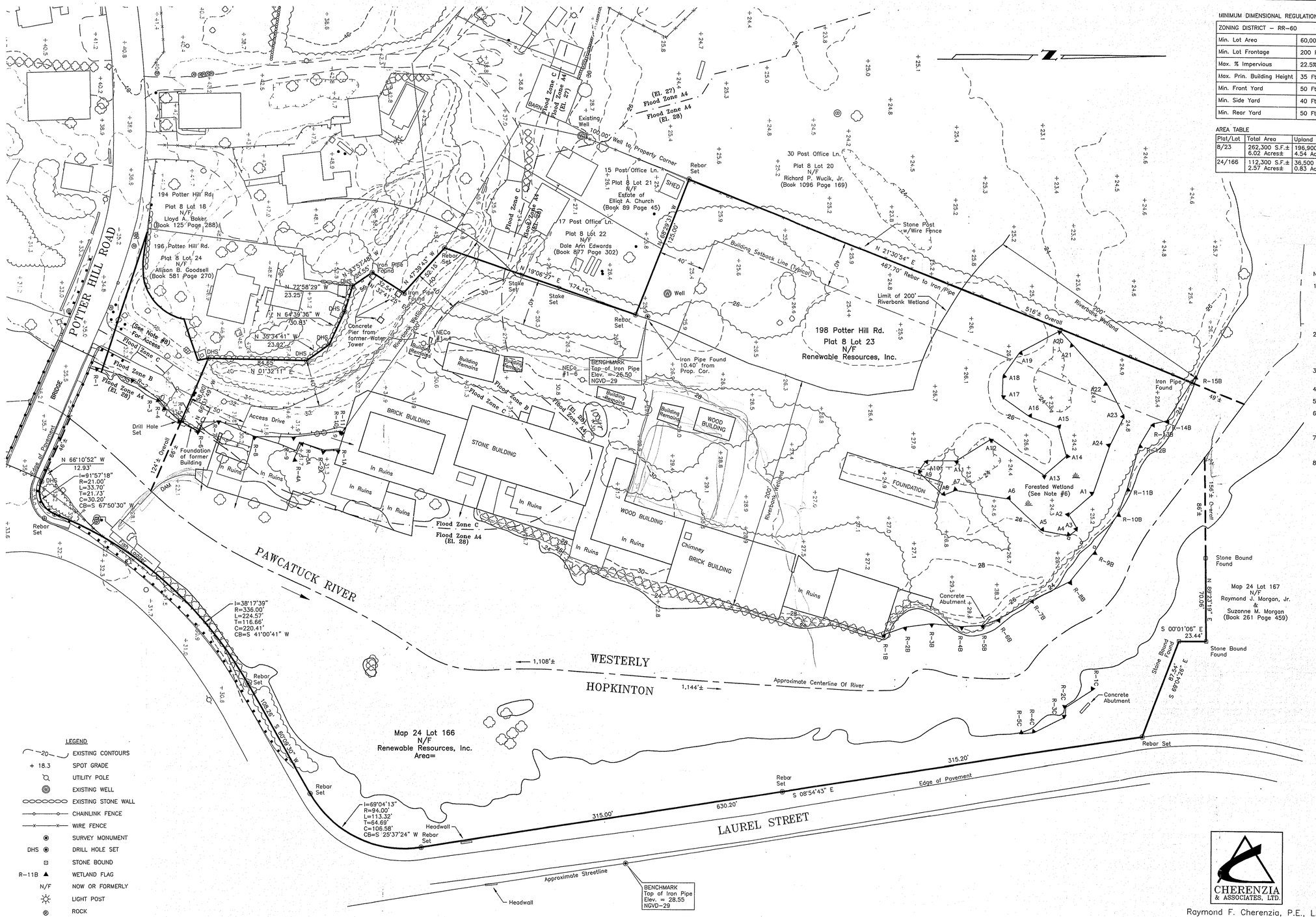
Stephanie Cappelli
Environmental Engineer I
Office of Land Revitalization &
Sustainable Materials Management

Authorized by,

Rachel Simpson
Senior Environmental Scientist
Office of Land Revitalization &
Sustainable Materials Management

cc: Kelly Owens, RIDEM/LRSMM
Town of Westerly

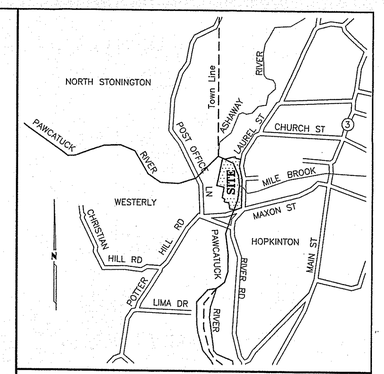
Attachments: Request for Status Update Letter, dated November 2, 2020
SIR Comment Letter, dated December 3, 2008



MINIMUM DIMENSIONAL REGULATIONS	
ZONING DISTRICT – RR–60	
Min. Lot Area	60,000 S.F.
Min. Lot Frontage	200 Ft.
Max. % Impervious	22.5%
Max. Prin. Building Height	35 Ft.
Min. Front Yard	50 Ft.
Min. Side Yard	40 Ft.
Min. Rear Yard	50 Ft.

AREA TABLE

Plat/Lot	Total Area	Upland Area
8/23	262,300 S.F.± 6.02 Acres±	196,900 S.F.± 4.54 Acres±
24/166	112,300 S.F.± 2.57 Acres±	36,500 S.F.± 0.83 Acres±



LOCATION MAP Scale: 1" = 1,200'±

NOTES:

1.) Reference is made to the following deed:

A.) A Conservator's Deed from Fleet Bank N.A. Conservator of the Estate of Helen E. Cottrell granted to Renewable Resources, Inc. recorded October 8, 1992 in the Town of Westerly Land Evidence Records Book 432 Page 53 and recorded October 8, 1992 in the Town of Hopkinton Land Evidence Records Book 217 Page 170.

2.) Reference is made to the following plan:

A.) Plat Showing Location Of Properties Belonging To The Pawcatuck Woolen Mills Potter Hill – Westerly–R.I. Scale 40 Feet To An Inch July 1920 George W. Woodward, Surveyor. Revised March 1930 Rossi & Lewis – Engineers.

3.) The bearings and North arrow orientation depicted hereon are based upon NAD–83 Rhode Island State Plane Grid System.

4.) The topographic features depicted hereon are based upon NGVD–29 vertical datum.

5.) Aerial mapping was provided by Techmap Incorporated, Smithfield, RI.

6.) The river bank and wetland features were delineated March 28, 2006 by Natural Resource Services, Inc., Harrisville, RI and were field survey located March 30, 2006 by Cherenzia & Associates, LTD, Westerly, RI.

7.) The flood zone information depicted hereon is from FIRM Flood Insurance Rate Map Town Of Westerly, Rhode Island Washington County Panel 10 Of 20 Community–Panel Number 445410 0010 C Map Revised: February 5, 1986.

8.) Plat 8 Lot 23 benefits from and Lot 24 is subject to "rights and privileges over and across that portion... lying between the house lot and the river bank..." as stated in the deed for Lot 24 recorded in Book 581 Page 270.

LEGEND

- EXISTING CONTOURS
- SPOT GRADE
- UTILITY POLE
- EXISTING WELL
- EXISTING STONE WALL
- CHAINLINK FENCE
- WIRE FENCE
- SURVEY MONUMENT
- DRILL HOLE SET
- STONE BOUND
- WETLAND FLAG
- NOW OR FORMERLY
- LIGHT POST
- ROCK
- SIGN POST
- BOULDER
- HYDRANT
- POST
- FIELD LOCATED BUILDING
- SHRUB / TREE
- RETAINING WALL
- BRUSH LINE / TREE LINE
- BUILDING LOCATION FROM PLAN REF. #2A

"This survey and plan conform to the following standards as adopted by the Rhode Island Board of Registration for Professional Surveyors."

Horizontal Classification: Class: II

Vertical Classification: Class: IV

By: _____ Registered Professional Land Surveyor

NATHAN D. LAUDER No. 1842 PROFESSIONAL LAND SURVEYOR

PLAN REVISIONS			
DATE	DESCRIPTION	DWN BY	CHK BY
4/18/08	CLARIFICATION OF POTTER HILL RD. ACCESS	MEG	NDL

STREET INDEX

POTTER HILL RD

CHERENZIA & ASSOCIATES, LTD.

Raymond F. Cherenzia, P.E., L.S.

P.O. Box 513
25 Ledward Avenue
Westerly, RI 02891
(401) 596–7747
FAX (401) 596–3610

Groton Office
500 Bridge Street
Groton, CT. 06340
(860) 405–1900
FAX (860) 405–1990

http://www.cherenzia.com/
email: cherenzia@cherenzia.com

EXISTING CONDITIONS PLAN
PREPARED FOR
EDWARD CARAPEZZA
POTTER HILL MILL SITE
198 POTTER HILL ROAD
PLAT 8 LOT 23
WESTERLY, RHODE ISLAND
&
LAUREL STREET
MAP 24 LOT 166
HOPKINTON, RHODE ISLAND

SCALE: 1" = 40' DRAWN BY: MEG
AUGUST 22, 2006 CHECK BY: NDL

40 0 40 80 120 Feet

CHERENZIA & ASSOCIATES, LTD.
WESTERLY, RHODE ISLAND
SHEET: 1 OF 1 JOB NO.: 206017
FILE NO.:

RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
235 Promenade Street, Providence, RI 02908-5767 TDD 401-222-4462

January 11, 2007

CERTIFIED MAIL

Edward Carapezza
Renewable Resources Inc.
17 Smith Court
Noank, CT 06430

RECEIVED
D.E.M./O.W.M.
2007 JAN 11 P 12:08

RE: Plat 8 Lot 23, 198 Potter Hill Road, Westerly, RI-Removal of Solid Waste

Dear Mr. Carapezza:

Compliance inspections have been made of property owned by Renewable Resources Inc., located at 198 Potter Hill Road in the town of Westerly, RI, otherwise identified as Westerly Assessor's Plat 8, Lot 23. The inspections revealed that solid waste had been disposed on the property. This is a violation of the Rhode Island General Laws Chapter 23-18.9-5 relating to the disposal of refuse at other than a licensed solid waste management facility and Rhode Island General Laws Chapter 23-18.9-8 relating to operating a solid waste management facility without a license.

On 10 August 2006, RIDEM inspected the property in response to a complaint. The inspection revealed approximately 30 cubic yards of construction & demolition debris from a collapsed building falling into a river. A complete inspection could not be made because the property was gated and locked.

On 30 November 2006, RIDEM reinspected the property. The inspection revealed approximately 298 cubic yards of solid waste deposited on the ground, consisting of scrap metal, deteriorated lumber, an abandoned automobile, discarded metal pipe, debris from collapsed buildings, and landfilled solid waste, including empty steel drums, scrap metal, and bottles and cans.

On 21 December 2006, RIDEM reinspected the property. Observations revealed that removal of solid waste had taken place. The inspection also revealed approximately 90 cubic yards of solid waste still deposited on the ground, consisting of scrap metal, deteriorated lumber, asphalt shingles, discarded metal pipe, and debris from collapsed buildings.

While we recognize that efforts are being made to correct the solid waste violations, to comply with R.I. General Laws Chapter 23-18.9, you must:

1. Continue the removal of all solid waste from the property and dispose of the solid waste at a licensed solid waste management facility within sixty days of receipt of this letter.

2. Submit documentation of the disposal of solid waste from the property (receipts, bills, weight slips, etc.) at a licensed solid waste management facility to the RIDEM Office of Compliance and Inspection.

30% post-consumer fiber

Your cooperation in this matter is anticipated. If you need further assistance, I may be contacted at 222-1360, ext. 7510.

Sincerely,

James M. Ashton, Principal Environmental Scientist
RIDEM Office of Compliance and Inspection

cc: D. Albro
T. Tyrrell
C. Gianfrancesco
B. Ahern
J. Unsworth

RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
235 Promenade Street, Providence, RI 02908-5767 TDD 401-222-4462

26 January 2007

Dr. Edward Carapezza
Renewable Resources, Inc.
17 Smith Court
Noank, CT 06430

RE: Site Investigation Report – 198 Potter Hill Road, Westerly, RI,
received December 5, 2006
Pawcatuck Woolen Mill (a.k.a. Potter Hill Mill)

Dear Dr. Carapezza:

The Rhode Island Department of Environmental Management, Office of Waste Management (OWM) has reviewed the above referenced report. Based on our review of that report we have generated the attached comments. As these comments indicate, the Site Investigation Report (SIR) submitted does not meet the requirements for an SIR as set forth in Rule 7.0 of the Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases, amended February 2004 (Remediation Regulations).

Please provide a response and schedule as to how and when Renewable Resources intends to address these deficiencies. Upon response to these comments, OWM will review the additional information submitted and if deemed satisfactory, will proceed with issuance of a Program Letter.

Please feel free to contact me if you have any questions regarding this letter at (401) 222-4700 X 7126 or Cynthia.Gianfrancesco@dem.ri.gov.

Sincerely,

Cynthia M. Gianfrancesco

Cynthia M. Gianfrancesco
Principal Environmental Scientist
Office of Waste Management

cc: Matthew DeStefano, RIDEM/OWM
Joseph Unsworth, Jacques Whitford Company

30% post-consumer fiber

PAWCATUCK WOOLEN MILL (former Potter Hill Mill)
198 Potter Hill Road
Westerly, RI

Site Investigation Report – 198 Potter Hill Road, Westerly, RI, received 12/5/06

Office of Waste Management Comments

GENERAL COMMENTS

A. The *Rules and Regulations for the Investigation and Remediation of Hazardous Materials, amended February 2004* , (Remediation Regulations), Rule 7.07 A requires Public Notice prior to implementation of the Site Investigation Field Activities, notifying all abutting property owners and tenants that an investigation is about to occur. At the time of the submittal of the Site Investigation Report (SIR) public notice had not been conducted at the implementation of the additional investigation in October of 2006, even though a release of hazardous substances had been identified during the limited Phase II Environmental Site Assessment (ESA) in April of 2006 and public notice was specifically required as part of the Letter of Responsibility issued on 16 October 2006. Upon notification by the RIDEM on 18 December 2006 non-compliance with the public notice requirement, Jacques Whitford Company, Inc. on behalf of Renewable Resources, initiated public notice on 20 December 2006. Please be aware that in the future, the public notice requirements must be complied with within the required time frame. Failure to do so may result in a RIDEM enforcement action.

B. Rule 7.08 of the Remediation Regulations requires that a SIR Submission Checklist be submitted for review and approval with the SIR, though the SIR Checklist was not submitted until after RIDEM requested it on 28 December 2007. Please be sure to submit a revised SIR Checklist with all future SIR submittals.

C. Information regarding the types of processes, chemical materials, waste materials and by-products from the wool manufacturing industry, and specifically the Pawcatuck Woolen Mill, was not included in the SIR. Limited research conducted by RIDEM indicates that the woolen mill industry used dyes which contained heavy metals, dye-aids which may have contained chlorinated solvents, and various lubricants during the time that the Pawcatuck Woolen Mill was in operation. Please provide additional information regarding the wool manufacturing industry so that the RIDEM is able to determine if all Substances of Concern/Areas of Concern/Recognized Environmental Concerns have been identified.

SPECIFIC COMMENTS:

1. Section 1.1 Site Information, Page 2

   This section states that the Westerly Tax Assessors information indicated that the property utilized an onsite septic system, but that the current owner believes all wastewater discharged directly to the river. No information was provided in the SIR to prove or refute either of these claims, as was recommended in the Phase I ESA report. RIDEM requires information be provided to conclusively determine whether on on-site septic system is located on the property, and if so, that the septic system be included as an Area of Concern and adequately sampled to determine if any hazardous substances are present. In addition, investigations into the presence of piping from each of the former buildings, leading to the river, will need to conducted and information provided, and sediment sampling at the outfall of each discharge pipe conducted.

   In addition, industrial mills which utilized coal frequently switched to heating oil at some point in their history. Please provide information regarding any investigations that were done to determine if heating oil was ever utilized on the property (i.e. type of boiler, piping, tanks, etc.).

2. Section 3.2.1 Substances of Concern (SOCs), Page 3

   The SIR included limited analytical testing of soil and groundwater samples for only a limited number of metals and Polynuclear Aromatic Hydrocarbons (PAHs), which RIDEM finds inadequate to fully characterize the site, potential impacts to off-site properties, or potential impact to environmentally sensitive areas (the Pawcatuck River) based on the historical use of the property.

   RIDEM requires that at least a portion of the samples collected at the site be analyzed for the full suite of compounds identified in Tables 1, 2 and 3, and Total Petroleum Hydrocarbon via laboratory analysis for all media sampled (soil, groundwater, sediment). This includes Volatile Organic Compounds (VOCs) via EPA Method 8260, Semi-volatile Organic Compounds (SVOCs) via EPA Method 8270, pesticides and PCBs, 16 metals, plus cyanide, and a Leachability method for those metals which warrant further analysis. In addition, all soil samples collected for VOCs must be collected via EPA Method 5035.

3. Section 3.2.2 Conceptual Site Model, Page 4

   RIDEM recommends that a geophysical survey be conducted to attempt to locate the former septic system, any abandoned underground storage tanks, or other buried debris which may be considered an Area of Concern.

In addition, RIDEM does not believe AOC#1 – Northwest Debris Area had been adequately characterized. A limited number of samples should be analyzed for full suite analysis, consistent with comment 2 above.

4. Section 3.2.3 Test Pits and Soil Sampling, Page 4

RIDEM does not believe that enough samples were collected from each test pit location for laboratory analysis or analyzed for an adequate number of parameters (see comment 2 above). Additional soil samples, to include but not be limited to the vicinity of all test pit locations, are required in order to fully characterize the site.

5. Section 4.1 Soil Sampling, Page 5

The SIR report does not indicate at what depth soil samples were collected. Please provide this information. Also, see comment 2 above regarding analytical parameters.

6. Section 4.2 Soil Borings and Monitoring Well Installation, page 6

Soil boring logs and monitoring well installation logs were not provided with the SIR report. Please provide copies all logs for each soil boring conducted and monitoring well installed.

7. Section 4.3 Groundwater Sampling, Page 6

RIDEM believes that additional monitoring wells should be located on the property in order to adequately characterize any groundwater contamination, and that groundwater samples should be run for all parameters listed in Table 3 of the Remediation Regulations, pursuant to comment 2 above.

In addition, it has come to the attention of the RIDEM that there are several homes on Post Office Lane which directly abut the site that utilize private drinking water wells. Please provide information regarding which homes on Post Office Lane are connected to public water, which homes utilize private drinking water wells, and the exact location of those wells. In addition, RIDEM requires additional investigation, to include but not be limited to, monitoring wells along the property boundaries to characterize any potential impact offsite and to private drinking water wells.

8. Section 4.4 Groundwater Flow Direction, Page 6
7.0 Physical Setting, Page 11

Assumptions presented in the SIR report regarding groundwater flow and contour information are not adequate. Due to the fact that the Pawcatuck River flows around the east and north of the site, groundwater flow directions at the site are

expected to be complex. Assumptions about depth to groundwater and flow direction 'based on visual observations" and the lack of groundwater gauging data is unacceptable. As stated in the report, this can only be verified by conducting subsurface investigation and associated hydrological survey. Therefore, pursuant to comment 7 above, additional monitoring wells should also be located to be able to provide hydrological survey data to adequately characterize groundwater flow directions and contours, and provide a groundwater contour map.

9. Section 5.0 Results, pages 7 - 9
Table 3, pages 7-9

As indicated in comment 2 above, RIDEM does not believe that an adequate number of samples have been analyzed for an adequate number of parameters to adequately characterize the site. At least some of the soil samples should have been run for all analytical parameters identified in Table 1 and 2 of the Remediation Regulations. Additional soil samples should be collected at all AOCs and across the site.

Also, all soil samples must be evaluated with respect to GA Leachability Criteria.

10. Section 6.0 Summary of Environmental Data, pages 9-10

RIDEM does not believe a determination can be made regarding environmental concerns until additional investigations are completed. After additional information is collected, please revise the conclusions accordingly.

11. Section 6.1 Quality Assurance and Quality Control (QA/QC), page 10

As indicated in comment 2, all soil samples should be collected via EPA Method 5035.

12. Section 8.0 Conclusions

All conclusions should be revised based on the above associated comments.

13. Section 9.0 Development of Remedial Alternatives

Remedial Alternatives were not included as part of this RIDEM review, and will not be considered until a complete SIR is submitted. However, remedial alternatives should address the fact that the site is within a flood zone and how this impacts the use of impermeable caps and storm water management.

14. Appendix A – Phase I ESA

Due to the fact that there were no Sanborn Maps for the subject area, please note if any other fire or flood insurance maps were consulted, such as Factory Mutual maps. During the site inspection on January 24, 2007, Mr. Carapezza mentioned that insurance maps have been reviewed. Please provide a copy of the referenced insurance maps and written narrative regarding the results of this review.

The Aerial Photos provided in the Phase I ESA were not legible. Please provide a legible copy of aerial photos and written narrative description of notable features identified in the historical aerial photos, including any evidence of pits, ponds or lagoons on the site.

15. Appendix B – Limited Phase II ESA, Section 2.3 Conceptual Site Model, page 2

See comment 3 above.

16. Appendix B – Limited Phase II ESA, Section 3.1 Test Pits

See comment 2 above.

Also, please provide an explanation as to why no laboratory analysis was conducted for soil samples from Test Pits 1, 2, 4 and 6.

17. SIR Checklist : 7.03.A

SIR objectives have not been adequately presented in the report. Please provide more specific information, listing the objectives for each media and each AOC. As indicated in comment 2 above, RIDEM does not believe that the information in the SIR presents adequate characterization of the site nor does it indicate how the objectives and data collected are used to select a remedy.

18. SIR Checklist: 7.03 D

Table 1 does not include information pertaining to operators and time period of occupancy/operation. Please include this information.

19. SIR Checklist 7.03 F

As indicated in comment C, the SIR does not contain enough information regarding compounds of concern that may have historically been used at the property, and this information should be linked to the specific objectives for the SIR.

20. SIR Checklist 7.03 H

The following items were not shown on the Figure 2 – the site plan:

- Wells (including former on site drinking water well and offsite drinking water wells)
- Septic tank and piping

21. SIR Checklist 7.03 I

Location and distance to any environmentally sensitive areas within 550 ft of the site: The Pawcatuck River is considered an environmentally sensitive area and should be identified as such, pursuant to Rule 3.16 C of the Remediation Regulations.

Actual sources of potable water for all properties immediately abutting the site: The SIR Checklist and report states that the area is serviced by municipal water. This is not entirely the case, as referenced in comment 7 above.

Determination as to whether the release impacts any off-site area utilized for residential or industrial/commercial property or both: RIDEM does not agree that enough data has been collected to fully characterize the site and determine that there is no off-site impact, consistent with comment 2 above.

22. SIR Checklist 7.03.J.

There is no information in Section 6.0 pertaining to surface or groundwater classification. RIDEM is unable to locate any information pertaining to surface water classification in the entire document.

23. SIR Checklist 7.03.K.

The information in this section of the checklist should be in the SIR report, not just the Checklist.

Concentrations of hazardous substances...in excess of the remedial objectives: The SIR indicates exceedances of PAH's as well.

Impacts to environmentally sensitive areas: The SIR does not address potential impacts to the Pawcatuck River, consistent with Comment 2 above.

List of hazardous substances at the site: The SIR should provide a list of all hazardous substances identified at the site.

24. SIR Checklist 7.03.N.

Responses to these checklist items in the SIR are not adequate, pursuant to Comments 7 and 8 above. In addition, pursuant to Comment 1, any existing piping should be identified and the effects of such as a conduit/preferential pathway for contamination determined.

25. Checklist 7.03.P.

Volatile organic compounds (VOCs) were not analyzed for as part of the site investigation, therefore, potential for volatilization cannot be determined at this time. In accordance with Comments C and A above, RIDEM believes that screening for VOCs using a hand held field instrument is not adequate and that soil and groundwater samples should be analyzed for VOCs via laboratory analysis in order to determine potential presence and impacts from VOCs.

26. Checklist 7.03.Q.

Please explain why this requirement is not applicable.

27. Checklist 7.03.T.

Appendix B of Appendix B includes only Test Pit Logs. Pursuant to Comment 6 above, soil boring and monitoring well logs could not be located in the SIR report and must be provided.

Jacques Whitford

Engineering, Scientific, Planning and Management Consultants

24 Albion Road
Suite 220
Lincoln RI
United States 02865

Bus 401 312 8005
Fax 401 312 8010

www.jacqueswhitford.com

July 5, 2007

RECEIVED
D.E.M./O.W.M.
2007 JUL -5 P 2:36

Rhode Island Department of Environmental Management
Office of Waste Management
Attention: Ms. Cynthia M. Gianfrancesco
235 Promenade Street
Providence, RI 02908-5767

RE: Response to Comments
198 Potter Hill Road
Westerly, RI
Jacques Whitford Project No. 1009825

Dear Ms. Gianfrancesco:

Jacques Whitford received a copy of your letter to Renewable Resources, Inc., dated January 26, 2007, concerning the Site Investigation Report (SIR) prepared by Jacques Whitford and dated August 7, 2006. As a general comment to the letter, Renewable Resources and Jacques Whitford believe that the additional investigation requested in the comment letter is both excessive and in some cases, unwarranted. Renewable Resources initiated due diligence investigations at the site on a voluntary basis. Renewable Resources was under no obligation to conduct the environmental investigations at the site. As required by RIDEM's regulations, the property owner notified the RIDEM of a release. While Renewable Resources and Jacques Whitford agree that some additional investigation may be warranted at the site, the comments contained in RIDEM's letter appear to vastly deviate from the both the intent of RIDEM's regulation and the accepted practice established by RIDEM through several years of implementing the program. We have conducted a review of several other submitted and approved SIRs over the last five years and believe that our protocols, sampling, and analysis conducted for this Renewable Resources, Inc SIR submission is totally consistent with accepted practices. All of these other SIR submissions were found acceptable by the RIDEM.

As you aware, the Renewable Resources is proposing to redevelop the property into a multi-use facility. Due to the historic nature of the site, significant financial resources are required to preserve and develop the property. As with similar projects, financing of the development is not available at this stage of the project and Renewable Resources is providing the financial resources for the environmental investigations, historic preservation investigations and applications, architectural services, local permitting and approvals, legal services, etc. Requiring excessive investigations at the site may present a financial hardship on the project.

With that said, Renewable Resources does want to work with the RIDEM to ensure that risks to human health and the environment are adequately assessed and controlled. As mentioned previously and discussed in more detail below, Renewable Resources does acknowledge that additional investigation is warranted. Renewable Resources is requesting that the RIDEM review the responses to the RIDEM's comments below and be willing to discuss the appropriate approach to completing the SIR.

Response to General Comment A: All required public notice will be completed in accordance with the regulations.

100% Post Consumer Content

Response to General Comment B: This comment is noted.

Response to General Comment C: As mentioned in the SIR, the mill has been vacant for over 50 years. Available historic information about the specific processes used at this specific mill is limited. We have conducted extensive research on the types of chemicals used by analogous textile mills during the time period of operation of this mill in southern New England and which therefore may have been used or stored at this site. The research included internet searches and visits to the National Archives in Washington D.C., Rhode Island Historic Preservation Society, libraries in Ashaway, Hope Valley and Westerly, and the American Textile Museum in Lowell, MA. There was a reference that the mill was used for "mens fabrics only", which may indicate that the dyeing was limited to blues, browns, black, and greens. Historically, mens clothing was not dyed with reds, yellows, purple, etc. Available information also indicates that the mill was considered to be a very small mill (i.e., <20 looms).

The vast amount of information reviewed indicates that although synthetic dyes were originally developed and used in Europe over a number of years prior to the closure of this mill in 1958, these synthetic dyes were not used by the textile industry in the United States until the 1960s. The mill at the site has not operated since approximately 1958. Information available also indicates that only natural fibers (i.e. wool) were dyed at the site. The process for dyeing wool typically involved a natural dye and often a mordant. The mordant was added to the wool to develop the correct chemical conditions for the dye to adhere to the wool. Many of the mordants were metal salts. Acids were also sometimes used to develop the correct chemical conditions for the dyeing process. Neither Jacques Whitford nor Dr. Edward Carapezza discovered any information that indicates chlorinated hydrocarbons or other volatile organic compounds were ever used in the process of dyeing wool in the time period that the mill was operation. Due to the fact that only natural fibers were dyed at the site and that operations ceased in the 1950s, we believe that it is highly unlikely that chemicals other than natural dyes, mordants and acids were used in the processes employed at the site.

Specific Comments:

Response to Comment 1: On February 1, 2007, Joseph T. Unsworth, P.E. and Dr. Edward Carapezza inspected the basement of the main stone building and all other buildings with crawl spaces. All piping in the basement of the main building is routed to one common pipe that discharges to the river. The attached photograph depicts the piping. No pipes or other methods of discharge were observed in the walls of the basement.

Pipes were observed in the building where apparent washing of wool was completed. A total of six pipes protrude from the eastern wall of this building. These pipes are shown in the attached photographs. Also, there appears to be an open area in the eastern wall of this building where wash water may have discharged into the river.

The first building on the southern portion of the site (the single story brick building) is underlain by the raceway. No other building has a basement. There were no pipes observed protruding from any of the buildings with crawl spaces.

Based on the observations made, it is clearly evident that all waste was discharged from the seven pipes and opening in the east wall of the building where washing was completed. There is absolutely no evidence that a septic system has ever been utilized at the site. There are also 2 areas, one in the main granite building and one in a wood extention building near the river, where the remains of toilet fixtures where observed. In both cases, discharges from the toilet fixtures appear to have been made directly to the river, not to a former septic system.

Sediment samples will be collected adjacent to each of the pipe discharges and the opening in the east wall. The samples will be collected and placed directly in laboratory prepared containers containing the appropriate preservative. The samples will be submitted to a Rhode Island licensed laboratory for analysis of volatile organic compounds (VOCs) by USEPA Method 8260, SVOCs by USEPA Method 8270, and the 16 metals contained in Table 1 and 2 of RIDEM's Rules and Regulations for the Investigation of and Remediation of Hazardous Material Releases (the Remediation Regulations). As discussed in the response to Comment 3, Jacques Whitford does not believe that additional analytical testing is required. Samples obtained for analysis of VOCs will be collected following USEPA Method 5035.

Also on February 1, 2007, the boiler building was thoroughly inspected for evidence of any use of fuel oil in the boiler at the site. The boiler is a direct coal fired boiler. The attached pictures depict where the coal was loaded into the boilers and where the ash was removed. There are no burners on the boiler that would be used to fire fuel oil. The boilers still contain remnants of unburned coal. Additionally, there is no evidence of fill/vent pipes or fill ports anywhere on the site. Based on these observations, Jacques Whitford believes that it is clearly evident that coal was always used to fire the boiler.

Response to Comment 2: Jacques Whitford does not agree that all compounds contained in Table 1, 2 and 3 are required to be analyzed. There is no language in the Remediation Regulations that require all constituents in the tables be analyzed. Section 7.01 of the Remediation Regulations, second paragraph, states that:

> *"The scope of the Site Investigation shall be tailored to specific conditions and circumstances at the site under investigation using professional judgment."*

The requirement to test for all parameters in the tables is a serious departure from RIDEM accepted practices and the obvious intent of the regulations. Jacques Whitford believes that the analytical suite completed to assess the two areas of concern was appropriate for the concerns identified. The constituents analyzed have always been accepted by the RIDEM for assessing the environmental concerns at the site. Metals and polynuclear aromatic hydrocarbons (PAHs) are consistently the constituents detected in soils containing debris and coal ash at concentrations requiring reporting to the RIDEM.

Jacques Whitford does agree that additional investigation is warranted at the site. As discussed in responses to other comments, samples of soils and sediment will be collected to assess potential impacts from discharge pipes and additional borings will be completed and monitoring wells installed. The suite of analysis proposed as part of the additional investigation is discussed in responses to other comments.

Response to Comment 3: Based on the inspection completed on February 1, 2007 and the proposed additional borings to be completed, Jacques Whitford does not believe that a geophysical survey is warranted at the site.

Response to Comment 4: The test pits were completed at the site as part of due diligence to identify potential areas of concern. Two areas of concern were identified during the test pits. The two areas were the buried debris area in the northwest area of the site and the area of potential coal storage to the west of the boiler building. Test pits 1 through 3 were completed within the area of the buried debris. All the buried debris has been excavated from the area and disposed under the oversight of the RIDEM.

Test pits 4 through 6 were completed near the area with observed coal ash. An additional 26 soil samples were collected from this area to assess the extent of the impacts from the apparent coal ash disposal. Also, two monitoring wells were installed to assess whether the buried coal ash had impacted the groundwater. No impacts to groundwater were

detected from the buried coal ash. Jacques Whitford believes that the area of the buried coal ash has been adequately defined and assessed. The data clearly indicates that arsenic is the contaminant that defines the extent of the impacts required to be addressed through implementation of a remedial alternative. Due to the removal of all the buried debris and the additional assessment completed in the area of the buried coal ash, and the fact that the area of buried coal ash will be addressed as part of a remedial alternative, Jacques Whitford does not believe that additional assessment is warranted associated with these two areas of concern.

Response to Comment 5: The test pit logs indicate the depth of the soil samples collected from the test pits. The 26 soil samples collected in the area of the buried coal ash were collected from 0-2 feet below ground surface. The tables contained in the SIR will be revised to include this information and submitted as part of a revised SIR.

Response to Comment 6: Soil boring logs will be included in the revised SIR.

Response to Comment 7: There is only one residence that directly abuts the site that utilizes a private drinking water well. All other residences in the neighborhood are connected to and utilize water from the Westerly municipal water system. The attached figure depicts the location of the drinking water well utilized by this single abutting resident. The private well for this residence is actually on the mill property. The well is reportedly a driven point well. Therefore, the well head cannot be opened and it is unlikely that access to the abutting property will be granted to obtain a sample of the water. We are proposing that a groundwater monitoring well be installed in the area immediately adjacent to the existing drinking water well. We are also proposing that two other additional monitoring wells be installed in the locations depicted on the attached figure. The three new monitoring wells and the two existing monitoring wells will be sampled. The groundwater samples collected will be submitted to a Rhode Island licensed laboratory for analysis of VOCs by USEPA Method 8260 and Priority Pollutant 13 Metals.

Response to Comment 8: Information from 5 distributed wells on the property, the three new proposed groundwater monitoring wells and the two existing groundwater monitoring wells, will be used to assess ground water flow direction at the site. A relative elevation survey will be completed and the depth to water in each monitoring well will be measured in order to generate groundwater elevation contours on the site. The results of the survey and the estimated groundwater elevation contours will be included in the revised SIR.

Response to Comment 9: The tables in the revised SIR will include a comparison to the GA Leachability Criteria. Refer to the responses to comments 2 and 3 for a response to the request for additional analyses.

Response to Comment 10: As stated previously, a revised SIR will be submitted to the RIDEM. Section 6.0 will be revised as appropriate.

Response to Comment 11: Soil samples obtained for analysis of VOCS will be collected following method 5035.

Response to Comment 12: As stated previously, a revised SIR will be submitted to the RIDEM. Section 8.0 will be revised as appropriate.

Response to Comment 13: As stated previously, a revised SIR will be submitted to the RIDEM. Section 9.0 will be revised as appropriate.

Response to Comment 14: Two historic maps of the site were obtained and are attached. The maps are dated 1895 and 1907. The maps depict the site as being limited to the building areas near the river to the north and east. The mill property depicted in these maps does not extend beyond the buildings near the river on the western part of the site. These figures indicate that the areas to the west of the building area could not have been used for a septic system during the time period of the maps as this property, to the west of the mill property area, has always been used as open farm property. Also, the 1907 map depicts "coal pile" in the area adjacent to the power house, which is consistent with the assumption that coal was used to fuel the boilers that are still in place at the site.

The aerial photographs will be re-printed and included in the revised SIR.

Response to Comment 15: Refer to response to Comment 3.

Response to Comment 16: Refer to response to Comments 2 and 3.

Response to Comment 17: Section will be revised as appropriate in the revised SIR.

Response to Comment 18: The following is the list of occupants of the site and the approximate dates of operation:

1955-1958	Westerly Woolen Mill
1930-1955	Swift River Woolen Mill
1907-1930	Pawcatuck Woolen Mill
1885-1907	J.P. Campbell Mill
1843-1870	E & H Babcock Mill

Response to Comment 19: Refer to the response to General Comment C.

Response to Comment 20: Figure 2 will be revised to include onsite drinking water wells and drinking water wells on abutting properties. There is no septic system on the site.

Response to Comment 21: The revised SIR will include the information contained in this response.

Response to Comment 22: Section 6.0 contains a description of the groundwater classification at the site. This section will be revised to include a description of the surface classification of the Pawcatuck River.

Response to Comment 23: The information contained in 7.03K of the checklist will be included in the revised SIR. Please note that the Remediation Regulations do not require that all information contained in Section 7.03 be included in the SIR. Section 7.03 specifically states:

"The Site Investigation Report shall contain the following information on the contaminated-site where the spill or release occurred, as appropriate." (underline added for emphasis)

The RIDEM has historically recognized the variability in sites and site conditions and has allowed flexibility in the content of SIRs.

Response to Comment 24: As discussed previously, additional monitoring wells will be installed, groundwater samples collected and analyzed, and a groundwater elevation survey completed.

Response to Comment 25: An analysis for VOCs will be conducted for all soil/sediment samples collected from the discharge pipes and for all groundwater samples collected. However, Jacques Whitford disagrees with RIDEM's claim in Comment 25 that a photoionization detector (PID) is not adequate for field screening for the presence of VOCs. PIDs have an extensive history of use for screening soil samples for the presences of VOCs. Jacques Whitford has implemented headspace screening on thousands of soil samples. Jacques Whitford cannot recall a single instance when no VOCs were detected above a PID instrument detection limit and subsequent laboratory analysis indicated VOCs at concentrations greater than any applicable RIDEM standard. Additionally, the decision to not analyze for VOCs also included visual and olfactory assessment of the soil/debris.

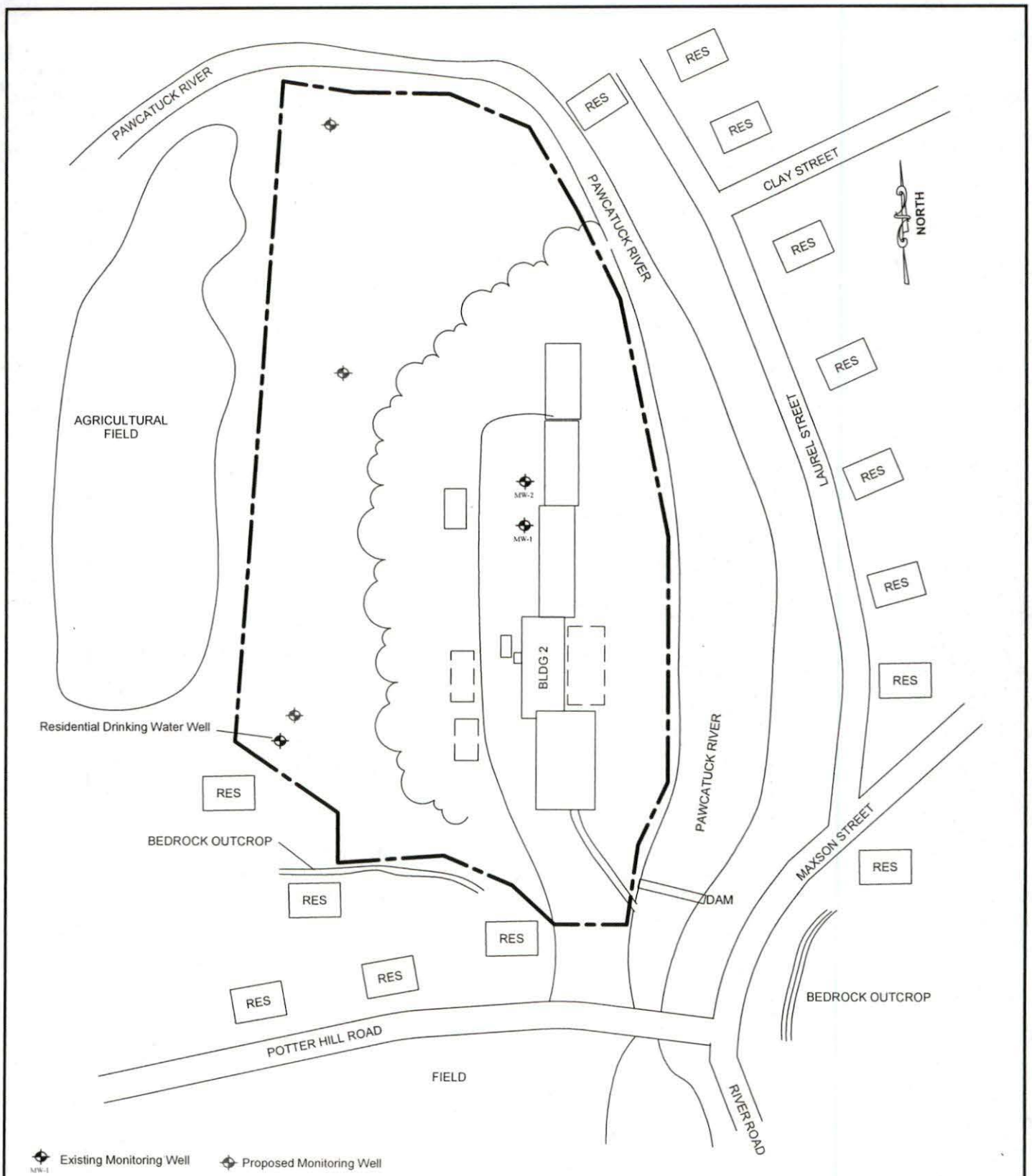
Response to Comment 26: A discussion of this requirement will be included in Section 6.0 of the revised SIR.

Response to Comment 27: Soil boring logs will be included as part of the revise SIR.

If you have any questions or comments regarding this letter or any other matter, please contact me at 401-312-8005.

Sincerely,
JACQUES WHITFORD COMPANY, INC.

Joseph T. Unsworth, P.E.
Project Manager



Jacques Whitford Company, Inc.

JACQUES WHITFORD LOCATION: 24 ALBION ROAD, SUITE 220, LINCOLN, RI				
DATE PREPARED: 3-8-06	DESIGNED BY: JTU	DRAWN BY: WL	CHECKED BY: VLJ	REVIEWED BY: JTU
REVISION DATE:	REVISION NO:	DRAWN BY:	CHECKED BY:	REVIEWED BY:
PROJECT NAME/FILE NAME: 198 POTTER HILL		PROJECT NUMBER/PHASE: 1009825	SCALE: NTS	

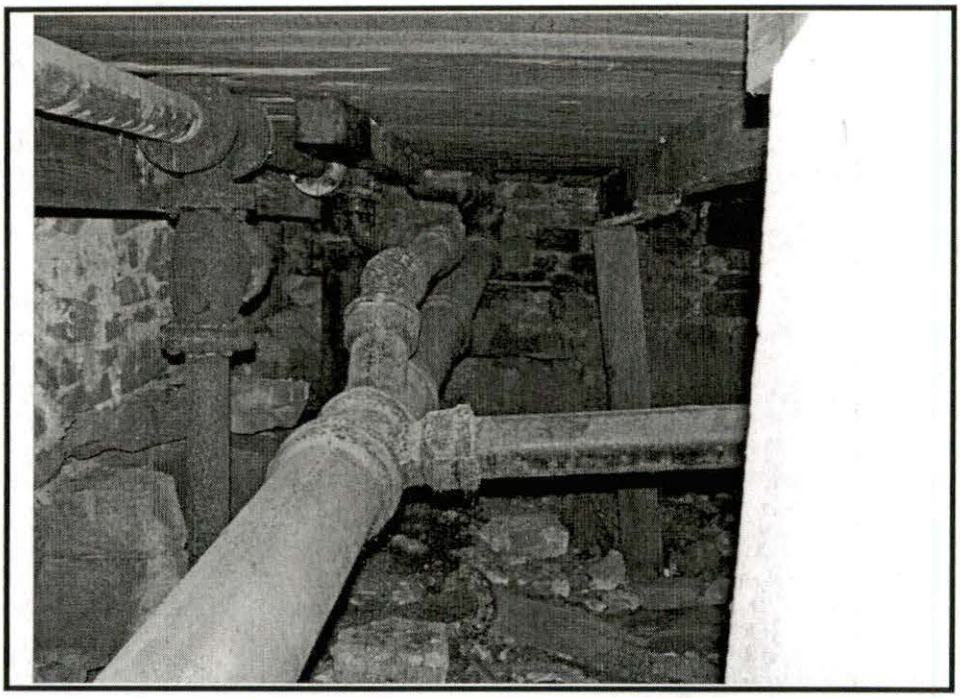
DRAWING TITLE:

SITE PLAN

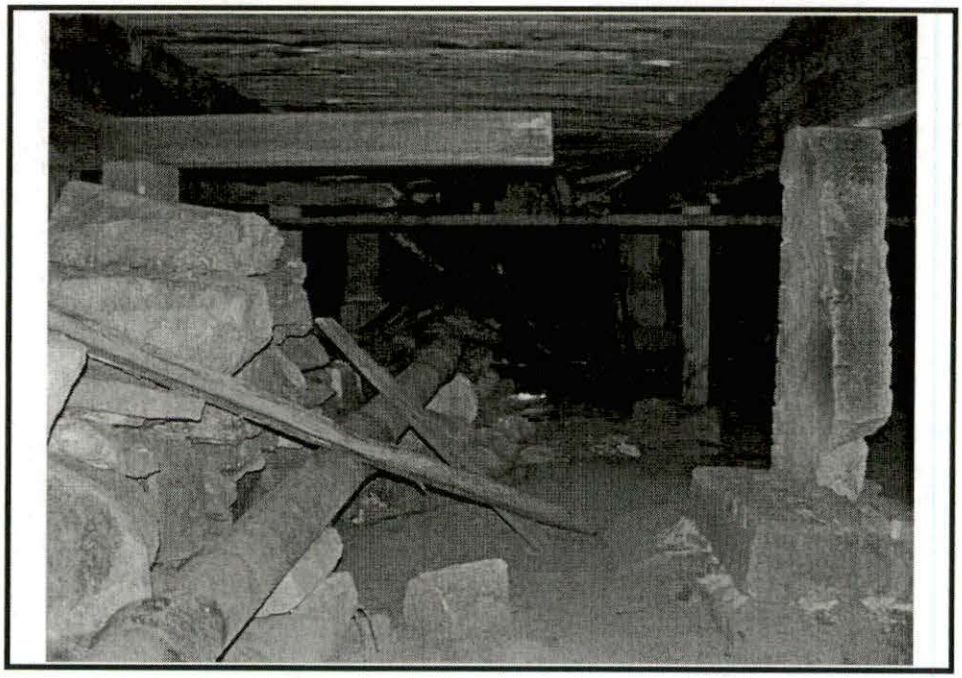
198 POTTER HILL ROAD
WESTERLY, RI

PREPARED FOR: Renewable Resources Inc.

FIGURE NO. 2



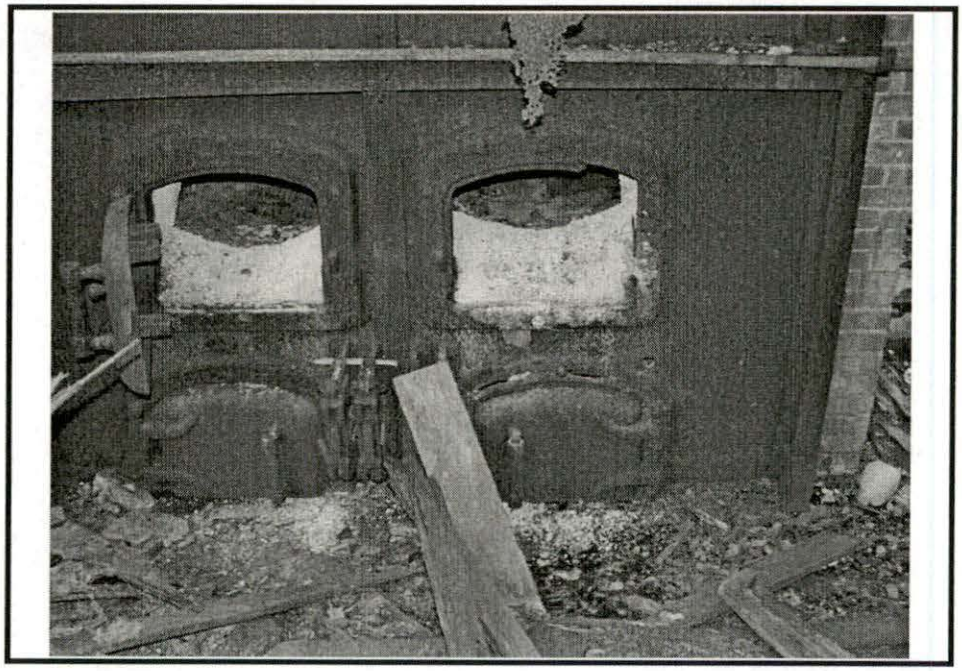
Pipes in basement of main building



Discharge pipe in basement of main building



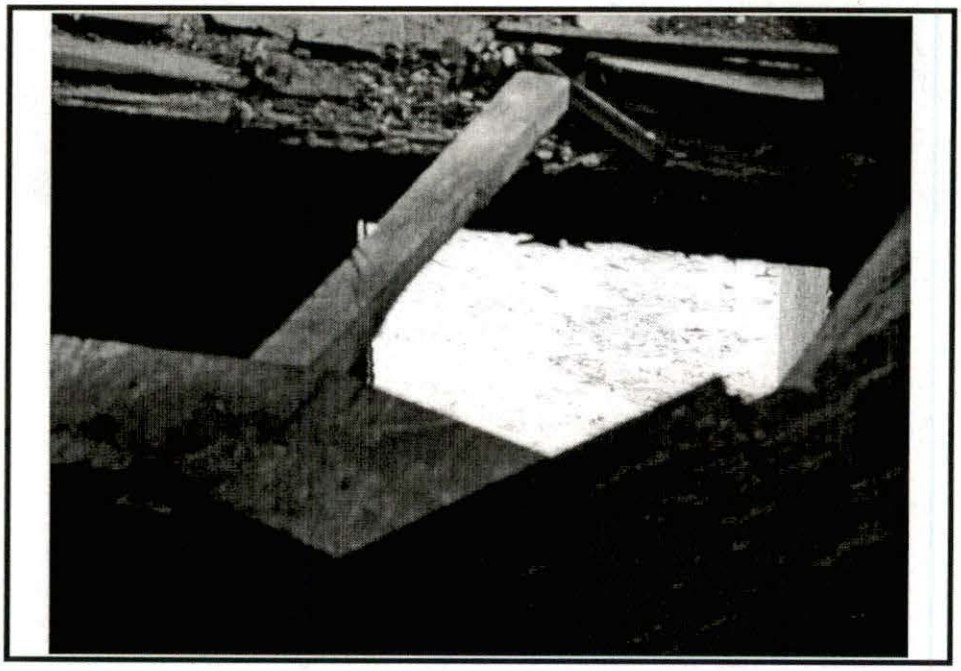
Boiler fire box – note grates and coal residue



Boilers – note coal residue in fire box area and clean out doors below



Discharge pipes along riverbank



Opening in side of wash building

RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
235 Promenade Street, Providence, RI 02908-5767 TDD 401-222-4462

31 July 2007

Dr. Edward Carapezza
Renewable Resources, Inc.
17 Smith Court
Noank, CT 06430

Mr. Joseph T. Unsworth, P.E.
Project Manager
Jacques Whitford Company, Inc.
24 Albion Road, Suite 220
Lincoln, RI 02865

RE: Pawcatuck Woolen Mill (a.k.a. Potter Hill Mill)
Response to Comments Received 5 July 2007
198 Potter Hill Road, Westerly, RI,

Dear Mr. Carapezza and Mr. Unsworth:

The Rhode Island Department of Environmental Management (Department or RIDEM) is in receipt of the above referenced response to comments and has reviewed said response.

The Department does not agree with your claim that the additional investigation work requested in our letter of 26 January 2007 is excessive and unwarranted, and "vastly deviates" from both the intent of the RIDEM regulations and the accepted practice established by RIDEM. The Department strives to be consistent in our SIR reviews and requirements, and this site is no exception. This is not to say, however, that each site is different and must be looked at based on past use, location, and anticipated future use. We are confident that when compared to similar sites (GA groundwater classification, SA surface water classification, adjacent private well use, past industrial use, proposed residential use), you will find that our requirements remain consistent with the Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases (Remediation Regulations), and that our comments are warranted.

As you indicate in your response, while there may have been a time when Renewable Resources was under no obligation to conduct the environmental investigations at the site, upon receiving sample results in April 2006 indicating that a release of hazardous materials had occurred at the site, in accordance with Section 3.60 of the Remediation

30% post-consumer fiber

Regulations Renewable Resources became a responsible party and as such became responsible for complying with the requirements under the Remediation Regulations and conducting a complete site investigation and remediating the site.

As such, we have prepared the attached response to your July 5, 2007 letter. As indicated on our comments, RIDEM recommends that you submit a proposal for the additional sampling for our review. If you choose to do so, please submit said proposal within 30 days of this letter. Pursuant to your email of July 9, 2007, where you indicated that : "Renewable Resources will start the work as soon as it is approved by the RIDEM. The proposed monitoring well installation, sampling and analysis can be completed within 2-3 weeks. A revised SIR can be submitted 2 weeks later for a total of 4-5 weeks.". As such, we expect that Renewal Resources will initiate the additional work upon RIDEM approval of said proposal and submit the revised SIR within 5 weeks thereafter.

Please feel free to contact me if you have any questions regarding this letter or would like a meeting, at (401) 222-4700 X 7126 or Cynthia.Gianfrancesco@dem.ri.gov.

Sincerely,

Cynthia M. Gianfrancesco

Cynthia M. Gianfrancesco
Principal Environmental Scientist
Office of Waste Management

cc: Matthew DeStefano, OWM

PAWCATUCK WOOLEN MILL (former Potter Hill Mill)
198 Potter Hill Road
Westerly, RI

Response to Comments received 7/5/07 regarding Site Investigation Report
198 Potter Hill Road, Westerly, RI, received 12/5/06

Office of Waste Management Comments

GENERAL COMMENTS

A. Response to General Comment A is acceptable.

B. Response to General Comment B is acceptable.

C. Please include any additional information which has been collected and all of the information provided in your response in a supplemental SIR report. However, it appears that very little information pertaining to the Pawcatuck Woolen Mill (PWM) exists. Information obtained by RIDEM regarding the Eastland Woolen Mill National Priorities List site in Corinna, Maine (http://oaspub.epa.gov/enviro/cerclis_web.description_report?pgm_sys_id=MED980915474) indicates that dye aids containing chlorobenzene were used at that woolen mill as early as the 1950's. As such, RIDEM believes the possibility exists that chlorinated solvents may have been used for a short period of time before the PWM closed and should be investigated for at the site.

SPECIFIC COMMENTS:

1. Response to Comment 1 is acceptable. Please include this additional information in a supplemental SIR report.

2. Response to Comment 2 is not acceptable. Additional compounds must be analyzed for in order to compile a complete SIR as it relates to this site. According to Table 3 of the SIR, of the 28 soil samples collected, only five were analyzed for PAHs, only eight were analyzed for a limited number of total metals besides arsenic, and none were tested for GA Leachability Criteria. Of these eight samples, one exceeds the Residential Direct Exposure Criteria for lead, and one was at the Residential Direct Exposure Criteria for lead, leading us to believe that additional samples should have been analyzed for total and leachable lead at a minimum. As such, we recommend that a proposal for additional sampling be submitted, to include locations and constituents to be analyzed for. This must, at a minimum, include Volatile Organic Compounds via method EPA 8260 and additional

metals analysis including a leachability method. For any compounds not being proposed for analysis, please present strong justification and backup documentation (where available) as to why no analysis is being proposed (i.e. no capacitors or transformers were ever used on site, hence no need to sample for PCBs; dyes contained only certain metals, hence no need to sample for remainder of metals, etc.). Also, see Comment 5 below.

3. Response to Comment 3 is acceptable, contingent upon the location of the additional proposed borings to be completed.

4. Response to Comment 4 is not acceptable. Please see response regarding Comment 2 above.

5. Response to Comment 5 is acceptable. Please include this additional information in a supplemental SIR report. Of note, however, is that Rule 8.02.A.i.2 of the Remediation Regulations requires that the residential direct exposure criterion shall be applied throughout the vadose zone for each hazardous substance. Based on the information provided in the SIR (page 11), the depth to groundwater is 10 – 15 feet below grade, therefore, subsurface soil samples should have been collected and analyzed. The fact that there is a private drinking water well located on the subject site, and more wells in the vicinity, requires that subsurface sampling be conducted.

6. Response to Comment 6 is acceptable. Please include this additional information in a supplemental SIR report.

7. Response to Comment 7 is not acceptable. According to the Assessors on-line database for the Town of Westerly (http://data.visionappraisal.com/WesterlyRI/DEFAULT.asp) there are 4 homes located on Post Office Lane, (Numbers 15, 17, 23 and 30). According to the Westerly Water Department, only two of those homes are connected to the public water system (Numbers 23 and 30). Therefore, we believe there are two homes which utilize private wells for their drinking water sources. Please verify this information and provide any other available information regarding the physical location of all private wells on Post Office Lane and, if possible the depth of those wells. In addition, please provide information and justification regarding the depth of the proposed monitoring wells you will be installing to, taking into consideration the information gathered on the nearby private wells.

8. Response to Comment 8 is acceptable. Please include this additional information in a supplemental SIR report.

9. Response to Comment 9 is not acceptable. Refer to Comment 2 above.

10. Response to Comment 10 is acceptable. Please include this additional information in a supplemental SIR report.

11. Response to Comment 11 is acceptable. Please include this additional information in a supplemental SIR report.

12. Response to Comment 12 is acceptable. Please include this additional information in a supplemental SIR report.

13. Response to Comment 13 is acceptable. Please include this additional information in a supplemental SIR report.

14. Response to Comment 14 is acceptable. Please include this additional information in a supplemental SIR report.

15. Response to Comment 15 is acceptable. Please see Comment 3 above.

16. Response to Comment 16 is unacceptable. Please refer to Comments 2, 3 and 4 above.

17. Response to Comment 17 is acceptable. Please include this additional information in a supplemental SIR report.

18. Response to Comment 18 is acceptable. Please include this additional information in a supplemental SIR report.

19. Response to Comment 19 is not acceptable. Please refer to Comment C above.

20. Response to Comment 20 is acceptable. Please include this additional information in a supplemental SIR report.

21. Response to Comment 21 is acceptable. Please include this additional information in a supplemental SIR report.

22. Response to Comment 22 is acceptable, however, it is believed you should be referring to Section 7.0 for information pertaining to groundwater classification.

23. Response to Comment 23 is acceptable, however, based on the specific characteristics of this site, RIDEM believes it is appropriate to include this information in the SIR.

24. Response to Comment 24 is acceptable. Please include this additional information in a supplemental SIR report.

25. Response to Comment 25, that analysis for VOCs will be conducted, is acceptable. In general the Department supports the use of field screening instruments, but generally requires that a minimum number of samples be sent for laboratory confirmation, depending on the characteristics of the site. In addition, chlorinated solvents infrequently can be detected via visual and olfactory assessment.

26. Response to Comment 26 is acceptable. Please include this additional information in a supplemental SIR report.

27. Response to Comment 27 is acceptable. Please include this additional information in a supplemental SIR report.

Jacques Whitford

Engineering, Scientific, Planning and Management Consultants

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Suite 220
Lincoln RI
United States 02865

Bus 401 312 8005
Fax 401 312 8010

www.jacqueswhitford.com

August 13, 2007

Rhode Island Department of Environmental Management
Office of Waste Management
Attention: Ms. Cynthia M. Gianfrancesco
235 Promenade Street
Providence, RI 02908-5767

RE: Response to Comments
198 Potter Hill Road
Westerly, RI
Jacques Whitford Project No. 1009825

Dear Ms. Gianfrancesco:

Jacques Whitford received a copy of your letter to Renewable Resources, Inc., dated July 31, 2007, concerning the Site Investigation Report (SIR) prepared by Jacques Whitford and dated August 7, 2006. This letter is being submitted to propose additional investigation to address your response to Comments 2, 5, and 7. In regards to Comment 7, based on additional research on the private wells in use on Post Office Lane, there is currently only one private well in use at 17 Post Office Lane. This property is owned by Dale Edwards. The neighboring house at 15 Post Office Lane also obtains water from the well used by 17 Post Office Lane. The well used by 15 and 17 Post Office Lane is the well located on the Pawtucket Woolen Mill property. This well is a driven overburden point well and, due to the presence of large bedrock outcrops in the area (including on the site), it is believed to be shallow. Jacques Whitford believes that the proposed location, depths, and number of additional wells previously proposed adequately assess the migration of any impacts to groundwater migrating in the direction of the private well. It should also be noted that the topography around the site is extremely hilly, with an over 150 increase in grade immediately west of the site. Additionally, the presence of the Pawcatuck River to the east and north are very likely the direction of groundwater flow. We believe that the installation of the proposed three groundwater monitoring wells along with the two previously installed groundwater monitoring wells, will be adequate to estimate the direction of groundwater flow at the site and the direction of any migration of groundwater impacts.

Comments 2 and 5 require that collection of additional soil samples for laboratory analysis. We are proposing that three soil samples be collected and analyzed for volatile organic compounds by USEPA Method 8260 and the 16 metals in the Remediation Regulations. We are proposing that no leachability testing be completed until the results of the total metals in soils and groundwater are obtained. If elevated metals in soils or groundwater are detected, then the soil samples collected will be analyzed for the elevated metals by the Synthetic Precipitation Leaching Procedure (SPLP). This approach can be completed without violating any hold times on the soil samples. We are not proposing that any PCBs testing be completed due to the fact that there was no evidence of any PCB transformers at the site. Many of the machines were powered by the river. The belt driven system is still visible on the machines that remain in the buildings. Also, there was no evidence of transformer pads or building mounted transformers.

As required in your comments, subsurface soil samples will be collected for laboratory analysis. The samples will be obtained from the first soil interval in

groundwater. Based on the previously installed groundwater monitoring wells, this soil interval is expected to be 10-15 feet below ground surface.

The proposed additional work can commence within one week of receiving RIDEM approval. All laboratory data will be available within two – three weeks of receiving approval and a revised SIR will be submitted within five weeks of receiving approval from the RIDEM.

If you have any questions or comments regarding this letter or any other matter, please contact me at 401-312-8005.

Sincerely,
JACQUES WHITFORD COMPANY, INC.

Joseph T. Unsworth, P.E.
Project Manager

CC: Dr. Edward Carapezza, Renewable Resources

Jacques Whitford

Engineering, Scientific, Planning and Management Consultants

24 Albion Road
Suite 220
Lincoln RI
United States 02865

Bus 401 312 8005
Fax 401 312 8010

www.jacqueswhitford.com

October 19, 2007

Rhode Island Department of Environmental Management
Office of Waste Management
Attention: Ms. Cynthia M. Gianfrancesco
235 Promenade Street
Providence, RI 02908-5767

RE: Response to Comments
198 Potter Hill Road, Westerly, RI
Jacques Whitford Project No. 1009825

Dear Ms. Gianfrancesco:

Jacques Whitford received your letter to Renewable Resources, Inc., dated September 7, 2007, concerning the Site Investigation Report (SIR) prepared by Jacques Whitford and dated August 7, 2006. This letter is being submitted to address your comments attached to that letter.

Comment 1: According to the Westerly Water Department, 23 and 30 Post Office Lane are connected to the municipal water supply. The only other residences on Post Office Lane are located at 15 and 17 Post Office Lane. We are proposing that the three groundwater monitoring wells be sampled as proposed and if impacts to groundwater are detected, then the drinking water well located at 15 Post Office Lane will be sampled and tested for the contaminants of concern. The three proposed monitoring wells will be advanced until refusal is encountered. The monitoring well will be constructed with the ten-foot screen at the bottom of the boring. The samples collected from the new groundwater monitoring wells will be analyzed for PAHs in addition to VOCs and the 13 Priority Pollutant Metals.

Comment 2: We are proposing to collect one soil sample from each of the borings completed to install the three proposed monitoring wells. As required in Comment 3, the soil samples will be collected from the vadose zone. As previously proposed, these soil samples will be analyzed for VOCs by USEPA Method 8260 and the 16 metals in the Remediation Regulations.

In addition to the three soil samples collected from the proposed borings, two soil samples will be collected from AOC 1, the former buried debris area in the northwest area of the site. The soil samples will be collected from the 0-2 foot below ground surface interval. Since the debris that formerly was buried in this area was directly on top of the current surface soils, the 0-2 foot interval would be the most impacted soils in the vadose zone. The two soil samples collected from AOC1 will be analyzed for VOCs, PAHs, and the13 Priority Pollutant Metals.

The two soil samples with the reported highest concentration of lead were SS-20 and SS-23. A soil samples will be collected from each of these two locations and analyzed for lead utilizing the SPLP method. The samples will be collected from the 0-2 foot bgs interval.

Comment 3: Refer to Comment 2.

Jacques Whitford

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Comment 4: All buildings are proposed to remain on the site as part of the redevelopment.

If you have any questions or comments regarding this letter or any other matter, please contact me at 401-312-8005.

Sincerely,
JACQUES WHITFORD COMPANY, INC.

Joseph T. Unsworth, P.E.
Project Manager

CC: Dr. Edward Carapezza, Renewable Resources

Cynthia Gianfrancesco

From: Cynthia Gianfrancesco
Sent: Tuesday, October 30, 2007 9:54 AM
To: 'Joseph Unsworth'
Subject: RE: Response Letter

Joe,

Per our conversation today, all responses have been adequately responded to. Please let me know when you plan to be conducting additional site work so I can stop by if I can. Also, it's been almost one year since the last abutters notifications were sent out. I recommend that you conduct public notice again prior to conducting additional site work.

Cynthia

Cynthia M. Gianfrancesco
Principal Environmental Scientist
RIDEM - Office of Waste Management
(401) 222-4700 X 7126
cynthia.gianfrancesco@dem.ri.gov
www.dem.ri.gov

From: Joseph Unsworth [mailto:junswort@jacqueswhitford.com]
Sent: Friday, October 19, 2007 2:00 PM
To: Cynthia Gianfrancesco
Subject: Response Letter

Response Letter Attached

Joseph T. Unsworth, P.E.
Project Manager
Jacques Whitford Company, Inc.
24 Albion Road, Suite 220
Lincoln, RI 02865 USA
bus: 401-312-8005, fax: 401-312-8010
e-mail: junswort@jacqueswhitford.com

This transmission contains privileged and confidential information intended for the addressee(s) listed above. If you have received this transmission in error, please call (401) 312-8005. Any unauthorized use is prohibited.

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****

RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
235 Promenade Street, Providence, RI 02908-5767 TDD 401-222-4462

7 September 2007

Dr. Edward Carapezza
Renewable Resources, Inc.
17 Smith Court
Noank, CT 06430

Mr. Joseph T. Unsworth, P.E.
Project Manager
Jacques Whitford Company, Inc.
24 Albion Road, Suite 220
Lincoln, RI 02865

RE: Pawcatuck Woolen Mill (a.k.a. Potter Hill Mill)
RIDEM SIR Comments Issued 31 July 2007
Jacques Whitford Response to Comments, July 5, 2007
RIDEM Response to Comments, 31 July 2007
Jacques Whitford Response to Comments, August 13, 2007
RIDEM Response to Comments Received August 13, 2007
198 Potter Hill Road, Westerly, RI,

Dear Mr. Carapezza and Mr. Unsworth:

The Rhode Island Department of Environmental Management (Department or RIDEM) is in receipt of the above referenced response to comments and has reviewed said response as it applies to the Rules and Regulations for the Investigation and Remediation of Hazardous Materials Releases, February 2004 (Remediation Regulations). Please see our comments which are attached.

Based on the information provided, the Department does not concur that the additional investigation work to be preformed will be sufficient to completely characterize the site. Should you decide to proceed, please be advised that you do so at your own risk and that additional site investigation may be required in order to determine that the site investigation is complete.

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Please feel free to contact me if you have any questions regarding this letter or would like a meeting, at (401) 222-4700 X 7126 or Cynthia.Gianfrancesco@dem.ri.gov.

Sincerely,

Cynthia M. Gianfrancesco

Cynthia M. Gianfrancesco
Principal Environmental Scientist
Office of Waste Management

cc: Matthew DeStefano, OWM

PAWCATUCK WOOLEN MILL (former Potter Hill Mill)
198 Potter Hill Road
Westerly, RI

RIDEM Response to Comments Received August 13, 2007

Office of Waste Management Comments

1. Paragraph 1, page 1

With respect to Comment 7, RIDEM has been in contact with the resident at 17 Post Office Lane, who had informed us that 15 Post Office Lane does not obtain its drinking water from the well at 17 Post Office Lane, but instead has its own private well which is utilized for drinking water. As previously indicated, please provide information regarding the location of all private wells on Post Office Lane, and if possible the depth of those wells.

With respect to the number and location of monitoring wells and based on the information you have provided, the Department concurs that the number and location of monitoring wells is adequate to characterize groundwater flow direction and characterize groundwater at the site; however, we would prefer that monitoring wells are installed to refusal if refusal/bedrock is deeper than 25 feet. In addition, monitoring wells installed at new locations should be analyzed for any known site related contaminants (PAHs) in addition to the proposed VOCs and Priority Pollutant 13 Metals.

2. Paragraph 2, page 1

With respect to additional soil sampling and analysis, the Department cannot concur that what is being proposed will be adequate to fully characterize the site. It is unclear from the August 13, 2007 response where additional proposed soil sample locations will be and what they will be analyzed for. The letter indicates that three additional soil samples will collected. Subsequently it was indicated that the three subsurface soils samples will be collected from the monitoring well borings. Please explain if these are the only additional soil samples being proposed or if there are three additional soil sample locations being proposed as well. As indicated in our 26 January 2007 and 31 July 2007 comment letters (comments 2 & 3), it is RIDEMs position that additional characterization of the site is necessary, particularly in the area of AOC#1. We are unable to determine based upon the information you have provided if additional borings will be in the vicinity of AOC#1.

Regarding sampling for leachability criteria, Remediation Regulation Rule 8.02 A.ii

indicates that, with respect to leachability criteria in soil, it must be demonstrated that the application of the leachability criteria is protective of the actual and potential uses of the groundwater, and of surface water at or in the vicinity of the contaminated-site from potential migration of groundwater. We will not be able to answer these questions without SPLP analysis from locations where total metals analysis exceeds 20 times (the SPLP dilution factor) the GA Leachability Criteria. For example, there are several locations with elevated levels of total lead at the site. SPLP analysis must be conducted at these locations to determine the potential for lead to leach into groundwater and potentially migrate to surface water.

3. Paragraph 3, page 1

Regarding subsurface soil sampling, as indicated in the Department's 31 July 2007 Response to Comment 5, the Remediation Regulations require that subsurface soil sampling be preformed throughout the vadose zone. Rule 3.68 indicates that the vadose zone is the full extent of the soil column existing above the elevation of groundwater (i.e. unsaturated zone above the groundwater table). The response to comment letter indicates that subsurface soil samples will be collected from the fist soil interval in the groundwater, which is not considered the vadose zone. Please be sure the subsurface soil samples are collected from above the groundwater table.

4. Additionally, Section 9.0 of the Site Investigation Report indicates that the proposed future use to the site may include residential and commercial uses; however, it does not indicate whether existing buildings will remain or be demolished. Please be aware that in the event of detections of VOCs, or the demolition of all or some of the existing buildings on site (particularly the former boiler room where coal ash may be present), additional investigation under existing or former building areas may be required.

RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
235 Promenade Street, Providence, RI 02908-5767 TDD 401-222-4462

29 February 2008

Dr. Edward Carapezza
Renewable Resources, Inc.
17 Smith Court
Noank, CT 06430

Mr. Joseph T. Unsworth, P.E.
Project Manager
Jacques Whitford Company, Inc.
24 Albion Road, Suite 220
Lincoln, RI 02865

RE: Pawcatuck Woolen Mill (a.k.a. Potter Hill Mill)
198 Potter Hill Road, Westerly, RI,
Comments on Additional Investigation Data received 23 January 2008

Dear Mr. Carapezza and Mr. Unsworth:

The Rhode Island Department of Environmental Management (Department or RIDEM) is in receipt of the above referenced letter and has reviewed the data therein as it applies to the Rules and Regulations for the Investigation and Remediation of Hazardous Materials Releases, February 2004 (Remediation Regulations) and previous comments letters pertaining to the Site Investigation Report submitted 5 December 2006 for said property. Please see our comments which are attached.

In accordance with page 5 of your letter, please submit a revised Site Investigation Report which provides a response to all previous comments issued pertaining to the Site Investigation Report submitted 5 December 2006, as well as the comments attached hereto.

Please feel free to contact me if you have any questions regarding this letter or would like to schedule a meeting at (401) 222-4700 X 7126 or Cynthia.Gianfrancesco@dem.ri.gov.

Sincerely,

Cynthia M. Gianfrancesco

Cynthia M. Gianfrancesco
Principal Environmental Scientist
Office of Waste Management

cc: Matthew DeStefano, OWM

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PAWCATUCK WOOLEN MILL (former Potter Hill Mill)
198 Potter Hill Road
Westerly, RI

RIDEM Comments on Additional Investigation Data received 23 January 2008

Office of Waste Management Comments

1. Page 1 Soil Sampling

   Please verify in the revised SIR that all VOC soil samples were collected via method 5035 (i.e. Chain of Custody indicates Methanol preservative, but collection method needs to be outlined or include an SOP).

2. Page 2, Groundwater Sampling

   Please indicate when and how monitoring wells were developed.

3. Page 3-4, Sediment Sampling

   The RI Residential Direct Exposure Criteria (RDEC) is generally only applied to sediments when location of sediments is easily accessible and seasonally exposed to potential direct human contact. If sediments in this section of the Pawtucket River do not meet that description then it is not appropriate to compare sediment results to RDEC. Since the Department does not have sediment criteria, the recommendation is that sediment sample results be compared to nationally published sediment criteria guidelines such as those published in the *Development and Evaluation of Consensus Based Sediment Quality Guidelines for Freshwater Ecosystems*, D. D. MacDonald, et al. Please include this comparison in the revised SIR. Also, please depict the location of all discharge pipes on Figure 3.

4. Pages 4 and 5, Summary of Results of Additional Investigation

   Regarding sediment contamination found in the river, while there may be attribution from more than one source (i.e. road runoff), the contaminants found in the river sediments are the same contaminants found in coal ash contaminated soil in the former boiler house area on the site; therefore, it can be determined that coal ash from the boiler area has contributed to sediment contamination in the river. Prevention of further contamination to the river must be addressed in the remedial alternatives for the site.

5. Tables: Please include the date each sample was collected and the units of measure.

6. Laboratory Reports: Please confirm that all Reportable Detection Limits (RDL) for all analytes tested for are below applicable RIDEM Criteria as published in Tables 1-4 of the Remediation Regulations. For example, sample SS27 has an RDL for 1,2-Dibromomethane (EDB) of 31.2 ug/kg. The RDEC for this compound is 10 ppb. This should have been reported as a QA/QC issue with an explanation as to how this should be interpreted.

Jacques Whitford

Engineering, Scientific, Planning and Management Consultants

24 Albion Road
Suite 220
Lincoln RI
United States 02865

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www.jacqueswhitford.com

RECEIVED
D.E.M. / O.W.M.

2006 SEP 28 P 12: 23

September 27, 2006

Rhode Island Department of Environmental Management
Office of Waste Management
Attn.: Ms. Kelly Owens
235 Promenade Street
Providence, RI 02908-5767

RE: Former Pawcatuck Woolen Mill
198 Potter Hill Road
Westerly, RI
Jacques Whitford Company Job No. 1009825

Dear Ms. Owens,

Jacques Whitford is submitting the attached Hazardous Material Release Notification Form on behalf of our client, Renewable Resources Inc., owner of the above referenced property. Jacques Whitford has completed a Phase I Environmental Site Assessment (ESA), Phase II ESA, and additional soil sampling.

Arsenic and beryllium have been detected in soil samples at concentrations greater than the Residential Direct Exposure Criteria (RDEC). Beryllium was detected in one of two soil samples at a concentration of 0.405 parts per million (ppm) which is slightly greater than the RDEC of 0.40 ppm. Arsenic was detected in one of the soil samples collected as part of the Phase II ESA above the RDEC. Both the arsenic and beryllium exceedances were detected in a soil sample collected from a small mound located adjacent to the former boiler building. The soil in this area appears to contain coal ash and/or coal slag.

In order to assess the extent of the soil impacts near the observed mound of coal ash/slag, an additional seventeen soil samples were collected and analyzed for arsenic. Arsenic was detected in nine of the seventeen soil samples at concentrations greater than RDEC. The exceedances ranged from 7.71 ppm to 58.9 ppm.

Jacques Whitford will be collecting additional soil samples in the area of the coal ash/slag to fully delineate the extent of the impacts. Additionally, two monitoring wells will be installed adjacent to the impacted area to assess impacts to the groundwater. Groundwater samples will be collected and analyzed for RCRA 8 metals. Once the additional soil samples and groundwater samples are collected and analyzed, a Site Investigation Report (SIR) will be submitted within three weeks to the RIDEM in accordance with Section 7.0 of the *Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases*. The Phase I and II ESAs completed by Jacques Whitford will be submitted as part of the SIR.

Also, the owner of the property is currently in the process of hiring a contractor to remove debris associated with a collapsed building and buried debris that was observed in test pits completed in the northwest corner of the property. Jacques Whitford collected samples of shingles and building paper from the debris of the

Jacques Whitford

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collapsed building and had the samples analyzed for asbestos. No asbestos was detected in any of the materials. Soil samples were collected from the area of buried debris and analyzed for metals and polynuclear aromatic hydrocarbons (PAHs). No metals or PAHs were detected in the soil samples at concentrations greater than the applicable RDEC. Therefore, the building debris and buried debris will be disposed of as solid waste.

Since the debris associated with the collapsed building is located adjacent to the Pawcatuck River, we are currently ascertaining whether any approvals are required from the wetlands permitting program at the RIDEM. If an approval from the wetlands program is required, a request for approval will be submitted to the RIDEM. The removal of the debris will be completed within two weeks of receiving the wetland program approval.

Should you have any questions or require additional information, please do not hesitate to contact the undersigned at (401) 312-8005.

Sincerely,
JACQUES WHITFORD

Joseph T. Unsworth P.E.
Project Manager

Enclosure: Hazardous Material Release Notification Form

CC: James Ashton, RIDEM
Dennis Esposito, Adler, Pollack & Sheehan

* RECEIVED *
SEP 28 2006
R.I.D.E.M.
OFFICE OF WASTE MANAGEMENT

Appendix C
DIVISION OF SITE REMEDIATION
HAZARDOUS MATERIAL RELEASE NOTIFICATION FORM

THIS FORM IS NOT TO BE USED TO REPORT AN IMMINENT HAZARD

1. Notifier Information

Name: **Renewable Resources Inc.**
Address: **900 North Strafford, Suite 2428, Arlington, VA 22203**

Phone: **703-405-2336**

Status: X Owner ___ Operator ___ Secured Creditor ___ Voluntary

2. Property Information

Name of Site: **Pawcatuck Woolen Mill**
Site Address: **198 Potter Hill Road, Westerly, RI**

Plat/Lot Numbers: **Plat 8, Lot 23**

Site Contact Person: **Dr. Edward Carapezza**

Site Contact Phone: **703-405-2336**

Site Land Usage Type: ___ Residential X Industrial/Commercial **(currently vacant)**

Location of Release: **Surface soils**

(attach site sketch as necessary)

3. Release Information

Date of Discovery: **September 20, 2006**
Source : **former coal storage and usage**
Release Media: **soils**

Hazardous Materials and Concentrations: **Arsenic ND-58.9 ppm, Beryllium ND-0.405 ppm**

(attach certificates of analysis as necessary)

Extent of Contamination: **Surface soils in limited area**

4. Resource Information

		proposed future use
Site Land Usage:	X Industrial/Commercial	___ Residential
Adjacent Land Usage:	X Industrial/Commercial	X Residential
Site Groundwater Class:	X GA/GAA	___ GB

Adjacent Groundwater Class: X GA/GAA ___ GB
(if different than site groundwater classification within 500 feet)

Nearest Surface Water or Wetland:

X Less Than 500 Feet X Greater Than 500 Feet

Potential for adverse impact No Yes/No

5. Potentially Responsible Parties

Name: **Renewable Resources Inc.**
Address: **900 North Strafford, Suite 2428, Arlington, VA 22203**

Status: X Owner ___ Operator ___ Other:_____

Name: _____

Address: _____

Status: ___ Owner ___ Operator ___ Other:_____

6. Measures Taken or Proposed to be Taken in Response to Release

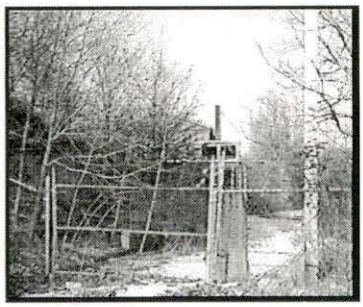
excavate and dispose of arsenic impacted soils

7. Other Significant Remarks About Release (Will a background determination be made?)

Signature: _____ Date 9/24/06

Title: President

198 POTTER HILL RD



Click to enlarge

MBLU :	8/ 23/ / / /
Location:	198 POTTER HILL RD
Owner Name:	RENEWABLE RESOURCES INC
Alternate ID:	008-023

Search for Similiar Sale Properties

Parcel Value

Item	Current Appraised Value	Current Assessed Value	FY 2005 Appraised Value	FY 2005
Buildings	0	0	0	
Extra Building Features	0	0	0	
Outbuildings	0	0	0	
Land	110,400	110,400	110,400	
Total:	**110,400**	**110,400**	**110,400**	

Owner of Record

RENEWABLE RESOURCES INC
C/O ED CARAPEZZA

Ownership History

Owner Name	Book/Page	Sale Date	Sale Price	
RENEWABLE RESOURCES INC	432/ 53	10/8/1992		5(
COTTRELL HELEN E	74/ 354	8/15/1955		

Land Use (click here for a list of codes and descriptions)

Land Use Code	Land Use Description
400V	INDUSTRL MDL-00

Land Line Valuation

Size	Zone	Appraised Value	Assessed Value
4.55 AC	R60	110,400	110,400

Construction Detail

Item	Value
STYLE	Vacant Land
MODEL	Vacant

Building Valuation

Item	Value
Living Area	0 square feet
Year Built	
Depreciation	100%
Replacement Cost Less Depreciation	0

Outbuildings (click here for a list of codes and descriptions)

Code	Description	Units	Appraised Value

No Outbuildings

Extra Features (click here for a list of codes and descriptions)

Code	Description	Units	Appraised Value

No Extra Building Features

Building Sketch (click here for a list of codes and descriptions)

Vacant Land, No Sketch

Online Database for Westerly, RI Powered by **Vision Appraisal Technology**

RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
235 Promenade Street, Providence, RI 02908-5767 TDD 401-222-4462

LETTER OF RESPONSIBILITY 16 October 2006
CASE # 2006-082

CERTIFIED MAIL

Dr. Edward Carapezza
Renewable Resources, Inc.
900 North Strattford, Suite 2428
Arlington, VA 22203

RE: Pawcatuck Woolen Mill (a.k.a. Potter Hill Mill)
198 Potter Hill Road
Westerly, RI

Dear Dr. Carapezza:

In February 2004, the Rhode Island Department of Environmental Management (the Department) enacted the amended Rules and Regulations for the Investigation and Remediation of Hazardous Materials Releases (the Remediation Regulations). The purpose of these regulations is to create an integrated program requiring reporting, investigation and remediation of contaminated sites in order to eliminate and/or control threats to human health and the environment in a timely and cost-effective manner. A Letter of Responsibility (LOR) is a preliminary document used by the Department to codify and define the relationship between the Department and a Responsible Party under the Remediation Regulations.

Please be advised of the following facts:

1. According to the Town of Westerly Tax Assessor's Office, Renewal Resources, Inc. is the current owner of the property located on Plat 8, Lot 23, at 198 Potter Hill Road in Westerly , Rhode Island.

2. The Department is in receipt of the following documents concerning property identified as the Pawcatuck Woolen Mill in Westerly, Rhode Island, further designated as Plat 8, Lot 23 of the Town of Westerly's Tax Assessor's plat maps (the Site):

   - Hazardous Material Release Notification Form dated September 21, 2006
   - Letter Report, submitted by Jacques Whitford, dated September 27, 2006

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2. A file (the File) exists at the Department that describes the environmental conditions concerning the Site.

3. The File identifies elevated concentrations of metals detected in soil samples collected from onsite soils for the Site, which may have significant adverse impact on human health and/or the environment. Specifically, arsenic concentrations ranged from 7.71 ppm to 58.9 ppm, and beryllium was detected at 0.405 ppm, both of which are suspected of being associated with former coal storage and usage on the property.

4. The identification of **hazardous materials** as defined by Rule 3.28, specifically, metals associated with on-site processes or activities for the Site constitutes a ***Release of hazardous materials*** to the environment as outlined in Rule 3.54 of the Remediation Regulations.

5. Renewable Resources, Inc., as the current owner of the property located on Plat 8, Lot 23 at 198 Potter Hill Road in Westerly, Rhode Island, is a ***Responsible Party*** as defined by Rule 3.60 of the Remediation Regulations.

As a result of the information known and conditions observed at the site, the Department requests that you comply with the following:

A. In accordance with Rule 7 (Site Investigation) of the Remediation Regulations, conduct a full Site Investigation, and prepare and submit to the Office of Waste Management (OWM) a complete Site Investigation Report (SIR) within ninety (90) days of receipt of this letter. Given that certain environmental work has already been completed during previous investigations, you may wish to incorporate portions of the information gathered to address the requirements of Rule 7. The Department requests conclusive information regarding the following environmental issues and questions;

   i. Determine the source and extent of soil and groundwater contamination at the site, specifically with respect to arsenic and beryllium concentrations, and other suspected hazardous materials, potentially associated with former coal storage and usage and other activities and areas of concern on the property, and potential impact to nearby surface water bodies;

   ii. Submit the complete SIR in accordance with Rule 7.08, to include at least two remedial alternatives other than no action, if necessary;

   iii. Be prepared to bring the Site into compliance with the Remediation Regulations.

B Submit an SIR checklist (attached). The SIR checklist was created as a supplemental tool to expedite the reviewing and approval process by cross referencing specific sections and pages within the SIR that provide detailed information and addresses each stated requirement within Rule 7 of the Remediation Regulations.

C. After submission of a complete SIR and approval by the Department be prepared to submit a Remedial Action Work Plan (RAWP), subject to Department review and approval, and implement the remedy, if necessary, that will bring the Site into compliance with the Remediation Regulations.

D. Be advised that any remedial alternatives that propose to leave contaminated soils on-site at levels which exceed Department criteria, will at a minimum necessitate the recording of an institutional control in the form of an Environmental Land Usage Restriction (ELUR) on the deed for the Site, and will likely require implementation of additional engineered controls to restrict human exposure.

Please be advised that prior to the implementation of any field activities, all abutting property owners and tenants must be notified by the responsible party that further investigation and remediation is about to occur, in accordance with Rule 7.07 and 7.09 of the Remediation Regulations and the Industrial Properties Remediation and Reuse Act (Rhode Island General Law 23-19.14-5). The notice should briefly indicate the purpose of the investigation, the work to be performed and the approximate scheduled date(s) of planned activities. Failure to comply with any of the aforementioned laws and regulations may result in enforcement actions as specified I Rhode Island General Law 23-19.1-17 and 23-19.1-18.

Please notify this Office within seven (7) days of the receipt of this letter of your plans to address these items. All correspondence should be sent to the attention of:

Cynthia M. Gianfrancesco, Principal Environmental Scientist
RIDEM Office of Waste Management
235 Promenade Street, Providence, RI 02908-5767
(401) 222-4700, ext. 7126; Cynthia.Gianfrancesco@dem.ri.gov

If you have any questions regarding this letter or would like the opportunity to meet with us, please feel free to contact me.

Sincerely,

Cynthia M. Gianfrancesco
Principal Environmental Scientist
Office of Waste Management
Department of Environmental Management

Authorized by:

Matthew D. DeStefano
Supervising Engineer
Office of Waste Management
Department of Environmental Management

cc. Terrence Gray, Assoc. Director
Leo Hellested, OWM
Cynthia Gianfrancesco, OWM
Kelly Owens, OWM
John Langlois, OLS

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Renewable Resources, Inc.

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1. Article Addressed to:

Dr. Edward Carapezza
Renewable Resources, Inc.
900 North Stratford, Suite 2428
Arlington, VA 22203

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X MiMi Lakew ☐ Agent ☐ Addressee

B. Received by *(Printed Name)*

C. Date of Delivery 10-19-06

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OFFICE OF WASTE MGMT.
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PROVIDENCE, RI 02908

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JAN 2 2007
R.I.D.E.M.
OFFICE OF WASTE MANAGEMENT

Section 7 of the "Remediation Regulations" Site Investigation Report (SIR)Checklist

Contact Name: **Jacques Whitford Co. - Joseph T. Unsworth(on behalf of OUL, LLC)**
Contact Address: **24 Albion Road, Suite 220, Lincoln, RI 02865**
Contact Telephone: **401-312-8005**

Site Name: **Pawcatuck Woollen Mill**
Site Address: **198 Potter Hill Road, Westerly, RI**

OFFICE USE ONLY
SITE INVESTIGATION REPORT (SIR)SITE: Pawcatuck Woolen Mill
PROJECT CODE: PAWM-HWM
SIR SUBMITTAL DATE: 12/5/06
CHECKLIST SUBMITTAL DATE: 1/2/07

DIRECTIONS: *The box to the left of each item listed below is for the administrative review of the SIR submission and is for **RIDEM USE ONLY**. Under each item listed below, cross-reference the specific sections and pages in the SIR that provide detailed information that addresses each stated requirement. Failure to include cross-references may delay review and approval. If an item is not applicable, simply state that it is not applicable and provide an explanation in the SIR.*

X 7.03.A. List specific objectives of the SIR related to characterization of the release, impacts of the release and remedy. **Section 2.0, Page 2**

X 7.03.B. Include information reported in the Notification Of Release. A copy of the release notification form should be included in the SIR. Include information relating to short-term response, if applicable. **Apendix C**

X 7.03.C. Include documentation of any past incidents or releases. **None**

X 7.03.D. Include list of prior property owners and operators, as well as sequencing of property transfers and time periods of occupancy. **Table 1, Page2**

X 7.03.E. Include previously existing environmental information which characterizes the contaminated-site and all information that led to the discovery of the contaminated-site. **Section 3.1 and 3.2, Phase I ESA in Appendix A, and Phase II ESA in Appendix B**

X 7.03.F. Include current uses and zoning of the contaminated site, including brief statements of operations, processes employed, waste generated, hazardous materials handled, and any residential activities on the site, if applicable. (This section should be linked to the specific objectives section demonstrating how the compounds of concern in the investigation are those that are used or may have been used on the site or are those that may have impacted the site from an off-site source.) **Section 1.0, Section 3.1, Section 3.2**

X 7.03.G. Include a locus map showing the location of the site using US Geological Survey 7.5-min quadrangle map or a copy of a section of that USGS map. **Figure 1**

JAN 2 2007

X 7.03.H. Include a site plan, to scale, showing: **Figures 2**

- X Buildings **Present**
- X Activities **Present**
- X Structures **Present**
- X North Arrow **Present**
- X Wells **Present**
- X UIC Systems, septic tanks, UST, piping and other underground structures **None**
- X Outdoor hazardous materials storage and handling areas **None**
- X Extent of paved areas **Present**
- X Location of environmental samples previously taken with analytical results **Present**
- X Waste management and disposal areas **None**
- X Property Lines **Present**

X 7.03.I. Include a general characterization of the property surrounding the area including, but not limited to:

Section 1.1, page 1

- X Location and distance to any surface water bodies within 500 ft of the site

Section 7.0, page 11

- X Location and distance to any environmentally sensitive areas within 500 ft of the site

Section 7.0, page 12

- X Actual sources of potable water for all properties immediately abutting the site

Area serviced by municipal water

- X Location and distance to all public water supplies, which have been active within the previous 2 years and within one mile of the site

Section 7.0, page 11

- X Determination as to whether the release impacts any off-site area utilized for residential or industrial/commercial property or both **Section 6.0, based on data, it does not appear that off site properties have been impacted.**
- X Determination of the underlying groundwater classification and if the classification is GB, the distance to the nearest GA area **GA**

X 7.03.J. Include classifications of surface and ground water at and surrounding the site that could be impacted by a release. **Section 6.0, page 9**

X 7.03.K. Include a description of the contamination from the release, including:

Section 3.2 (pages 3 - 5), Section 4.0 (pages 5-9), Section 6.0 (pages 9-10)

X Free liquids on the surface **None**

X LNAPL and DNAPL **None**

X Concentrations of hazardous substances which can be shown to present an actual or potential threat to human health and any concentrations in excess of any of the remedial objectives
Arsenic in soil

X Impact to environmentally sensitive areas **None**

X Contamination of man-made structures **None**

X Odors or stained soil **None**

X Stressed vegetation **None**

X Presence of excavated or stockpiled material and an estimate of its total volume **None**

X Environmental sampling locations, procedures and copies of the results of any analytical testing at the site **Figure 2, Section 3.2 (pages 3-5), Section 4.0 (pages 5-9), Appendix D of the Phase II ESA in Appendix B, and Apprndix D of the SIR**

X List of hazardous substances at the site
None

X Discuss if the contamination falls outside of the jurisdiction of the Remediation Regulations, including but not limited to USTs, UICs, and wetlands **None**

X 7.03.L. Include the concentration gradients of hazardous substances throughout the site for each media impacted by the release.
Tables 3 and 4, and Figures 2 and 3

X 7.03.M. Include the methodology and results of any investigation conducted to determine background concentrations of hazardous substances identified at the contaminated site. **None**

X 7.03.N. Include a listing and evaluation of the site specific hydrogeological properties which could influence the migration of hazardous substances throughout and away from the site, including but not limited to, where appropriate:

X Depth to GW **Section 7.0, Page 11**

X Presence and effects of both the natural and man-made barriers to and conduits for contaminant migration **None**

X Characterization of bedrock **Section 7.0, Page 11**

X Groundwater contours, flow rates and gradients throughout the site
not determined

X 7.03.O. Include a characterization of the topography, surface water and run-off flow patterns, including the flooding potential, of the site **Section 7.0, page 11**

X 7.03.P. Include the potential for hazardous substances from the site to volatilize and any and all potential impacts of the volatilization to structures within the site. **no volatilization from detected contamination expected**

X 7.03.Q. Include the potential for entrainment of hazardous substances from the site by wind or erosion actions. **N/A**

X 7.03.R. Include detailed protocols for all fate and transport models used in the Site Investigation. **None used**

X 7.03.S. Include a complete list of all samples taken, the location of all samples, parameters tested for and analytical methods used during the Site Investigation. (Be sure to include the samples locations and analytical results on a site figure). **Tables 2, 3, and 4**

X 7.03.T. Include construction plans and development procedures for all monitoring wells. Well construction must be consistent with the requirements of Appendix I of the Groundwater Quality Regulations. **bornig logs in Appendix B of the Phase II ESA in Appendix B**

X 7.03.U. Include procedures for the handling, storage and disposal of wastes derived from and during the investigation. **All investigation derived waste was handled in accordance with RIDEM's Guideline's for the Management of Investigation Derived Waste (Policy Memo 95-01)**

X 7.03.V. Include a quality assurance and quality control evaluation summary report for sample handling and analytical procedures, including, but not limited to, chain-of-custody procedures and sample preservation techniques. **Section 6.0, Page 9**

X 7.03.W. Include any other site-specific factor, that the Director believes, is necessary to make an accurate decision as to the appropriate remedial action to be taken at the site. **None**

X 7.04 Include Remedial Alternatives. The Site Investigation Report **must** contain a minimum of **2** remedial alternatives other than no action/natural attenuation alternative, unless this requirement iswaived by the Department. It should be clear which of these alternatives is most preferable. All alternatives must be supported by relevant data contained in the Site Investigation Report and consistent with the current and reasonably forseeable land usage, and documentation of the following: **Section 9.0, Page 12**

- X Compliance with Section 8 (RISK MANGEMENT);
- X Technical feasibility of the preferred remedial alternative;
- X Compliance with Federal, State and local laws or other public concerns; and
- X The ability of the performing party to perform the preferred remedial alternative

X 7.05 **Certification Requirements:** The Site Investigation Report and all associated progress reports must include the following statements signed by an authorized representative of the party specified:

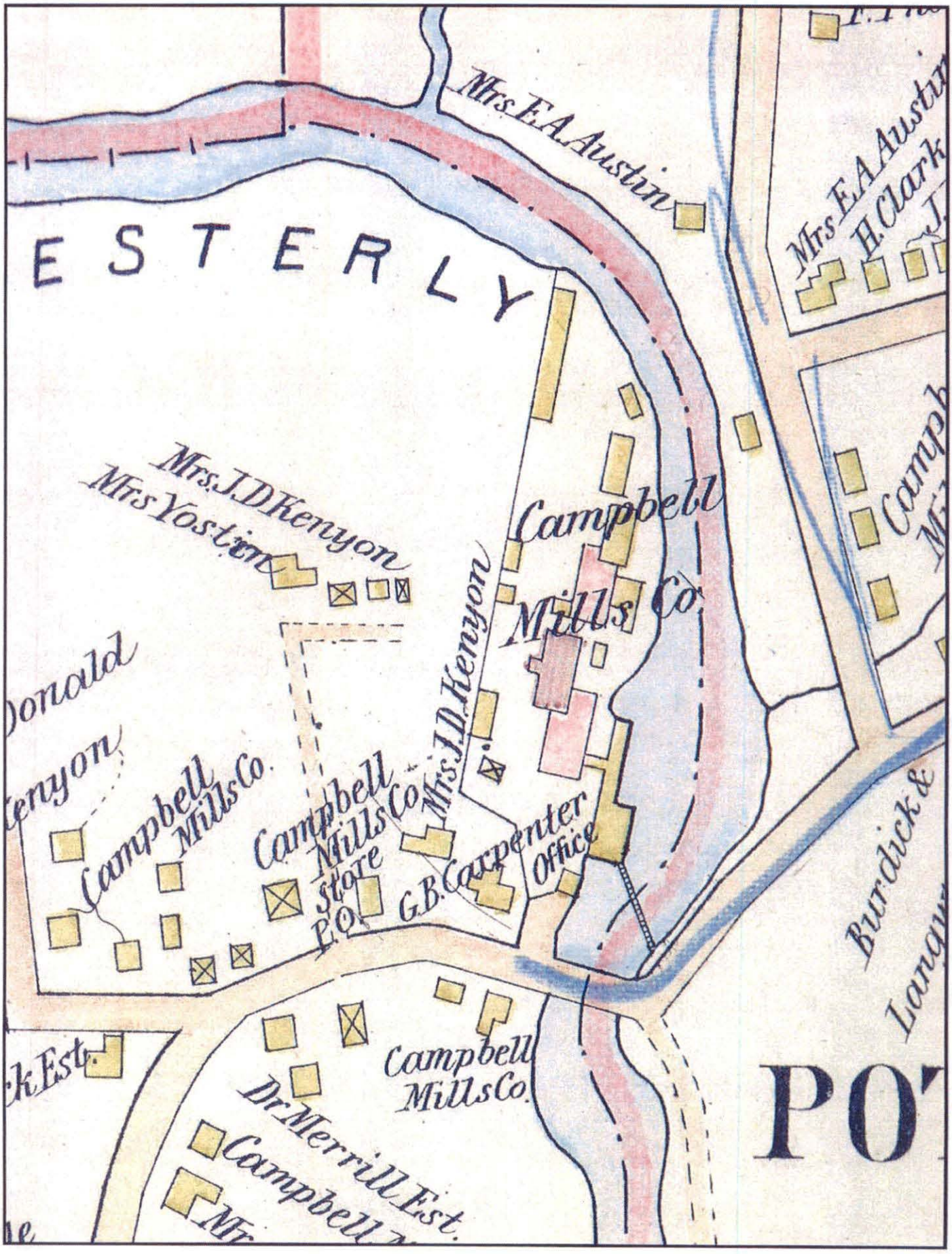
Section 10.0, page 13

X A statement signed by an authorized representative of the person who prepared the Site Investigation Report certifying the completeness and accuracy of the information contained in that report to the best of their knowledge; and

X A statement signed by the performing party responsible for the submittal of the Site Investigation Report certifying that the report is a complete and accurate representation of the site and the release and contains all known facts surrounding the release to the best of their knowledge

X 7.06 **Progress Reports:** If the Site Investigation is not complete, include a schedule for the submission of periodic progress reports on the status of the investigation and interim reports on any milestones achieved in the project

7.07 **Public Notice:** Be prepared to implement public notice requirements per Section 7.07 and 7.09 of the Remediation Regulations when the Department deems the Site Investigation Report to be complete.



1895 Everts & Richards

Cynthia Gianfrancesco

From: Unsworth, Joseph [Joseph.Unsworth@JacquesWhitford.com]
Sent: Tuesday, March 18, 2008 5:06 PM
To: Cynthia Gianfrancesco
Subject: New Address

Cindy,

FYI – Ed's new local address is:

Renewable Resources, Inc
PO Box 365
Hopkinton, RI 02833

Joseph T. Unsworth, P.E.
Project Manager
Jacques Whitford Company, Inc.
24 Albion Road, Suite 220
Lincoln, RI 02865
(401)-312-8005
(401)-312-8010 (fax)
(401)-465-2173 (cell)
joseph.unsworth@jacqueswhitford.com
www.jacqueswhitford.com



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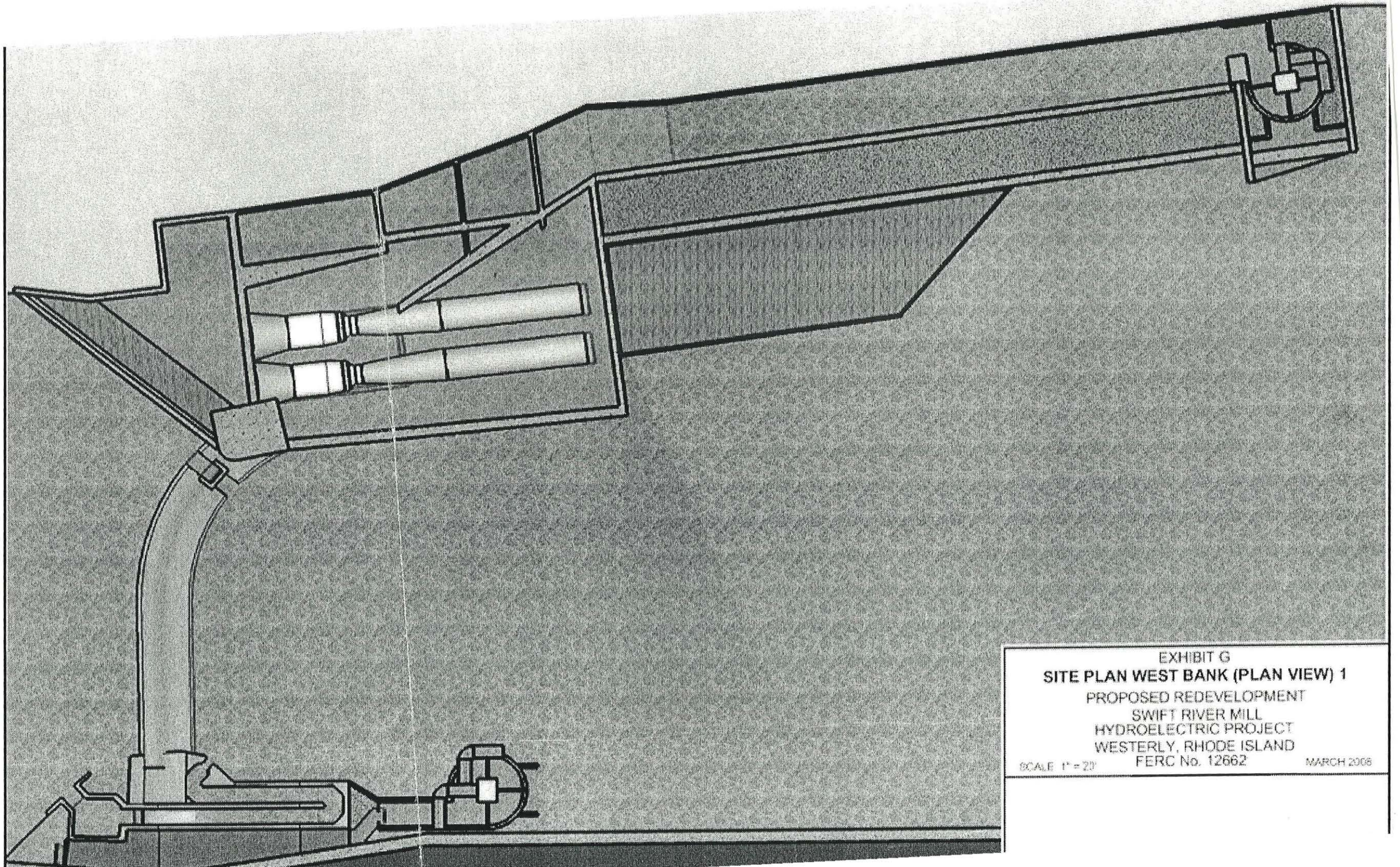

EXHIBIT G

SITE PLAN WEST BANK (PLAN VIEW) 1

PROPOSED REDEVELOPMENT
SWIFT RIVER MILL
HYDROELECTRIC PROJECT
WESTERLY, RHODE ISLAND

SCALE 1" = 20' FERC No. 12662 MARCH 2008

thewesterlysun.com

Print Page

Rezone awaits field trip to mill

(Created: Wednesday, July 9, 2008 11:55 AM EDT)

WESTERLY — Before making any decision about rezoning the Potter Hill Mill site, town officials have agreed to tour the property and surrounding neighborhood.

Town Council members on Monday heard an application by mill owner Edward Carapezza to rezone the 4.55-acre site from residential 60 to neighborhood business.

Heeding requests by mill neighbors, councilors said they would visit the 198 Potter Hill Road property and also view the dilapidated mill through the eyes of abutting residents. "It's important for you to see this first-hand and we would encourage you to do that before you take any action," said Joyce Duerr, of 1 Christian Hill Road.

Councilor Diana Avedesian agreed: "To be fair, to get the full picture, I think we need a field trip." A date for that tour has not been set.

The zoning currently permits two to three single-family homes to be constructed on the mill property, which abuts the Pawcatuck River and Hopkinton border.

Carapezza, president of Renewable Resources Inc., has conceptual plans for a historic, green, mixed-use village, including residential units, office space, small shops, a museum and science center — all powered by hydroelectricity.

Attorney Vincent Naccarato, representing Carapezza, said his client purchased the mill property in 1992 when it was zoned manufacturing. In 1998, the parcel was changed to residential 60 under a townwide rezone — a change Carapezza said he did not learn about until later.

The property has sat unused for approximately 50 years and was used prior to that as a wool-making mill. Naccarato said the rezone would comply with the town's Comprehensive Plan future land use map, which identifies the mill property as a historic mill village

Naccarato said a final Site Investigation Report with mitigation recommendations has been submitted to the state Department of Environmental Management and they are awaiting the agency's response. Carapezza said they have found levels of arsenic higher than permitted in residential areas on the property, remnants of coal burning, and they plan to pave over those areas.

Naccarato said a zone change would only be the first step, but it would allow them to bring building plan specifics to the planning and zoning boards.

Real estate appraiser and attorney Michael Lenihan told councilors he believed the

property would remain stagnant and declining if the rezone is not granted.

Of seeing two or three single-family homes constructed there, he said, "I can tell you that's not going to happen. There's just too many problems with the property."

A number of Potter Hill residents voiced strong objections to the rezone and submitted to councilors a petition signed by 145 Westerly and Hopkinton residents sharing their concerns.

Eric Taivalantti, of 131 Potter Hill Road, said the property has been condemned and that decision upheld for nearly a decade in court. He added the entrance to the mill property is merely a right of way over private property.

"We've heard this man's promises for 20 years. When is enough enough?" he asked. He later added, "How many councils is it going to take? This place is ready for the wrecking ball… You know it. Do something about it, please."

Gloria Russell, a Sun contributor and 129 Potter Hill Road resident, said the mill owner would need a magic wand to affect change.

"This has got to go before the smoke stack falls into the river (and) before someone gets killed," she said.

Harris Edwards, of 17 Post Office Lane, called on councilors to visit the area and for the "inexcusable" barbed wire strands topping a fence surrounding the mill property to be removed.

Christopher Fox, of Pawcatuck, said he fears the impact on fish of a plan to raise the dam abutting the mill 2 feet. The Wood-Pawcatuck Watershed Association is restoring fish passage on the upper Pawcatuck River by modifying dams in Shannock, allowing fish to migrate into 1,300 acres of habitat in Worden's Pond in South Kingstown.

Fox said, "1,300 acres of spawning ground, all those fish must first pass through the small fish ladder at Potter Hill Mill."

Bonnie Bennett, of 182 Potter Hill Road, read a lengthy objection. She said the mill complex would burden town infrastructure, not be supported by the winding, narrow roads in Potter Hill, and impact residents' quiet and peaceful quality of life. Bennett added the area is prone to flooding.

J. Michael Abbott, of Newport Collaborative Architects, said they aim to restore the existing buildings and reconstruct two buildings no longer standing, returning the site to its 1880s configuration.

Abbott said the Potter Hill Mill is "absolutely" salvageable. However, a finding issued 20 years ago by his firm said only 50 percent of the mill buildings were salvageable.

He said his firm has completed mill restoration projects in Cumberland and North

Smithfield — largely with the assistance of historic tax credits.

Carapezza said they are seeking state and federal historic tax credits as well as final approval from the U.S. Department of Energy to use hydroelectricity.

He said one firm, Rite Solutions of Pawcatuck, has already expressed interest in moving their 160-person headquarters to the mill complex.

edupuis@thewesterlysun.com

Potter Hill Mill
Demolition Bid Walk
September 11, 2009
10:00 AM

Paul Uzgiris, PE
PROJECT MANAGER

planning, permitting, design, construction, operation, maintenance, design/build, & equipment

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Scott S. Hobson, Director
Environmental Permitting

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Timothy Regan, P.E., M.B.A.
Chief Operating Officer
tregan@cherenzia.com

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Tel: 860-629-6500
Fax: 860-599-2701

P.O. Box 513
Westerly, RI 02891
Tel: 401-596-7747
Mobile: 401-486-6583

STATE OF RHODE ISLAND
HISTORICAL PRESERVATION & HERITAGE COMMISSION
www.preservation.ri.gov

RICHARD E. GREENWOOD, Ph.D.
DEPUTY DIRECTOR

OLD STATE HOUSE
150 BENEFIT STREET
PROVIDENCE, RI 02903

TEL: (401) 222-2078
FAX: (401) 222-2968
E-Mail: rgreenwood@preservation.ri.gov

68 White Rock Rd.
Westerly, R.I. 02891
Phone: (401)348-2562
Fax: (401)596-9512

Town Engineer's Office

Fax

To: S. DuCHARME From: J. PRATT

Fax: 222-3812 Date: 9-11-09

Phone: 222-2797 Pages: 2

Re: POTTER HILL MILL CC:

☐Urgent ☑For Review ☐Please Comment ☐Please Reply ☐Please Recycle

•Comments:

SIGN IN SHEET. FOR SITE VISIT @ MILL.

JON

TOWN OF WESTERLY
ENGINEERING DEPARTMENT
68 White Rock Road
Westerly, Rhode Island 02891
401-348-2562
fax: 401-596-9512

Pre-Bid Conference

Project Name: Potter Hill Mill Demo. Date: Sep. 11, 09

Owner Name: Town of Westerly, State of Rhode Island Engineer: Jon Pratt, PE

Inspector:

Present (Name, Company, Address, Phone, Fax, Email):

Roger Lizotte	Northeast Engineer	401-849-0810
Scott Hobson	Caputo and Wise Ltd.	(401) 434-8880
Shelley Ducharme	RIDEM	(401) 222-2797 ext. 7158
Jim Gallagher	RI Analytical	401-562-1320
Steve Richtarik	BETA Group, Inc.	401-333-2382
Tim Regan	Cherenzia & Associates	860-629-6500
Daniel Simas	RI Analytical	401 737-8500 x 121
Sean Cassidy	EFI Global	978 886 3712
Paul Vezzosa	Weston & Sampson	978. 2-1900 x 2234
Robin Dyer	Maguire Group	401-272-6000 x 268
Michael Rongione	Pare Corp	401-334-4100
Greg Sampson	LFR	617-908-7026
Dean Audet	Fuss & O'Neill	401-861-3070 x 4560
Bob May	Fuss & O'Neill, Enviro Science	401-861-3070 x 4701
Nate Lander	Cherenzia & Assoc.	860-629-6500
Tim Regan		"

FUSS & O'NEILL
Disciplines to Deliver

November 16, 2007

Mr. Geoffrey Marchant
Community Development Consortium
125 Main Street
P.O. Box 111
East Greenwich, RI 02818-0111

RE: Summary of Documented Environmental Activities
Former Pawcatuck Woolen Mill (Potter Hill Mill)
198 Potter Hill Road
Westerly, Rhode Island

Dear Mr. Marchant:

The purpose of this letter is to submit a summary of environmental activities documented at the Rhode Island Department of Environmental Management (RIDEM) concerning the above-referenced site. We understand that the Town of Westerly (Town) is interested in clarifying the environmental status of the former Pawcatuck Woolen Mill (aka Potter Mill Hill) property (the "subject site") prior to initiating further activities at the site.

We understand the subject site consists of a 4.55-acre parcel identified by the Town of Westerly Tax Assessor as Plat 8, Lot 23. The site is currently owned by Renewable Resources, Inc. (RRI). Our scope of services consisted of a review of files available at the RIDEM Office of Waste Management (OWM) for the subject site. This summary letter addresses major environmental issues identified at the subject site, pertinent RIDEM correspondence, an assessment of potential response actions remaining to be performed, and an assessment of potential remediation activities which may be required to bring the subject site into compliance with RIDEM regulations.

The Foundry Corporate Office Center
275 Promenade Street
Suite 450
Providence, RI 02908
t (401) 861-3070
(800) 286-2469
f (401) 861-3076
www.FandO.com
Rhode Island
Connecticut
Massachusetts
New York
North Carolina
South Carolina

1.0 RIDEM FILES

Fuss & O'Neill reviewed files maintained by RIDEM OWM on November 2, 2007. The following is a summary and discussion of reports and correspondence documented in the RIDEM file.

Hazardous Materials Release Notification

- September 27, 2006: Jacques Whitford (JW), on behalf of the site owner, RRI, notified RIDEM of a hazardous materials release of arsenic and beryllium to soil on the subject site.

- October 16, 2006: RIDEM issued a Letter of Responsibility to RRI and directed the completion of a Site Investigation in accordance with the *Rules and Regulations for the Investigation and Remediation of Hazardous Materials Releases* (*Remediation Regulations*).

Site Investigation Report

- November 28, 2006: JW, on behalf of RRI, submitted a Site Investigation Report (SIR) to RIDEM for the subject site. The SIR included the following documents:
  - March 14, 2006: Phase I Environmental Site Assessment (ESA) performed by JW. The Phase I ESA identified several recognized environmental conditions (RECs) on the subject site, including:
    - Potential asbestos-containing material in the site buildings.
    - Potential lead-based paint.
    - A potential on-site septic system, according to Town records. However, the property owner believed that all wastewater was directly discharged to the Pawcatuck River.
    - Potential use of coal for fuel on the subject site.
    - A waste disposal area in the northwestern portion of the site that contained miscellaneous debris, including several empty, rusty, 55-gallon drums.
    - Several former buildings that appeared to have been demolished on-site.
    - Electrical equipment potentially containing polychlorinated bi-phenyls (PCBs) and mercury.
  - April 26, 2006: Limited Phase II ESA performed by JW. The Limited Phase II ESA contained a conceptual site model identifying two areas of concern (AOCs) - AOC #1: northwestern debris area, and AOC #2: a potential former coal storage area. The location of AOC #2 was identified as "west of the building near the former boiler building." A total of six test pits were excavated at the two AOCs. A total of two soil samples were collected and submitted for laboratory analysis for the Priority Pollutant Metals (PP13 metals) and polycyclic aromatic hydrocarbons (PAHs). Arsenic and beryllium were reported at concentrations greater than their respective RIDEM Residential Direct Exposure Criteria (R-DEC) in the sample collected from AOC #2. Additionally, the Limited Phase II ESA stated that "groundwater flow at the property is estimated to be in an easterly/northeasterly direction."
- The SIR also included information from additional soil sampling performed in September, October, and November 2006, and groundwater sampling performed in October 2006. Twenty six surficial soil samples were collected in the vicinity of AOC #2. All samples were analyzed for arsenic, six samples were analyzed for RCRA 8 metals, and three samples were analyzed for PAHs. Fifteen soil samples

contained arsenic at levels greater than the RIDEM R-DEC, and two soil samples contained lead at concentrations that met or exceeded the R-DEC.

- Additionally, two one-inch monitoring wells were installed at the subject site in October 2006, and groundwater was sampled from these wells and analyzed for RCRA 8 metals and PAHs. Groundwater was reportedly encountered approximately at five feet below grade. However, in a subsequent letter, groundwater was estimated to be located ten to fifteen feet below grade. The two groundwater samples did not contain exceedances of RIDEM criteria for the analyzed parameters.
- Based on the observations made during the test pit excavations in AOC #2 and the results of the soil and groundwater sampling, JW concluded that:
  - "The subject property and surrounding area are serviced by municipal water and sewer."
  - "Metals and polynuclear aromatic hydrocarbons (PAHs) exist in surficial soils at concentrations greater than RIDEM's R-DEC. The impacted soils appear to be limited to an area near a mound containing coal ash and slag." JW determined that approximately 9,750 square feet of soil at AOC #2 were impacted by mounded coal ash and slag. JW further stated that "the only environmental concern at the site is the soil impacted by the coal ash and slag."
  - "No impacts from the coal ash and slag to groundwater were detected."
- The SIR included three remedial alternatives as required by the *Remediation Regulations*, and soil capping over the impacted soil at AOC #2 was chosen as the preferred remedial alternative in conjunction with an Environmental Land Use Restriction (ELUR).

Solid Waste

- January 11, 2007: RIDEM notified RRI that, as a result of compliance inspections conducted by RIDEM, solid waste had been disposed of on the subject site. RIDEM summarized materials observed during site inspections of the subject site as:
  - 30 cubic yards of construction and demolition (C&D) debris from a collapsed building
  - 298 cubic yards of solid waste including scrap metals, deteriorated lumber, an abandoned automobile, C&D debris from collapsed buildings, and landfilled solid waste, including empty steel drums, scrap metal, and bottles and cans
  - 90 cubic yards of solid waste consisting of scrap metal, deteriorated lumber, asphalt shingles, discarded metal pipe, and C&D debris from collapsed buildings.

- RIDEM indicated that to achieve compliance with Rhode Island General Laws, RRI needed to demonstrate that all solid waste from the property was removed within 60 days of January 11, 2007 and disposed of at a licensed solid waste management facility.
- Correspondence from JW on July 5, 2007 indicated that "All the buried debris has been excavated from the area [AOC #1] and disposed under the oversight of the RIDEM." However, further documentation of the solid waste disposal was not included in the RIDEM file.

SIR Review and Additional Investigations

- January 26, 2007: RIDEM notified RRI that the SIR did not meet the requirements for an SIR as set forth in the *Remediation Regulations* and provided comments on the deficiencies. As one of RIDEM's general comments, information regarding the historic activities on the subject site, which operated as a wool manufacturing facility, were not included in the SIR (wool mills typically used dyes containing heavy metals, dye-aids which may have chlorinated solvents, and lubricants in the machinery itself). RIDEM also included specific comments regarding deficiencies in the SIR. The most significant comments included the following:
  - Clarification was required for whether the site contained an on-site septic field, or discharged directly to the river. RIDEM indicated that piping leading to the river should be investigated, and that sediment sampling at each of the outfalls be conducted. RIDEM also required a determination regarding whether the site had ever utilized heating oil.
  - The soil sampling conducted as part of the Phase II ESA investigation and the additional soil sampling conducted as part of the SIR were insufficient to fully characterize the site, potential impacts to off-site properties, or to sensitive areas, including the Pawcatuck River.
  - RIDEM recommended conducting a geophysical survey in order to attempt to locate the former septic system, underground storage tanks, or other buried debris which would be considered an AOC. RIDEM also indicated that AOC #1 had not been adequately characterized and that additional soil sampling was necessary to characterize the site.
  - RIDEM indicated that additional monitoring wells should be installed on the property in order to adequately characterize for groundwater contamination, and that groundwater samples should be analyzed for the parameters listed in Table 3 of the *Remediation Regulations*. RIDEM also indicated that they had determined that private drinking water wells for adjoining properties were present on the subject site, and that additional investigation into private drinking water wells on properties adjoining the subject site should be conducted in order to characterize potential impacts off-site and/or to private drinking water wells.

- The groundwater flow direction identified in the SIR was inadequate. RIDEM stated that further subsurface investigation and a hydrogeological survey were required to determine actual groundwater flow direction, and as part of that investigation, additional monitoring wells should be installed, and a groundwater contour map developed.
- Additional soil sampling should be performed at the identified AOCs, at newly identified AOCs (based on additional investigations described above), and also from across the site. RIDEM also requested a comparison of analytical results to the RIDEM GA-Leachability Criteria (GA-LC).
- RIDEM concluded that a determination regarding environmental concerns on the site could not be made until additional investigations are conducted, and requested updated conclusions at that time.
- RIDEM did not review the remedial alternatives, but recommended that remedial alternatives should "address the fact that the site is within a flood zone and how this impacts the use of impermeable caps and stormwater management."

In response to RIDEM on July 5, 2007, JW, on behalf of RRI, indicated that:

- Based on observed conditions, they believed that coal was always used on site and that no evidence of heating oil tanks was observed on the site.
- Sediment sampling of the Pawcatuck River was planned at observed pipe discharges.
- "All the buried debris has been excavated from the area [AOC #1] and disposed under the oversight of the RIDEM." Further documentation of the solid waste disposal was not included in the RIDEM file.
- Three additional monitoring wells were proposed to be installed at the site, and the five on-site monitoring wells were proposed to be re-sampled.
- Subsequent to the completion of the additional proposed activities, a revised SIR was planned for RIDEM submission. Documentation of the completion of these activities or the submission of a revised SIR was not included in the available files reviewed at RIDEM.

In response to the July 5, 2007 letter prepared by JW, RIDEM prepared a letter dated July 31, 2007. The letter recommended that RRI submit a work plan for RIDEM approval for the additional work to be performed at the site. JW submitted a work plan to RIDEM on August 13, 2007. RIDEM responded to the work plan in a letter dated September 7, 2007, and JW further discussed the work plan in a letter dated October 19, 2007.

Based on information available in the RIDEM file, approval of the work plan for additional investigation has not been granted, and no additional environmental investigations have been performed at the site subsequent to the investigations documented in the SIR.

2.0 REMAINING ASSESSMENT ACTIVITIES

Based on our review of the above documentation, at a minimum, RIDEM will require the following assessment activities to be performed at the site in order to achieve approval of the SIR:

- Conduct further research on the historical operational history of the site to determine its former uses and potential use of hazardous materials.
- Conduct a geophysical survey at the site to attempt to locate the former septic system, underground storage tanks, or other buried debris
- Collect groundwater samples from one, possibly two, drinking water wells located on or adjacent to the site.
- Install additional soil borings and groundwater monitoring wells and collect soil samples from the soil borings.
- Collect groundwater samples from new and existing groundwater monitoring wells on the site.
- Conduct soil sampling in the vicinity of AOC #2 to evaluate for compliance with the GA-LC.
- Conduct sediment sampling at/near the outfall pipes leading from the site to the Pawcatuck River.
- Perform an elevation survey of the groundwater monitoring wells and develop a groundwater contour map for the site, indicating the direction of likely groundwater flow.
- Review site development plans and potential future uses to determine additional sampling requirements, potentially including under existing or former buildings.
- Update the SIR to reflect information obtained during the recommended investigations, and prepare conclusions based on the findings of the recommended investigations, including identification of three potential remedial alternatives for the subject site.

3.0 POTENTIAL REMEDIATION ACTIVITIES

Based on the information available in the RIDEM file, substantial assessment activities remain to be completed in order to determine the environmental quality of the site. Therefore, a meaningful evaluation of remedial options and opinions of cost is not feasible at this time. However, given the information available in the RIDEM, potential

remediation activities that will bring the site into compliance with RIDEM regulations must, at a minimum, include the following:

- Completion of assessment activities to satisfy RIDEM's requirement for a full Site Investigation.
- Development of a Remedial Action Work Plan (RAWP) for RIDEM submission that will detail remediation activities to be conducted at the site.
- Coordination with the RIDEM Office of Water Resources to discuss potential remediation activities that may be required within the floodplain of the Pawcatuck River.
- Potential removal action and off-site disposal of coal, coal ash, and slag from AOC #2 and other potential areas at the site.
- Collection and off-site disposal of solid waste and construction and demolition debris from throughout the site.
- Construction of a soil cap over AOC #2, and potentially over the entire 4.55-acre site.
- Potential closure of underground injection structures in accordance with the RIDEM *Underground Injection Control Rules and Regulations.*
- Based on the results of additional groundwater sampling, including sampling from adjacent private wells, potentially conduct groundwater remediation activities.
- Based on the results of sediment sampling of the Pawcatuck River, potentially conduct sediment remediation activities.
- Implementation of an ELUR that will restrict future uses of the site and establish guidelines for site maintenance and soil management.

4.0 CONCLUSIONS AND RECOMMENDATIONS

1. Based on assessment activities conducted to date, the site is currently regulated under the RIDEM *Remediation Regulations*, and substantial additional response actions are required to bring the site into compliance. Currently, the site owner is identified as the responsible party to address these requirements, and any future owners of the site may be considered a responsible party for these activities upon acquisition of the site.

2. Currently, additional site assessment and remediation activities are required by RIDEM, and the results of those activities may trigger additional assessment and remediation requirements. Accurate estimations of the overall costs of the activities necessary to bring the site into compliance with the *Remediation Regulations* can not be determined, based on the incomplete assessment conducted to date.

3. We recommend further assessment activities to collect information necessary to understand long-term environmental liability and associated costs that will be necessary to bring the site into compliance with the RIDEM *Remediation Regulations*. Fuss & O'Neill has extensive experience in securing and utilizing federal grants for the assessment of brownfields properties, similar to the site, to identify environmental liabilities and to facilitate productive re-use of the site. We recommend a further discussion of the options that may be available to facilitate the completion of the required activities.

Please contact us if you have any questions or require any clarifications regarding the above information.

Sincerely,

Brian E. Kortz
Senior Hydrogeologist

John A. Chambers, PG, LSP
Associate/Hydrogeologist

Jacques Whitford

Engineering, Scientific, Planning and Management Consultants

24 Albion Road
Suite 220
Lincoln RI
United States 02865

Bus 401 312 8005
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October 19, 2007

Rhode Island Department of Environmental Management
Office of Waste Management
Attention: Ms. Cynthia M. Gianfrancesco
235 Promenade Street
Providence, RI 02908-5767

RE: Response to Comments
198 Potter Hill Road, Westerly, RI
Jacques Whitford Project No. 1009825

Dear Ms. Gianfrancesco:

Jacques Whitford received your letter to Renewable Resources, Inc., dated September 7, 2007, concerning the Site Investigation Report (SIR) prepared by Jacques Whitford and dated August 7, 2006. This letter is being submitted to address your comments attached to that letter.

Comment 1: According to the Westerly Water Department, 23 and 30 Post Office Lane are connected to the municipal water supply. The only other residences on Post Office Lane are located at 15 and 17 Post Office Lane. We are proposing that the three groundwater monitoring wells be sampled as proposed and if impacts to groundwater are detected, then the drinking water well located at 15 Post Office Lane will be sampled and tested for the contaminants of concern. The three proposed monitoring wells will be advanced until refusal is encountered. The monitoring well will be constructed with the ten-foot screen at the bottom of the boring. The samples collected from the new groundwater monitoring wells will be analyzed for PAHs in addition to VOCs and the 13 Priority Pollutant Metals.

Comment 2: We are proposing to collect one soil sample from each of the borings completed to install the three proposed monitoring wells. As required in Comment 3, the soil samples will be collected from the vadose zone. As previously proposed, these soil samples will be analyzed for VOCs by USEPA Method 8260 and the 16 metals in the Remediation Regulations.

In addition to the three soil samples collected from the proposed borings, two soil samples will be collected from AOC 1, the former buried debris area in the northwest area of the site. The soil samples will be collected from the 0-2 foot below ground surface interval. Since the debris that formerly was buried in this area was directly on top of the current surface soils, the 0-2 foot interval would be the most impacted soils in the vadose zone. The two soil samples collected from AOC1 will be analyzed for VOCs, PAHs, and the13 Priority Pollutant Metals.

The two soil samples with the reported highest concentration of lead were SS-20 and SS-23. A soil samples will be collected from each of these two locations and analyzed for lead utilizing the SPLP method. The samples will be collected from the 0-2 foot bgs interval.

Comment 3: Refer to Comment 2.

100% Post Consumer Content

Comment 4: All buildings are proposed to remain on the site as part of the redevelopment.

If you have any questions or comments regarding this letter or any other matter, please contact me at 401-312-8005.

Sincerely,
JACQUES WHITFORD COMPANY, INC.

Joseph T. Unsworth, P.E.
Project Manager

CC: Dr. Edward Carapezza, Renewable Resources

200606075022 Received FERC OSEC 06/07/2006 01:02:00 PM Docket# P-12662-000

United States Department of the Interior
OFFICE OF THE SECRETARY
Office of Environmental Policy and Compliance
408 Atlantic Avenue – Room 142
Boston, Massachusetts 02210-3334

TAKE PRIDE IN AMERICA

June 7, 2006

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ER 06/383

Honorable Magalie R. Salas, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, D.C. 20426

RE: COMMENTS
Review of Notice of Application for Preliminary Permit;
Swift River Mill Hydroelectric Project, FERC No. 12662,
Pawcatuck River, Washington County, Rhode Island

Dear Secretary Salas:

This responds to your public notice, dated April 17, 2006, regarding the application for preliminary permit for the Swift River Mills Hydroelectric Project, located on the Pawcatuck River in Washington County, Rhode Island. The applicant for the project, Renewable Resources, Inc. (RRI), proposes to redevelop an existing dam, intake, power canal and flume, four turbines, and three tailrace channels. Some parts of the original hydro system will be refurbished and others will be replaced. The application states that the project will operate run-of-river with minimal impoundment fluctuations, and will not be used for peaking purposes.

While the Department has serious concerns with the proposed project (detailed below), it does not object to the issuance of a preliminary permit at this time. In determining the feasibility of this project the applicant should devote special attention to water quality concerns and fish passage for anadromous and catadromous species.

RESOURCE SPECIFIC ISSUES

Water Quality

The applicant should be aware that the tidal portions of the Pawcatuck River are on the State of Rhode Island's 303(d) list, meaning that they do not meet state water quality criteria. In particular, the waterbody is listed for dissolved oxygen and pathogens. A number of years ago, a numerical model was developed to study oxygen in the river and found that water flowing over the Potter Hill Dam adds between 0.5 and 0.75 mg/l of oxygen to the stream, depending on flow conditions. Because the Pawcatuck River provides oxygenated water to the tidal areas, and particularly because the Potter Hill Dam is the last point of significant re-aeration, any small

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changes in oxygen can exacerbate the oxygen problem. Additionally, a TMDL is being performed on the tidal area of the Pawcatuck. Once the study is completed, results may indicate that more restrictive requirements are needed.

The Department has identified two initial concerns with the potential impact the proposed project may have on water quality. First, if flashboards are re-installed at the site, the impoundment would increase in size, which could alter dissolved oxygen levels (via increased retention time, potential thermal stratification, etc.). Second, diverting flow to the turbines likely will significantly reduce the amount of time the project spills, which could impact the oxygen contribution the dam currently provides to the river. In evaluating the feasibility of the site for hydropower, RRI should consider that the project will need to comply with the state's antidegradation policy and water quality standards.

Fish Passage

Upstream Anadromous

The Wood-Pawcatuck watershed is actively managed for migratory fish. According to the state's Strategic Plan for the Restoration of Anadromous Fishes to Rhode Island Coastal Streams (Rhode Island Department of Environmental Management Division of Fish and Wildlife, December 2002), it is the only watershed with habitat suitable for all seven target species,[1] including Atlantic salmon.

Of the eight dams on the mainstem Pawcatuck River, the first five are passable either because they are breached or have fish ladders. A U.S. Geological Survey gauging station near the confluence with the Wood River likely will require some modification to allow passage during low flow conditions. The last three barriers are the focus of a fish passage feasibility study that will be conducted this summer. The goal of the study is to identify preferred alternatives for providing fish passage at the Lower and Upper Shannock Dams and the Kenyon Dam. Implementing passage at these remaining barriers will restore access to an additional 1,300 acres of spawning and/or rearing habitat.

Potter Hill Dam is the first barrier upstream migrants must negotiate on the Pawcatuck River (the headwork structures of the downstream White Rock Dam have been partially removed allowing passage up the bypass channel). There is an existing fishway at the Potter Hill Dam that was constructed with federal monies for the State of Rhode Island over 30 years ago. The effective operation of this fishway is imperative to the overall success of the restoration program. The fishway has never operated, and was not designed to operate, in conjunction with a hydroelectric facility. Based on the small amount of information contained in the preliminary permit application, initial concerns with how the project may impact the existing fishway include:

- attraction of upstream migrants to the three tailrace channels;
- loss of attraction to the fishway entrance that currently is provided by spill at the dam; and
- excess flow through the fishway if flashboards are installed, which would require major modifications to both the trapping facility and the upper run of the Denil ladder.

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[1] Atlantic salmon (*Salmo salar*), American shad (*Alosa sapidissima*), alewife (*Alosa pseudoharengus*), blueback herring (*Alosa aestivalis*), rainbow smelt (*Osmerus mordax*), white perch (*Morone americana*), and sea-run brook trout (*Salvelinus fontinalis*)

If RRI is unable to address upstream fish passage concerns to the satisfaction of the fishery agencies (including providing large amounts of spill at the dam to facilitate attraction to the ladder entrance), it is very likely the Department would require construction of a second upstream anadromous fishway on the west side of the river.

Downstream Anadromous

In addition to the effect the project would have on the fish ladder, generating hydropower at the site will pose a significant threat to downstream migrants due to the increased risk of injury or mortality caused by impingement at the racks or entrainment through the units. Therefore, to protect outmigrants, RRI would be required to provide downstream passage facilities as part of any permit issued for the project.

Downstream fish passage would have to meet all of the Service design criteria, including:

- an angled trash rack (for fixed racks: 10 foot deep plus the distance between the minimum and maximum operating levels during the passage season) with clear spacing not to exceed ¾ inch (or 1 inch if RRI conducts nightly shutdowns during the downstream eel passage season);
- approach velocities not to exceed 2 feet per second as measured immediately upstream of the trashracks;
- construction of a standard bypass facility (i.e., collection box and weir) at the downstream end of the trashracks;
- a 24-inch diameter pipe or flume conveying fish from the bypass to the tailwaters; and
- a plunge pool at the outfall that is at least three feet deep or 20-25% of the difference between the headpond and tailwater at minimum flow conditions during the outmigration period, whichever is greater.

Catadromous

It also will be the responsibility of RRI to provide safe, effective fish passage for American eel. Efforts are underway to restore populations of the catadromous (i.e., rears in freshwater and spawns in the ocean) American eel to east coast rivers. American eels are an ecologically, commercially, and recreationally important species. In response to a growing concern over declining eel populations, the Atlantic States Marine Fisheries Commission adopted a fishery management plan (Plan) in October of 1999. As a result of the Plan, individual states have adopted regulations on the sport and commercial eel fishery. Another key component of the Plan is for the states to provide access to historical habitat above dams.

On November 18, 2004, the American eel was petitioned for listing under the Endangered Species Act (ESA). On July 6, 2005, the U.S. Fish and Wildlife Service (Service) issued a 90-day finding on the petition and began a status review. The Service anticipates that it will conclude the status review and provide a recommendation on Endangered Species Act protection later in 2006.

Upstream passage for eels is fairly well understood, and is relatively inexpensive compared to other upstream fishways. Downstream passage needs for eels are less well understood. Research is ongoing to determine the types of bypass measures that are most effective for eel passage. At some sites, a traditional surface bypass may suffice, while at others, temporary station shut-downs may be the only means to ensure safe passage of outmigrating adult eels. Of equal

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concern is the impact the turbines may have on adult eel migrating downstream. Eel are particularly susceptible to injury and mortality from entrainment in turbines.

Under the current configuration, some eel likely are able to pass the Potter Hill Dam, given that it spills continuously and is relatively low-head. However, if the site is developed as proposed, the amount and duration of spill over the dam may change substantially, resulting in reduced passage success. Likewise, adult eel migrating out to sea presently can pass over the dam safely. If the site generates power, those outmigrants will need to be protected from impingement and entrainment mortality. In order to ensure safe passage for American eel, RRI would be required to provide eel passage facilities as part of any permit issued for the project.

RRI should also be aware that the Rhode Island Department of Environmental Management/Division of Fish and Wildlife (RIDEM/DFW) operates the existing fishway year-round to facilitate movement of both resident riverine and migratory fish species. If the project is developed, RRI will need to provide flows sufficient to operate all fishways (upstream and downstream) for whatever periods of time the state determines are necessary to meet management objectives.

RRI should initiate consultation as soon as possible with the Service and RIDFW to ensure that fish passage issues are well understood and adequately addressed.

FISH AND WILDLIFE RESOURCES

In addition to the specific resource issues described above, the Permittee will need to investigate and document other fish and wildlife resources that will be affected by the construction and operation of the project. State and federal fish and wildlife agencies should be consulted early in the planning process for their advice on impact assessment studies. After the Permittee has conducted the necessary studies, the resource agencies should be consulted again for their recommendations on measures needed to mitigate adverse impacts and compensate for unavoidable losses to fish and wildlife resources. Please contact the U.S. Fish and Wildlife Service, New England Field Office, 70 Commercial Street, Suite 300, Concord, New Hampshire 03301.

CULTURAL RESOURCES

The State Historic Preservation Officer (SHPO) should be consulted concerning the project to ensure compliance by the applicant and the Federal Energy Regulatory Commission (FERC) with all preservation legislation. Consideration of project effects on any existing or potential cultural resources should take place as part of the environmental evaluation during the preliminary permit period. We suggest that Article 7 in Order No. 54 Final Rule, FERC, October 22, 1979, be included in the preliminary permit. For Rhode Island, the SHPO is Edward Sanderson, Rhode Island Historic Preservation & Heritage Commission, 150 Benefit Street, Providence, Rhode Island 02903 (telephone 401/222-2678).

RECREATIONAL RESOURCES

An assessment of the recreation potential of the project should be undertaken during the preliminary permit period in consultation with the State Liaison Officer (SLO), county officials, and local community groups and agencies concerned with providing opportunities for public recreation. The assessment should include consideration of recreation needs and priorities

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identified in the Statewide Comprehensive Outdoor Recreation Plan. The SLO for Rhode Island is Fred Vincent, Director of the Department of Environmental Management, 235 Promenade Street, Suite 425, Providence, Rhode Island 02908 (telephone 401/222-2771).

Thank you for the opportunity to review and comment on this application. Please feel free to contact me at (617) 223-8565 if I can be of further assistance.

Sincerely,

Andrew L. Raddant /s/
Regional Environmental Officer

200606135017 Received FERC OSEC 06/13/2006 11:51:00 AM Docket# P-12662-000

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

In the matter of

Swift River Mill Project
Renewable Resources, Inc.

Project No. 12662-000

"COMMENTS"

The Department offers the following comments on the preliminary permit application for the above project that was the subject of an April 17, 2006 public notice by the Commission. These comments are intended to assist the applicant in further evaluating the development of a facility at the proposed site as well as focusing on information that should be included in any subsequent license application.

The Pawcatuck River forms the interstate boundary between the States of Rhode Island and Connecticut from approximately the head-of-tide to the river mouth. Two significant tributaries of the Pawcatuck River watershed are predominantly located within Connecticut: the Shunock River and Ashaway River (known in Connecticut as 'Green Falls River'). There is a barrier waterfall in the headwaters of the Green Falls River but no evidence of other natural barriers to migration of historic diadromous fish runs within these drainages. The historical record is clear that the Pawcatuck River watershed supported abundant runs of diadromous fish including Atlantic salmon, American shad, alewife, blueback herring, sea lamprey, striped bass, rainbow smelt, white perch, and American eel. Moreover, all of these species are still present, to some degree, below the Potter Hill Dam.

The Department's Inland Fisheries Division seeks to conserve and restore historic runs of these fish throughout Connecticut, including the Pawcatuck River. It has been actively working on fish passage projects with partners on the Shunock River, a stream that it stocks with sea-run brown trout in an effort to establish that additional anadromous species. Also, it has actively participated in an interstate Technical Advisory Committee established to guide restoration efforts on the Pawcatuck River and continues to support the restoration efforts through its work on the U.S. Atlantic Salmon Assessment Committee and regular interactions with Rhode Island's fishery agency staff.

The success of the restoration of the Pawcatuck River diadromous fish runs impacts citizens of Connecticut in several ways. Residents of inland towns fail to realize benefits to their community if fish are not able to reach their portion of the watershed due to downstream barriers or insufficient population size. This results in lost opportunities for angling, wildlife observation, and ecosystem restoration (increased biodiversity and influx of marine derived nutrients). Residents of the lower Pawcatuck River area as well as residents from all over Connecticut who travel to the lower Pawcatuck River will fail to realize these benefits if upstream production decreases or remains low due to barriers.

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The lower Pawcatuck River is an important fishing area for the citizens of Connecticut. They currently target anadromous fish that need to access upriver habitat to spawn. This population is a fraction of its potential size due to the lack of adequate fish passage facilities. Also, anglers target non-diadromous species (e.g. weakfish, false albacore, bluefish) and anadromous fish that do not need to spawn upriver (e.g. striped bass and hickory shad) that enter the estuary to feed on the incoming and outgoing migrants of diadromous fish using the upriver portions of the watershed. These species need a healthy, functioning estuarine ecosystem full of the native diadromous species to flourish and support viable fisheries, which in turn contributes greatly to the local economy.

The success of the restoration of the Pawcatuck River diadromous fish runs will, in large part, depend upon successful upstream and downstream fish passage at the Potter Hill Dam. It is the gateway to most anadromous fish spawning and nursery habitat and American eel rearing habitat in the watershed. Although diadromous fish in Connecticut's Shunock River watershed can come and go without passing the Potter Hill Dam, these migrants must still pass through the entire Pawcatuck River estuary, and their well being relies on the health of this ecosystem.

Although the Potter Hill Dam is located within the State of Rhode Island, the interests of the State of Connecticut are impacted by what occurs at this project site. The Department expects this project to include effective upstream and downstream fish passage for both anadromous and catadromous fish species. The existing fishway was not designed to be effective with a hydroelectric facility operating at this dam, much less on the opposite side of the river. Given these changes at the site, the Department will expect a rigorous evaluation of the future effectiveness of the existing fish passage facility. Also, the consideration of additional facilities, as appropriate, should be included in this evaluation. For further information regarding anadromous fisheries, please contact Steve Gephard in the Department's Inland Fisheries Division at 860.447.4316.

A run-of-river operational mode is proposed in the preliminary permit application, which the Department interprets to mean that the outflow from the project will equal the inflow to the project on an instantaneous basis. This operational mode will be protective of instream values below the project. The methods that will be used to accomplish this operational mode should be included in future project descriptions.

If plans change regarding this project feature, there will be a need to establish an appropriate project minimum stream flow release that is protective of instream values and aquatic resources. Typically, an Instream Flow Incremental Method (IFIM) study or similar approved fisheries habitat based field study would be used to define the necessary release. The Department's should be consulted during the design and development of any such field study.

I hope that these comments are helpful in furthering the evaluation of redeveloping the hydropower potential at this site. If I can be of any further assistance regarding these comments or with other questions that may arise during the planning of this project, please contact me at 860.424.4109. Also, any resource agency identified by the Commission, which is within the Department, that is required to be consulted during the preparation of a license application will be satisfied by contacting my office at the letterhead address. Additionally, to facilitate the

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Department's review any of future licensing materials, three copies should be provided to this office.

Sincerely,

Dated: 6/13/06

Brian J. Emerick
Supervising Environmental Analyst
Office of Environmental Review

cc: Renewable Resources, Inc.
Melissa Grader, USF&WS
Bob Kaliszewski, DEP/OPPD
Steve Gephard, DEP/IFD
Brian Murphy, DEP/IFD
Eric Thomas, DEP/WPSD

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ORIGINAL

Wood-Pawcatuck Watershed Association

203 Arcadia Road, Hope Valley RI 02832 • 401-539-9017 • www.wpwa.org

FILED
OFFICE OF THE
SECRETARY
2006 JUN 23 P 2:42
FEDERAL ENERGY
REGULATORY COMMISSION

June 13, 2006

Honorable Magalie R. Salas, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, D.C. 20426

RE: ER06/383 FERC#12602-000 COMMENTS
Notice of Application for Preliminary Permit
Swift River Mill Hydroelectric Project, FERC No. 12662
Pawcatuck River, Washington County, Rhode Island

Dear Secretary Salas:

The Wood-Pawcatuck Watershed Association (WPWA), state-designated Watershed Council for the Pawcatuck, hereby submits the following comments in response to your public notice of April 17, 2006, regarding the application for a preliminary permit for the Swift River Mills Hydroelectric Project, located on the Pawcatuck River in Westerly, Rhode Island.

WPWA has reviewed the subject notice and has serious concerns with the proposed hydroelectric project relative to the potential impacts to fish passage and ongoing fishway restoration efforts in the watershed.

WPWA is presently involved as lead partner in two fish passage projects on the Pawcatuck mainstem: the Shannock Fish Passage Feasibility Study, funded by RI Coastal Estuaries Habitat Trust, and the NOAA-American Rivers partnership, to look at alternatives for moving fish over three dams in Shannock and Kenyon; and the Bradford Fishway Rehabilitation Project, funded by USDA Natural Resource Conservation Service through its WHIP program, to address erosion around the Denil fishway, and to reconstruct the lower section of the fishway for increased efficiency.

It is critical to the success of fish passage efforts in our watershed that the applicant be required to assess environmental impacts relative to aquatic life, and to address how the goals of the proposed project fit with federal, state and local fishway restoration goals and efforts. Further, any necessary relief from any impacts must be defined and guaranteed prior to a preliminary permit being issued.

Partner agencies in our fish passage projects include National Oceanic Atmospheric Administration, US Fish & Wildlife Service, USDA Natural Resource Conservation Service, Towns of Richmond and Charlestown RI, American Rivers, Trout Unlimited, The Nature Conservancy, RI Dept. of Environmental Management, RI Coastal Resources Management Council, and the Narragansett Bay Estuary Project. As partners we are committed to the restoration of historic fisheries to the system, and with the Shannock project to restoring 1,300 acres of upstream spawning and rearing habitat.

Unofficial FERC-Generated PDF of 20060626-0260 Received by FERC OSEC 06/23/2006 in Docket#: P-12602-000

The existing Potter Hill fishway is a critical piece of the overall success of the restoration program on the Pawcatuck. It is the first impediment to upstream passage. The effective operation of the fishway there, and its ability to attract fish moving upstream, could be at risk in the presence of a hydroelectric facility. Potential impacts to the operation of the fishway must be assessed, as well as the avoidance of conflicts. As well, applicant must demonstrate how injury or mortality to downstream migrants will be avoided. In particular, applicant must assess impacts to the American eel, a species under review for Endangered Species Act protection, and a target species in our restoration efforts along the Pawcatuck.

Achieving fish passage and fishway restoration goals offer a significant, lifetime benefit to the community in many respects– from the improvement of aquatic habitat and the health of the ecosystem, to the quality of local recreational opportunities, to the boost that improved ecotourism brings to the local economies. How the proposed hydroelectric facility fits in with these goals, and how the community will benefit, are important questions to address in this review process.

Thank you for the opportunity to advise you of our efforts to restore fish passage in the Pawcatuck Watershed, and to comment on the proposed hydroelectric project in our watershed.

Sincerely,

Lori Urso
Executive Director

Cc: Shannock Fish Passage Feasibility Study Partners

Cynthia Gianfrancesco

From: Edward Carapezza [edcarapezza@metronets.com]
Sent: Tuesday, November 07, 2006 3:46 PM
To: Cynthia Gianfrancesco
Cc: Joseph Unsworth
Subject: This correspondence verifies that I am in receipt of your Letter of Responsibility for Case # 2006-082
Importance: High

Cynthia,
I called and left a message for you last week. I received your voice message reply yesterday requesting that I send you a written response for your files that I have indeed received your Letter of Responsibility correspondance. You also asked for some written explanation of my plans to comply within the prescribed 90 day requirement.

As such, I am sending this email to officially respond in writing that I am indeed in receipt of the Letter of Responsibility (for Case # 2006-082) that you sent to my Virginia address. As per your 16 October letter, you are in receipt of the Hazardous Material Release Notification Form dated September 21, 2006 and the Letter Report, submitted by Jacques Whitford, dated 27 September 2006.

Our plans are to fully comply with the items addressed in your letter. As you are aware, I have retained the Jacques Whitford Company to complete all our required environmental sampling, assessments and reporting. Mr. Joe Unsworth is our lead engineer for this project. Joe has been conducting a full site investigation and will prepare a complete Site Investigation Report (SIR) for us. Our plans are to submit this complete SIR to your office in December, well within the prescribed 90 day requirement.

I hope this note meets your requirement for a written acknowledgement. Email responses are now acceptable as "official" responses for most government communications. Please feel free to contact me or Joe Unsworth at any time should you need more information.

Thanks much – Ed Carapezza

Edward Carapezza, PhD
President
Renewable Resources, Inc
900 N.Stafford Street (Suite 2428)
Arlington, VA 22203

Email: EdCarapezza@metronets.com
Email: ecarapezza@comcast.net

Cell: 703-405-2336
Blackberry Cell: 703-509-5142

Additional RI/Connecticut Local Number:
860-245-5317

Jacques Whitford

Engineering, Scientific, Planning and Management Consultants

24 Albion Road
Suite 220
Lincoln RI
United States 02865

Bus 401 312 8005
Fax 401 312 8010

www.jacqueswhitford.com

* RECEIVED *
DEC 20 2006
R.I.D.E.M.
OFFICE OF WASTE MANAGEMENT

December 20, 2006

Rhode Island Department of Environmental Management
Office of Waste Management
Attn.: Ms. Cynthia Gianfrancesco
235 Promenade Street
Providence, RI 02908-5767

RE: Former Pawcatuck Woolen Mill
198 Potter Hill Road
Westerly, RI
Jacques Whitford Company Job No. 1009825

Dear Ms. Gianfrancesco,

Please find enclosed copies of the public notice letters sent to abutters and other property owners near the above referenced property. Also attached is a list of the property owners notified and the plat maps that show the location of each of the property owners notified.

Should you have any questions or require additional information, please do not hesitate to contact the undersigned at (401) 312-8005.

Sincerely,
JACQUES WHITFORD

Joseph T. Unsworth P.E.
Project Manager

Jacques Whitford

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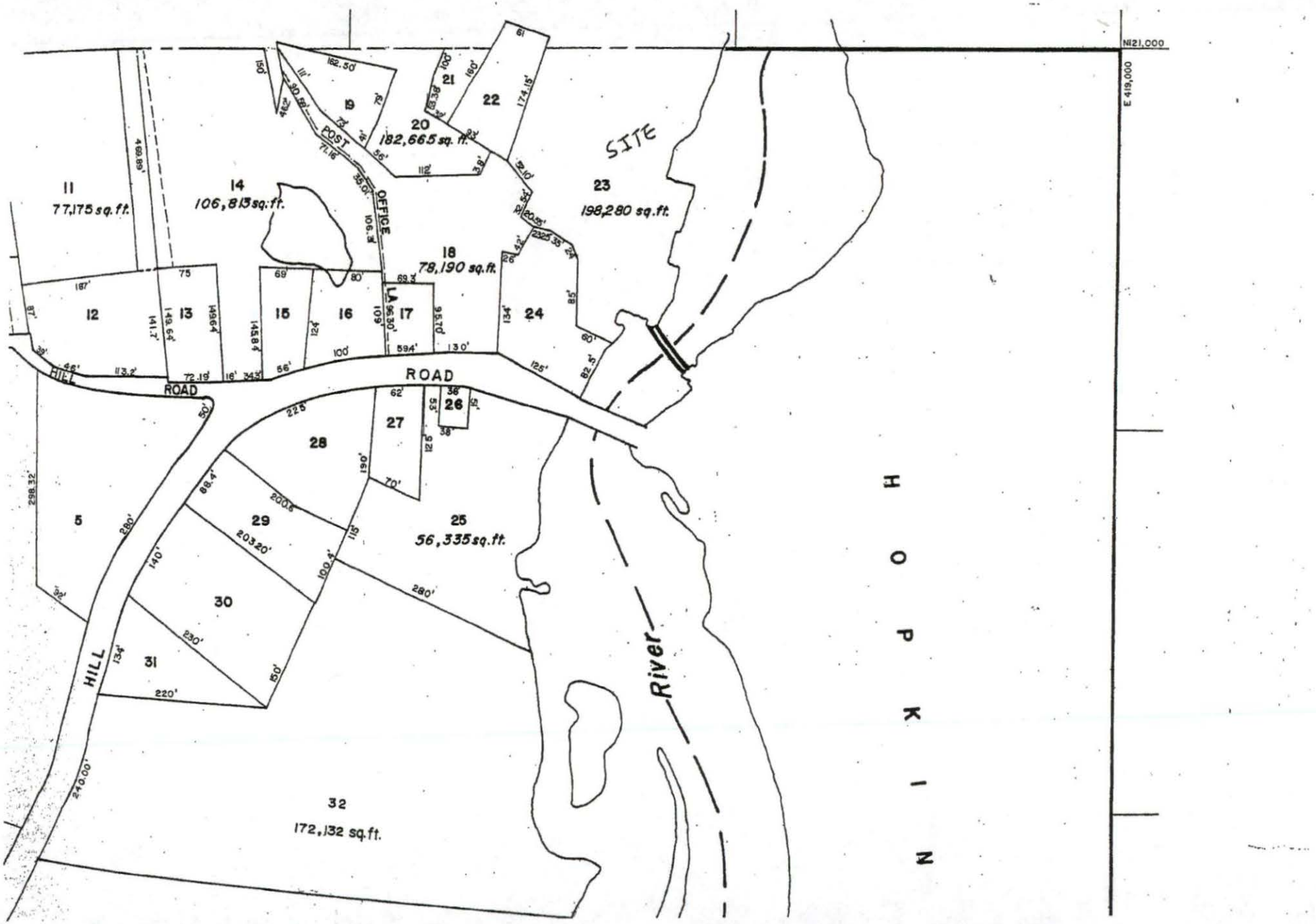
DEC 30 2008

Name	Mailing Address	City	State	Zip	Plat	Lot
Dale & Ann Edwards	17 Post Office Lane	Westerly	RI	02891	8	22
Lloyd & Ann Baker	194 Potter Hill Road	Westerly	RI	02891	8	18
Allison B. Goodsell	198 Potter Hill Road	Westerly	RI	02891	8	24,26
Richard Wurcik	30 Post Office Lane	Westerly	RI	02891	8	20
Francis J. Hunt Jr.	Buckeye Brook Road, PO BOX 209	Bradford	RI	02808	8	25
William Jacobson	15 Post Office Lane	Westerly	RI	02891	8	21
Kadir Koseuglo	69 Laurel Street	Ashaway	RI	02804	24	130
Raymond Morgan Jr.	72 Laurel Street	Ashaway	RI	02804	24	167
James A. Driscoll	70-A Laurel Street	Ashaway	RI	02804	24	168
Josia Turner	71 Laurel Street	Ashaway	RI	02804	24	131
Jeffrey Beaucamp	PO Box 1824	Westerly	RI	02804	24	132
Theodore & Betty Gardiner	PO Box 243	Ashaway	RI	02804	24	133
Thomas & Kim Dulaney	930 Groton Long Point Road	Groton	CT	06340	24	138
Charles & Karen Hammond	PO Box 126	Ashaway	RI	02804	24	139
John Ferrigno	133 River Road	Pacatuck	CT	06379	24	140
John Ferrigno	83B Laurel Street	Ashaway	RI	02804	24	141
Roy Hall	32 Maxson Street	Ashaway	RI	02804	24	142
Gilbert Macamaux	PO Box 405	Wyoming	RI	02898	24	161
Kenneth & Jody Dinwoodie	PO Box 18	Ashaway	RI	02804	24	162
Daniel & Lori Bueno	29B Maxson Street	Ashaway	RI	02804	24	162A
Timothy Ward & Marie Gentile	PO Box 211	Ashaway	RI	02804	24	165
James Hirst	Po Box 128	Ashaway	RI	02804	24	66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E 419,000
SITE
OFFICE
POST
ROAD
HILL
ROAD
HILL
River
HOPKIN
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14
106,813 sq.ft.
20
182,665 sq.ft.
18
78,190 sq.ft.
23
198,280 sq.ft.
25
56,335 sq.ft.
32
172,132 sq.ft.
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MANUFACTURING
NORTH STONINGTON, CONNEC
RFR-80
WESTERLY
WESTERLY
SITE
RIVER
HILLSIDE AVENUE
WELLS STREET
CHURCH STREET
ELM STREET
BROOKDALE DRIVE
CLAY STREET
OAK STREET
MAIN STREET
AMELIA STREET
WILLIAMS STREET
RIDGEWOOD AVE.
EDGEWOOD AVENUE
LAUREL STREET
RIVER ROAD
R-1
M
17N
17P
17
17-C
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Notification to Abutters
Site Investigation
Plat Map 8 Lot 23
198 Potter Hill Road
Westerly, Rhode Island
December 19, 2006

In accordance with the Rhode Island Department of Environmental Management's (RIDEM's) Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases (the Remediation Regulations), Jacques Whitford Company, Inc., representing the owners of the above referenced site, is providing notice to abutters that a Site Investigation Report for the above mentioned property has been completed and additional investigation activities may be completed within the next three months. The property is further designated on Plat Map 8, as Lot 23, of the Town of Westerly Tax Assessor's plat maps. The goal of the investigations is to determine if the subsurface of the subject property had been impacted by previous operations, which may have resulted in any exceedances of the RIDEM's promulgated soil and groundwater criteria. The previously completed investigation included sampling and laboratory analysis of surface and subsurface soil, as well as groundwater. The SIR was submitted to the RIDEM.

Should you desire any additional information regarding this project, please contact me at the following address/phone:

Joseph T. Unsworth, P.E.
Jacques Whitford Company, Inc.
24 Albion Road, Suite 220
Lincoln, RI 02965
(401) 312-8005

Jacques Whitford

Engineering, Scientific, Planning and Management Consultants

24 Albion Road
Suite 220
Lincoln RI
United States 02865

Bus 401 312 8005
Fax 401 312 8010

www.jacqueswhitford.com

December 20, 2006

Dale & Ann Edwards
17 Post Office Lane
Westerly, RI 02891

RE: Notification of Environmental Investigation on Abutting Property

To Whom It May Concern:

In accordance with the Rhode Island Department of Environmental Management (RIDEM) Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases, Rule 7.07, this letter has been written to inform you that a Site Investigation Report (SIR) has been completed and additional investigations may be completed for the property located at 198 Potter Hill Road in Westerly, RI, which is abutting to Plat 8 , Lot 22, for which you are listed as the current owner. Any questions regarding this notice can be directed to Mr. Joseph Unsworth, P.E., of Jacques Whitford Company, Inc., at (401) 312-8005.

Sincerely,
Jacques Whitford Company, Inc.

Joseph T. Unsworth, P.E.
Project Manager

Jacques Whitford

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Engineering, Scientific, Planning and Management Consultants

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United States 02865

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Fax 401 312 8010

www.jacqueswhitford.com

December 20, 2006

Lloyd & Ann Baker
194 Potter Hill Road
Westerly, RI 02891

RE: Notification of Environmental Investigation on Abutting Property

To Whom It May Concern:

In accordance with the Rhode Island Department of Environmental Management (RIDEM) Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases, Rule 7.07, this letter has been written to inform you that a Site Investigation Report (SIR) has been completed and additional investigations may be completed for the property located at 198 Potter Hill Road in Westerly, RI, which is abutting to Plat 8 , Lot 18, for which you are listed as the current owner. Any questions regarding this notice can be directed to Mr. Joseph Unsworth, P.E., of Jacques Whitford Company, Inc., at (401) 312-8005.

Sincerely,
Jacques Whitford Company, Inc.

Joseph T. Unsworth, P.E.
Project Manager

Jacques Whitford

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December 20, 2006

Allison B. Goodsell
198 Potter Hill Road
Westerly, RI 02891

RE: Notification of Environmental Investigation on Abutting Property

To Whom It May Concern:

In accordance with the Rhode Island Department of Environmental Management (RIDEM) Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases, Rule 7.07, this letter has been written to inform you that a Site Investigation Report (SIR) has been completed and additional investigations may be completed for the property located at 198 Potter Hill Road in Westerly, RI, which is abutting to Plat 8, Lots 24 and 26, for which you are listed as the current owner. Any questions regarding this notice can be directed to Mr. Joseph Unsworth, P.E., of Jacques Whitford Company, Inc., at (401) 312-8005.

Sincerely,
Jacques Whitford Company, Inc.

Joseph T. Unsworth, P.E.
Project Manager

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December 20, 2006

Richard Wurcik
30 Post Office Lane
Westerly, RI 02891

RE: Notification of Environmental Investigation on Abutting Property

To Whom It May Concern:

In accordance with the Rhode Island Department of Environmental Management (RIDEM) Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases, Rule 7.07, this letter has been written to inform you that a Site Investigation Report (SIR) has been completed and additional investigations may be completed for the property located at 198 Potter Hill Road in Westerly, RI, which is abutting to Plat 8, Lot 20, for which you are listed as the current owner. Any questions regarding this notice can be directed to Mr. Joseph Unsworth, P.E., of Jacques Whitford Company, Inc., at (401) 312-8005.

Sincerely,
Jacques Whitford Company, Inc.

Joseph T. Unsworth, P.E.
Project Manager

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December 20, 2006

Francis J. Hunt Jr.
Buckeye Brook Road, PO BOX 209
Bradford, RI 02808

RE: Notification of Environmental Investigation on Abutting Property

To Whom It May Concern:

In accordance with the Rhode Island Department of Environmental Management (RIDEM) Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases, Rule 7.07, this letter has been written to inform you that a Site Investigation Report (SIR) has been completed and additional investigations may be completed for the property located at 198 Potter Hill Road in Westerly, RI, which is abutting to Plat 8, Lot 25, for which you are listed as the current owner. Any questions regarding this notice can be directed to Mr. Joseph Unsworth, P.E., of Jacques Whitford Company, Inc., at (401) 312-8005.

Sincerely,
Jacques Whitford Company, Inc.

Joseph T. Unsworth, P.E.
Project Manager

Jacques Whitford

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December 20, 2006

William Jacobson
15 Post Office Lane
Westerly, RI 02891

RE: Notification of Environmental Investigation on Abutting Property

To Whom It May Concern:

In accordance with the Rhode Island Department of Environmental Management (RIDEM) Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases, Rule 7.07, this letter has been written to inform you that a Site Investigation Report (SIR) has been completed and additional investigations may be completed for the property located at 198 Potter Hill Road in Westerly, RI, which is abutting to Plat 8, Lot 21, for which you are listed as the current owner. Any questions regarding this notice can be directed to Mr. Joseph Unsworth, P.E., of Jacques Whitford Company, Inc., at (401) 312-8005.

Sincerely,
Jacques Whitford Company, Inc.

Joseph T. Unsworth, P.E.
Project Manager

Jacques Whitford

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December 20, 2006

Kadir Koseuglo
69 Laurel Street
Ashaway, RI 02804

RE: Notification of Environmental Investigation on Abutting Property

To Whom It May Concern:

In accordance with the Rhode Island Department of Environmental Management (RIDEM) Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases, Rule 7.07, this letter has been written to inform you that a Site Investigation Report (SIR) has been completed and additional investigations may be completed for the property located at 198 Potter Hill Road in Westerly, RI, which is abutting to Plat 24, Lot 130, for which you are listed as the current owner. Any questions regarding this notice can be directed to Mr. Joseph Unsworth, P.E., of Jacques Whitford Company, Inc., at (401) 312-8005.

Sincerely,
Jacques Whitford Company, Inc.

Joseph T. Unsworth, P.E.
Project Manager

Jacques Whitford

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December 20, 2006

Raymond Morgan Jr.
72 Laurel Street
Ashaway, RI 02804

RE: Notification of Environmental Investigation on Abutting Property

To Whom It May Concern:

In accordance with the Rhode Island Department of Environmental Management (RIDEM) Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases, Rule 7.07, this letter has been written to inform you that a Site Investigation Report (SIR) has been completed and additional investigations may be completed for the property located at 198 Potter Hill Road in Westerly, RI, which is abutting to Plat 24, Lot 167, for which you are listed as the current owner. Any questions regarding this notice can be directed to Mr. Joseph Unsworth, P.E., of Jacques Whitford Company, Inc., at (401) 312-8005.

Sincerely,
Jacques Whitford Company, Inc.

Joseph T. Unsworth, P.E.
Project Manager

Jacques Whitford

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Lincoln RI
United States 02865

Bus 401 312 8005
Fax 401 312 8010

www.jacqueswhitford.com

December 20, 2006

James A. Driscoll
70-A Laurel Street
Ashaway, RI 02804

RE: Notification of Environmental Investigation on Abutting Property

To Whom It May Concern:

In accordance with the Rhode Island Department of Environmental Management (RIDEM) Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases, Rule 7.07, this letter has been written to inform you that a Site Investigation Report (SIR) has been completed and additional investigations may be completed for the property located at 198 Potter Hill Road in Westerly, RI, which is abutting to Plat 24, Lot 168, for which you are listed as the current owner. Any questions regarding this notice can be directed to Mr. Joseph Unsworth, P.E., of Jacques Whitford Company, Inc., at (401) 312-8005.

Sincerely,
Jacques Whitford Company, Inc.

Joseph T. Unsworth, P.E.
Project Manager

Jacques Whitford

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Fax 401 312 8010

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December 20, 2006

Josia Turner
71 Laurel Street
Ashaway, RI 02804

RE: Notification of Environmental Investigation on Abutting Property

To Whom It May Concern:

In accordance with the Rhode Island Department of Environmental Management (RIDEM) Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases, Rule 7.07, this letter has been written to inform you that a Site Investigation Report (SIR) has been completed and additional investigations may be completed for the property located at 198 Potter Hill Road in Westerly, RI, which is abutting to Plat 24, Lot 131, for which you are listed as the current owner. Any questions regarding this notice can be directed to Mr. Joseph Unsworth, P.E., of Jacques Whitford Company, Inc., at (401) 312-8005.

Sincerely,
Jacques Whitford Company, Inc.

Joseph T. Unsworth, P.E.
Project Manager

Jacques Whitford

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Lincoln RI
United States 02865

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Fax 401 312 8010

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December 20, 2006

Jeffrey Beaucamp
PO Box 1824
Westerly, RI 02804

RE: Notification of Environmental Investigation on Abutting Property

To Whom It May Concern:

In accordance with the Rhode Island Department of Environmental Management (RIDEM) Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases, Rule 7.07, this letter has been written to inform you that a Site Investigation Report (SIR) has been completed and additional investigations may be completed for the property located at 198 Potter Hill Road in Westerly, RI, which is abutting to Plat 24, Lot 132, for which you are listed as the current owner. Any questions regarding this notice can be directed to Mr. Joseph Unsworth, P.E., of Jacques Whitford Company, Inc., at (401) 312-8005.

Sincerely,
Jacques Whitford Company, Inc.

Joseph T. Unsworth, P.E.
Project Manager

Jacques Whitford

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Jacques Whitford

Engineering, Scientific, Planning and Management Consultants

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United States 02865

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December 20, 2006

Theodore & Betty Gardiner
PO Box 243
Ashaway, RI 02804

RE: Notification of Environmental Investigation on Abutting Property

To Whom It May Concern:

In accordance with the Rhode Island Department of Environmental Management (RIDEM) Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases, Rule 7.07, this letter has been written to inform you that a Site Investigation Report (SIR) has been completed and additional investigations may be completed for the property located at 198 Potter Hill Road in Westerly, RI, which is abutting to Plat 24, Lot 133, for which you are listed as the current owner. Any questions regarding this notice can be directed to Mr. Joseph Unsworth, P.E., of Jacques Whitford Company, Inc., at (401) 312-8005.

Sincerely,
Jacques Whitford Company, Inc.

Joseph T. Unsworth, P.E.
Project Manager

Jacques Whitford

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Jacques Whitford

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24 Albion Road
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Lincoln RI
United States 02865

Bus 401 312 8005
Fax 401 312 8010

www.jacqueswhitford.com

December 20, 2006

Thomas & Kim Dulaney
930 Groton Long Point Road
Groton, CT 06340

RE: Notification of Environmental Investigation on Abutting Property

To Whom It May Concern:

In accordance with the Rhode Island Department of Environmental Management (RIDEM) Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases, Rule 7.07, this letter has been written to inform you that a Site Investigation Report (SIR) has been completed and additional investigations may be completed for the property located at 198 Potter Hill Road in Westerly, RI, which is abutting to Plat 24, Lot 138, for which you are listed as the current owner. Any questions regarding this notice can be directed to Mr. Joseph Unsworth, P.E., of Jacques Whitford Company, Inc., at (401) 312-8005.

Sincerely,
Jacques Whitford Company, Inc.

Joseph T. Unsworth, P.E.
Project Manager

Jacques Whitford

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December 20, 2006

Charles & Karen Hammond
PO Box 126
Ashaway, RI 02804

RE: Notification of Environmental Investigation on Abutting Property

To Whom It May Concern:

In accordance with the Rhode Island Department of Environmental Management (RIDEM) Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases, Rule 7.07, this letter has been written to inform you that a Site Investigation Report (SIR) has been completed and additional investigations may be completed for the property located at 198 Potter Hill Road in Westerly, RI, which is abutting to Plat 24, Lot 139, for which you are listed as the current owner. Any questions regarding this notice can be directed to Mr. Joseph Unsworth, P.E., of Jacques Whitford Company, Inc., at (401) 312-8005.

Sincerely,
Jacques Whitford Company, Inc.

Joseph T. Unsworth, P.E.
Project Manager

Jacques Whitford

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December 20, 2006

John Ferrigno
133 River Road
Pacatuck, CT 06379

RE: Notification of Environmental Investigation on Abutting Property

To Whom It May Concern:

In accordance with the Rhode Island Department of Environmental Management (RIDEM) Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases, Rule 7.07, this letter has been written to inform you that a Site Investigation Report (SIR) has been completed and additional investigations may be completed for the property located at 198 Potter Hill Road in Westerly, RI, which is abutting to Plat 24, Lot 140, for which you are listed as the current owner. Any questions regarding this notice can be directed to Mr. Joseph Unsworth, P.E., of Jacques Whitford Company, Inc., at (401) 312-8005.

Sincerely,
Jacques Whitford Company, Inc.

Joseph T. Unsworth, P.E.
Project Manager

Jacques Whitford

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Jacques Whitford

Engineering, Scientific, Planning and Management Consultants

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Fax 401 312 8010

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December 20, 2006

John Ferrigno
83B Laurel Street
Ashaway, RI 02804

RE: Notification of Environmental Investigation on Abutting Property

To Whom It May Concern:

In accordance with the Rhode Island Department of Environmental Management (RIDEM) Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases, Rule 7.07, this letter has been written to inform you that a Site Investigation Report (SIR) has been completed and additional investigations may be completed for the property located at 198 Potter Hill Road in Westerly, RI, which is abutting to Plat 24, Lot 141, for which you are listed as the current owner. Any questions regarding this notice can be directed to Mr. Joseph Unsworth, P.E., of Jacques Whitford Company, Inc., at (401) 312-8005.

Sincerely,
Jacques Whitford Company, Inc.

Joseph T. Unsworth, P.E.
Project Manager

Jacques Whitford

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Renewable Resources, Inc.

900 North Stafford Street
Arlington, Virginia 22301
401-207-2643
860-245-5317

December 30, 2006



Honorable Magalie R.Salas, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, DC 20426

Re: Renewable Resources, Inc, FERC # 12662-000

Dear Secretary Salas:

Enclosed please find the original and 4 copies of the first progress report, due on 31 December 2006, for the Swift River Mill Project. As per Article 4, we have also served a copy of this progress report to the interveners in this proceeding. This progress report describes the nature and timing of what has been done under the pre-filing requirements of 18CFR4.38 and other applicable regulations.

Thank you for your attention to this matter.

Edward Carapezza, Ph.D.
President
Renewable Resources, Inc

cc: John Lavigne
Paul Nolan, Esq.
DOI, Office of Environmental Affairs
USA, New England Division
DOI, USFWS, Region 5
RIDEM, Office of Technical and Customer Assistance
Wood-Pawcatuck Watershed Association
Connecticut DEP, Office of Environmental Review



Renewable Resources, Inc.

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Swift River Mill Hydroelectric Project
FERC # 12662-000

Progress Report #1 (July-Dec 2006)
Prepared for: FERC

Prepared by: Renewable Resources, Inc
IAW Article 4

28 December 2006

Report Sections:

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Attachments:

FERC Order Issuing Preliminary Permit (1 July 2006)	**Attachment 1**
FERC Introductory Letter (14 July 2006)	**Attachment 2**
FERC License Application Preparation Letter (25 July 2006)	**Attachment 3**
State of Connecticut DEP Comment Letter (13 June 2006)	**Attachment 4**
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SUMMARY TIMELINE

Reporting Period #1 (July-Dec 2006)

July 15, 2006	FERC Order Issued Preliminary Permit
July 17, 2006	FERC Introductory Letter with Article 4 Requirements
July 25, 2006	FERC License Application Preparation Letter
July 30, 2006	Commenced detailed literature search, discussions, and site visits related to low-head hydroelectric power generation, fishways, fish entrainment mitigation, fish attraction, water quality standards, and other topics relevant to this permit
Aug 15, 2006	Discussed RI Renewable Energy RFP and Grant Process with RI State Energy Coordinator
Aug 28, 2006	Completed review of site survey, elevation measurements and wetlands boundary definition and markings
Sept 5, 2006	Engaged architectural firm to prepare historic documentation and drawings for Historic Tax Credit Application Package submission to RI Historic Preservation Commission and Department of Interior
Sept 15, 2006	Met with RI Historic Preservation staff to deliver and discuss comments to National Historic Register Application
Oct 12, 2006	Discussed RI new Hydroelectric Initiative, Grants, and Loan Guarantees with Governor's Energy Advisor
Oct 11, 2006	Westerly Town Manager meeting to establish priorities and timeline for site rehabilitation activities
Nov 2, 2006	Conducted preliminary engineering survey of conditions of current hydroelectric related structures and channels
Nov 30, 2006	Presented Historic Mill and Hydro Conceptual Plans to Westerly Planning Board
Dec 5, 2006	Completed all site environmental assessment reports and filed reports and final Environmental Site Investigation Report with RI DEM and Town of Westerly
Dec 15, 2006	Consultation Meeting with Wood-Pawcatuck Watershed Association
Dec 18, 2006	Joint Consultation Meeting with RI DEM and US F&WS
Dec 20, 2006	Consultation Meeting with Connecticut DEP
Dec 28, 2006	Submission of First Progress Report #1 to FERC

Consultation Meeting Summaries and Attendee Lists

1) Wood-Pawcatuck Watershed Association (WPWA) Consultation Meeting:

A consultation meeting was held on December 15, 2006 with the Wood-Pawcatuck Watershed Association at their offices in Hopkinton, RI.
In attendance were the following organization staff and members:

Ms Lori Urso	Executive Director
Robert Scheidler	President, Board of Trustees
Nancy Hess	Secretary, Board of Trustees
Dante Ionata	Member, Board of Trustees
Edward Carapezza	Renewable Resources, Inc
Marsha Brown	Renewable Resources, Inc

Topics discussed included comments made by the association in their letter dated 13 June 2006 (see attachment 7). The organization members expressed concerns about potential impact to fish passage and ongoing fishway restoration efforts in the watershed. They requested that we address environmental impacts relative to aquatic life, and address how the goals of the proposed project fit with federal, state and local fishway restoration goals. They were also concerned about recreation on the river and expressed hopes that the project would in some way contribute to promoting improved recreation on the river. Their comments have been incorporated into the Comments & Initial Response Matrix of this report.

They also provided contact information for the McBrum Engineering firm. This firm is apparently presently under contract with their organization to study fish passage challenges and issues on three dams upstream of the Potter Hill Dam. They indicated that Jim McBrum was a fish passage expert who might be helpful as we explored alternative fish passage design features for our hydroelectric project. We have subsequently initiated a contact call to this firm and to Mr Brum.

Overall the meeting was very positive and productive. The attendees were very forthright and provided information about the waterway previously unknown to me. For instance, they indicated that one of their distinguished members, Dr Saul Sailor, a fisheries expert who has studied this watershed, believes that Atlantic salmon were not indigenous to the Wood-Pawcatuck River. They indicated that plans for any future fishway modifications should focus on accommodating indigenous fish in the river, such as brook trout, shad, herring, and American eel, and not just Atlantic Salmon.

I look forward to further consultations with this group as our design concepts mature.

Consultation Meeting Summaries and Attendee Lists (continued)

2) RI DEM and US F&WS Joint Consultation Meeting:

A joint consultation meeting with representatives from both the Rhode Island Department of Environmental Management (RIDEM) and the US Fish and Wildlife Service (USF&WS) was held on December 18, 2006 at the DEM offices in Providence, RI. In attendance were:

Joseph Antonio	RIDEM
Beverly Migliore	RIDEM
John O'Brian	RIDEM
Alisa Richardson	RIDEM
Veronica Mason	RIDEM
Joseph Casey	RIDEM
Cynthia Gianfrancesco	RIDEM
Terry Walsh	RIDEM
Melissa Grader	US F&WS
Edward Carapezza	Renewable Resources, Inc

Topics discussed included comments made by State of Rhode Island DEM in their letter dated 15 June 2006 (see Attachment 5) and by the Department of Interior in their letter dated 7 June 2006 (see Attachment 6). The organization members expressed concerns about potential impact to fish passage and ongoing fishway restoration efforts in the watershed. They were concerned about such topics as potential fish attraction away from fish ladder, potential fish entrainment into turbine intakes, use of flashboards and potential impacts related to impoundment area increases and impacts related to potential decreases in dissolved oxygen levels in the river. Their comments and our initial responses have been incorporated into the Comments & Initial Response Matrix of this report.

The RI DEM and US F&WS representatives indicated that they would assist in identifying relevant studies and documentation that might be useful for this project but indicated that there were no online databases, at either organization, that could be assessed to initiate searches for past reports and studies.

The US F&WS representative explained the capabilities of the their fishway engineering at Newton Corner, MA and suggested that we co-ordinate with her to schedule meeting with these people when we were ready. She mentioned a Mr Dick Quinn as being a good source of relevant information.

Consultation Meeting Summaries and Attendee Lists (continued)

RI DEM representatives indicated that they would provide relevant information to enable us to better respond to their comments and to present and refine hydroelectric design alternative for their review. To facilitate this effort, we request the following:

1) list of targets species relevant to the dam and fish passage facility at Potter Hill.
2) current schedule (what has been used for the past 3 to 5 years) for actively managing this fishway to facilitate upstream migration of targeted species. This information would be helpful to assess the fishway flow requirements for this site
3) current schedule of when during the calendar year they have observed and anticipate the out migration of both adults and juveniles (This information would be helpful to size the out migration related capabilities at this site).
4) Relevant water quality studies and simulation documentation, such as the referenced simulation study report describing the Potter Hill Dam contribution toward increasing the levels of dissolved oxygen downstream of the dam.

Overall the meeting was very positive and productive. The attendees were very forthright and provided clarification to their written comments and a great deal of information relevant to this project.

Especially helpful in organizing this meeting was Joe Antonio, our point of contact in RIDEM's Technical and Customer Assistance Office. I look forward to further consultations with this group as our design concepts mature.

Consultation Meeting Summaries and Attendee Lists (continued)

3) State of Connecticut DEP Consultation Meeting:

A consultation meeting with a representative from the State of Connecticut Department of Environmental Protection (DEP) and the US Fish and Wildlife Service (USF&WS) was held on December 20, 2006 at the DEP offices in Old Lyme, CT.
In attendance was:

Steve Gephard	DEP Inland Fisharies Division
Edward Carapezza	Renewable Resources, Inc

Topics discussed included comments made by State of Connecticut DEP in their letter dated 13 June 2006 (see Attachment 4). The organization members expressed concerns about potential impact to fish passage and ongoing fishway restoration efforts in the watershed. Their comments and our initial responses have been incorporated into the Comments & Initial Response Matrix of this report.

The Connecticut DEP representative was very helpful in explaining the typical migration patterns of fish in the waterway and recommended that we obtain specific target species and observed in migration and out migration schedules and patterns, by species, directly from the Rhode Island DEM as this organization has been actively managing the fish ladder at Potter Hill for years. He indicated that the primary up migration of river herring (alwifes) were in the March/April timeframe and blueback herring up migrations typically occurred in April/May timeframe. He indicated that typically the waterways were only actively managed when target species were up migrating although I should also request that RI DEM provide historical data on when adult and juvenile species out migrate as such information is important in the design of features to facilitate such out migrations. He indicated that American eels are very weak swimmers and usually can not up migrate using a Denil fish ladder. He explained some very simple eel passage designs that have been successfully utilized in the State of Connecticut for years and recommended that I review these designs.

He explained several of the important standards used to design proper fishway systems and recommended that I meet with US F&WS fishway design experts in Massachusetts. He recommended speaking with Mr Ben Rizzo and Mr Dick Quinn on such matters.

The meeting was very positive and productive. Mr Steve Gephard was very helpful and I look forward to further consultations with this group as our design concepts mature.

Consultation Comments Received & Initial Response Matrix
(Swift River Hydroelectric Project - FERC # 12662-000)

RI Department of Environmental Management (RI DEM)
(Comments from RIDEM Letter Dated 15 June 2006)

RIDEM DIVISION OF FISH & WILDLIFE FISHWAY FUNCTION CONCERNS:

Comment RIDEM-1: Installing flashboards and raising the head of the dam will render the fishway useless because the fishway is designed to work under specific flow conditions
Response RIDEM-1: We will investigate the optimum way to use flashboards while ensuring that the 1-2% flow (typical by design standards) to the fishway, when active, is maintained. Historically flashboards have been used at this dam. RIDEM personnel also currently use about 2 foot high flashboards for a distance of about 30 feet along the eastern crest of the dam to minimize distracting crest flows near the fish ladder

Comment RIDEM-2: Using the entire run-of-river will also render the fishway useless

Response RIDEM-2: We will investigate the optimum way to manage flows through the fish ladder to ensure that the 1-2% flow to the fishway (typical by design standards) is maintained when the fishway is required to actively facilitate upstream passage for each of the targeted species. We will also investigate the best ways to ensure fish returning to the sea have sufficient flows during these migration phases.

Comment RIDEM-3: Eliminating spill over the dam will affect attraction flow to the fishway and redirecting the attraction flow on west side and further downstream will distract returning fish.
Response RIDEM-3: We will investigate designs to insure that proper attraction flows near the fishway on the eastern side of the river (using current fishway design standards) are maintained and that distracting flows from the western side of the river (near the proposed hydroelectric turbine tailraces) are as close to the dam as possible and are minimized.

Comment RIDEM-4: Connectivity of river on upstream and downstream sides of dam will not be maintained
Response RIDEM-4: We will not be removing any water from the river so therefore the mass flow rates coming to the dam from the upstream watershed will exactly equal the mass flow rates downstream of the dam and existing tailraces.

Comment RIDEM-5: Concern for out migrants being entrained in turbines
Response RIDEM-5: We will review techniques currently employed to minimize fish entrainment in similar, operating low head hydroelectric facilities. Additionally we will investigate any new, state-of-art technologies that may have recently become available to further minimize the entrainment of out migrants. We plan to incorporate screens and similar barriers sufficiently upstream of the turbine intakes to minimize such entrainments.

Comment RIDEM-6: American eel specific passage
Response RIDEM-6: We have reviewed literature and consulted with a Connecticut DEP scientist (Steve Gephard) on their very successful eel passage system design. We plan to model our eel passage system on this simple design. The design uses a lightweight metal trough, lined on the bottom with filter type material, to provide sufficient traction for the eels to traverse up and over the crest of a dam at surprisingly steep angles and with a minimum of water flow through the trough. These systems are apparently quite effective at facilitating eel movements upstream.

RIDEM DIVISION OF FISH & WILDLIFE ENVIRONMENTAL/HABITAT CONCERNS:

Comment RIDEM-7: Eliminating spill will reduce oxygenation of river
Response RIDEM-7: We will review historical data to determine and correlate the range of water levels at the dam and the associated upstream and downstream dissolved oxygen levels, on a month to month, basis over the past years. We will also review techniques used in similar, operating low head hydroelectric facilities to maximize downstream dissolved oxygen levels. Additionally we will investigate any new technologies, such as the use of diffusers and vortex flows to maximize entrained air for all outflows with the goal of maintaining or increasing downstream dissolved oxygen levels, even when the spill over the crest is reduced.

Comment RIDEM-8: Raising the head of dam will affect/eliminate upstream habitat via flooding
Response RIDEM-8: Flashboards attachment mechanisms are incorporated into the existing design of this dam and historically flashboards were utilized used at this site when the mill hydro facility was operational. Additionally, DEM personnel currently attach and remove flashboards to control flows over the dam crest near the east bank of the river (near the fish ladder). We will estimate the flooded upstream habitat areas when both one and two foot flashboards are installed. We will also compare the size of these flooded habitat areas to the current upstream flooded areas (without flashboards) to help assess the environmental significance of using flashboards at this site.

Comment RIDEM-9: Raising the head of dam and increasing the impoundment will increase temperature and therefore decrease oxygen in the river
Response RIDEM-9: We will estimate the size of the flooded upstream impoundment areas for several head heights (up to two feet above the crest of the dam) and estimate potential associated temperature and dissolved oxygen level changes.

Comment RIDEM-10: Moving flow through the turbines instead of over the crest of the dam will not increase oxygen in the river.
Response RIDEM-10: We will estimate the entrained air and associated downstream dissolved oxygen levels for the current flows at the site (both over the dam crest and also through the existing stationary turbines) and for the planned hydroelectric design flows (flows both over the crest and through planned spinning turbines). We will assess the significance of potential dissolved oxygen level differences for these two cases.

RIDEM OFFICE OF WATER RESOURCES/WATER QUALITY CONCERNS:

Comment RIDEM-11: Previous numerical models predicted that the Potter Hill dam may contribute dissolved oxygen to the river in the range of 0.5% to 0.75% milliliter/liter of oxygen. Simulate hydropower alternatives and their effect on oxygen in the river.
Response RIDEM-11: We will review this previous model, other studies, and other related data to assess the contribution of Potter Hill dam to adding oxygen to the stream. We will estimate the entrained air and associated downstream dissolved oxygen levels for the current flows at the site (both over the dam crest and also through the existing stationary turbines) and for the planned hydroelectric design flows (flows both over the crest and through planned spinning turbines). We will assess the significance of potential dissolved oxygen level differences for alternative hydropower designs.

RIDEM OFFICE OF WATER RESOURCES/FRESHWATER WETLAND CONCERNS:

Comment RIDEM-12: File a freshwater wetlands permit application if freshwater wetlands are present
Response RIDEM-12: Freshwater wetlands permit applications will be filed, as appropriate

US Department of the Interior (DOI)
(Comments from DOI Letter dated June 7, 2006)

WATER QUALITY CONCERNS

Comment DOI-1: Previous numerical models predicted that the Potter Hill dam may contribute dissolved oxygen to the river in the range of 0.5% to 0.75% milligrams/liter of oxygen. Examine impact of using flashboards and diverting water flow to turbines on the oxygen contribution of the current dam to the river.
Response DOI-1: We will review this previous model, other studies, and other related data to assess the contribution of Potter Hill dam to adding oxygen to the stream. We will estimate the impact of impoundment area size increases and entrained air and associated downstream dissolved oxygen levels for the current flows at the site (both over the dam crest and also through the existing stationary turbines) and for the planned hydroelectric design flows (flows both over the crest and through planned spinning turbines). We will assess the significance of potential dissolved oxygen level differences for alternative hydropower designs.

FISH PASSAGE CONCERNS (UPSTREAM ANADROMOUS FISH)

Comment DOI-2: Initial concern with how the proposed project may impact the attraction of upstream migrants to the three tailrace channels
Response DOI-2: We will investigate designs to insure that proper attraction flows near the fishway on the eastern side of the river (using current fishway design standards) are maintained and that distracting flows from the western side of the river (near the proposed hydroelectric turbine tailraces) are as close to the dam as possible and are minimized.

Comment DOI-3: Initial concern with how the proposed project may impact the attraction of upstream migrants to the fishway entrance, due to reduced spill at the dam
Response DOI-3: We will investigate designs to insure that proper attraction flows near the entrance to the fishway on the eastern side of the river (using current fishway design standards) are maintained and that distracting flows from the western side of the river (near the proposed hydroelectric turbine tailraces) are minimized.

Comment DOI-4: Initial concern that excess flow through fishway, if flashboards are installed, would require modification to fish trapping facility and upper run of Denil ladder
Response DOI-4: We will investigate the use of flashboards, up to 2 feet high, and the optimum way to manage flows through the fish ladder to ensure that the 1-2% flow to the fishway (the usual design standard) is maintained when the fishway is required to be actively facilitate upstream passage for each of the targeted species.

FISH PASSAGE CONCERNS (DOWNSTREAM ANADROMOUS FISH)

Comment DOI-5: To minimize threat to downstream migrants, downstream passage facilities (that meet all of the Service design criteria) would be required for this project
Response DOI-5: We will review all relevant standards and incorporate downstream fish passage facilities, that meet all Service design criteria, into any hydroelectric system designs proposed for this project.

FISH PASSAGE CONCERNS (CATADROMOUS FISH)

Comment DOI-6: Concerns about American eel specific upstream and downstream passage

Response DOI-6: We have reviewed eel passage literature and consulted with a State of Connecticut DEP scientist on their very successful upstream eel passage system design. We plan to model our upstream eel passage system on this simple design. The design uses a lightweight trough lined on the bottom with filter type material to provide sufficient traction for the eels to traverse up and over the crest of a dam at surprisingly steep angles and with a minimum of water flow through the trough. Effective downstream eel passage approaches will be examined and incorporated into any proposed designs.

FISH & WILDLIFE RESOURCE CONCERNS

Comment DOI-7: Investigate and document other fish and wildlife resources that will be affected by the construction and operation of the project. project

Response DOI-7: We will consult with US Fish and Wildlife Service in Concord, NH and resource agencies, as requested, on measures needed to mitigate adverse impacts to fish and wildlife resources, for any proposed hydroelectric system designs for this project.

CULTURAL RESOURCE CONCERNS

Comment DOI-8: The State Historic Preservation Officer (SHPO) should be consulted concerning the project to ensure compliance with all preservation legislation

Response DOI-8: We have consulted with the RI Historic Preservation Commission staff and submitted an application to have this historic mill facility added to the National Register of Historic Places. We have also hired an architectural firm, experienced in historic mill renovations, to prepare and submit an Historic Tax Credit Application package, including extensive historical and architectural documentation, to the RI Historic Preservation Commission and to the Department of Interior.

RECREATIONAL RESOURCE CONCERNS

Comment DOI-9: The State Liaison Officer (SLO), county officials, and local community groups and agencies concerned with public recreation should be consulted.

Response DOI-9: We will consult with the State Liaison Officer (SLO). We met with the Executive Director and four (4) Board of Director members from the Wood Pawcatuck Watershed Association (WPWA) on a number of issues, including recreation on this river. We plan follow-up meetings

Connecticut Department of Environmental Protection (DEP)
(Comments from CT DEP letter dated June 13, 2006)

Comment CONNDEP-1: Effective upstream and downstream fish passage for anadromous, diadromous and catadromous fish species at the Potter Hill Dam.

Response CONNDEP-1: The effectiveness of the existing fish passage facility at this site will be evaluated and alternative hydroelectric facility designs will address fish passage issues and concerns. Flows through the facility will be analyzed to determine the effectiveness of any proposed fish passage designs.

Wood Pawcatuck Watershed Association (WPWA)
(Comments from WPWA Letter dated 13 June 2006)

Comment WPWA-1: Concerns about potential impacts to fish passage and ongoing fishway restoration efforts in the watershed. Assess environmental impacts relative to aquatic life, and address how the goals of the proposed project fit with federal, state and local fishway restoration goals and efforts.

Response WPWA-1: The effectiveness of the existing fish passage facility at this site will be evaluated and alternative hydroelectric facility designs will address fish passage issues and concerns. Flows through the facility will be analyzed to determine the effectiveness of any proposed fish passage designs.

Attachments:

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RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
235 Promenade Street, Providence, RI 02908-5767 TDD 401-222-4462

January 8, 2007

Ed Carrapezza
Renewable Resources, Inc.
900 North Stafford Street, Unit 2428
Arlington, VA 22201

Dear Mr. Carrapezza,

I am writing this letter to summarize the issues discussed at our meeting with you held on December 18, 2006 at the Rhode Island Department of Environmental Management. In attendance at this meeting were the following personnel from DEM – John O'Brien and Veronica Masson from the Division of Fish & Wildlife, Alisa Richardson and Terry Walsh from the Water Quality Certification program, Joe Casey from Freshwater Wetlands Permitting, Cynthia Gianfrancesco from the Office of Waste Management, and Beverly Migliore and myself, Joe Antonio from the Office of Technical & Customer Assistance. Also in attendance at this meeting was Melissa Grader from the U.S. Fish & Wildlife Service.

The purpose of this meeting was to discuss your proposed hydroelectric facility to be located on the Pawcatuck River in Westerly. Specifically, the goal of your project is to reinstate the hydroelectric turbines, which currently exist at the site, without causing adverse effects to the various fish populations which pass through this section of the River. A Preliminary Permit was issued for this project on July 11, 2006 by the Federal Energy Regulatory Commission. The Permit, which is valid for 3 years from the date issued, allows the applicant to conduct "investigations and secure data necessary to determine the feasibility of the proposed project and, if the project is found to be feasible, prepare an acceptable development application."

As is also indicated in the Permit, "RIDEM…stated that the project could affect a variety of environmental resources." Below are some of the Department's concerns that were addressed at this meeting; these concerns would need to be resolved with the various programs within the Department in order for this project to move forward:

1. **Fish Passage.** At this time, it appears that the biggest issue from the Department's standpoint is how this project would affect fish passage and fish ladders managed by the Division of Fish & Wildlife one of which is located at the site of the proposed hydroelectric project. Currently, there are no fish ladders that co-exist with hydroelectric power in Rhode Island. Even though the fishway was specifically designed for American shad, many species of fish utilize the ladder, as the ladder provides continuity for anadromous, catadromous and resident fish species. Based on the discussions that took place at this meeting, it appears that reactivating a hydroelectric plant on the Pawcatuck could potentially pose serious implications for any species utilizing the fishway. Additionally, reinstating turbines will alter the flow of the river, as well as attract fish species towards the turbines and away from the fish ladder. Attraction is an issue for all fish, as turbines could change oxygen levels, potentially disrupt fish migration

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patterns and injure or kill fish that become entrained in the turbines. It was noted that the US Navy has extensive experience with acoustic technologies which can prevent attraction; such technologies may be effective for your application.

2. **Sluice Gate Repair.** Presently, there is a 100-foot long dam with a fish ladder, as well as 3 sluice gates at the site of this proposed project. The gates are in disrepair; however in order to repair the gates, water intake through the gates must be blocked. This, in turn, would affect fish passage, and, therefore, permission must be obtained from the Freshwater Wetlands program, as well as the Dam Safety program, to ensure that the repairs can be performed with the least minimal impact.

3. **Dissolved Oxygen.** Hydroelectric turbines can have a negative impact on dissolved oxygen levels for fish. As water flows over a spillway, oxygen is replenished in the water. Such is not the case for water flowing through many types of turbines. Therefore, dissolved oxygen models must be performed on the stream to the impacts to the stream with regards to changes in dissolved oxygen. Any changes including post-aeration must comply with the anti-degradation policy in the Water Quality regulations.

4. **Stream Continuity.** Any hydropower project in the State cannot affect the continuity of the river and must operate as a run-of-the-river utility. Operating scenarios for cleaning trash racks, peaking and flow monitoring that ensure good river health and stream continuity will need to be part of the final plan.

5. **Wetlands.** The Freshwater Wetlands section cannot consider issuing any permit approvals for this project until the project proposal(s) can satisfy Fish & Wildlife's regulations. As previously stated, turbines will change the flow of the Pawcatuck River, which, in turn, would disrupt fish and wildlife management throughout the River. Further, Rule 11.02 of the Freshwater Wetlands Regulations states that the Department must be satisfied that a proposed project will not result in significant reduction or degradation of a number of aspects that could adversely affect the suitability of any wetland. Floodplain impacts must also be considered.

   In addition, there was discussion about raising and/or adding boards at the site of the existing turbines. The value of adding boards for the hydroelectric proposal would have to be assessed, in that water levels would change, thus, impacting water quality upstream and downstream fish passage, impounding presently free-flowing fish and wildlife habitat, etc.

As this was a preliminary meeting, a number of basic issues should be considered and investigated:

- Can hydroelectric power work on this River?

- It would be helpful to identify what you want to achieve with this project. One way to accomplish this would be to develop certain scenarios of impact; for instance, run of the river (instantaneous inflows = instantaneous outflows) vs. store and release. Also mentioned was if the 4 turbines present at the site would be reactivated, or could the hydro proposal sustain 2 larger turbines instead. Likewise, would the project be viable if flashboards were not added?

- The US Fish & Wildlife Service has fishway engineers that can provide conceptual designs for fish passage. However, designs cannot be initiated until all the pertinent project information is

available (e.g., hydraulic operating range of the unit(s), headpond and tailwater elevations, etc.). (Note: Some data is already known pertaining to velocities and other fish ladder information).

- A detailed proposal and design is necessary for DEM to be able to provide more specific comments. The proposal should describe the facility's upstream and downstream effects on fish passage, water quality, and fish and wildlife habitat. DEM will do its best to provide information and answers to any specific questions you may have during the development of the proposal.

A project of this scope would most likely involve the Army Corp. of Engineers, and it was suggested to you to contact and coordinate your hydroelectric proposal with Michael Elliot from this agency.

This site has also been plagued with a history of solid waste violations. It was mentioned that this issue is finally being addressed, and currently there is a solid waste inspector on site from the Department overseeing solid waste removal. Resolution of these issues must be accomplished in accordance with Departmental requirements.

You also indicated that you have met with the Wood Pawcatuck Association to discuss the hydroelectric proposal for the River and will continue to update them on the project as it progresses.

This concludes RIDEM's comments regarding this meeting. I hope that they are of assistance to you. Please be aware that this letter is not to be construed as a permit to undertake work or any indication that any permit for this project will ultimately be granted. This letter does not relieve Renewable Resources from its obligation to obtain any local, state, or federal approvals or permits required by ordinance or law.

If you have any questions concerning this meeting, please contact me at 401-222-4700 x 4410, or by email at *joseph.antonio@dem.ri.gov*.

Sincerely,

Joseph W. Antonio

Joseph W. Antonio, Senior Environmental Scientist
RIDEM/Office of Technical & Customer Assistance

Cc: Ron Gagnon, RIDEM
Beverly Migliore, RIDEM
John O'Brien, RIDEM
Veronica Masson, RIDEM
Joe Casey, RIDEM
Alisa Richardson, RIDEM
Terry Walsh, RIDEM
Cynthia Gianfrancesco, RIDEM
Melissa Grader, US Fish & Wildlife Service

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WASTE MANAGEMENT

FIELD INVESTIGATION REPORT

SITE NAME: Pawcatuck Woolen Mill/Potter Hill Mill

SITE LOCATION: 198 Potter Hill Road, Westerly, RI

DATE OF INVESTIGATION: 1/24/07 **TIME OF ARRIVAL: 8:30 am**

DEM Personnel: Cynthia Gianfrancesco

Other Persons: Edward Carapezza, owner
Joe Unsworth, Jacques Whitford

Findings:

Prior to meeting Mr. Carapezza and Joe Unsworth, I drove down the opposite side of the Pawcatuck River to view the mill and take photos (see photos 1-8). The view from the Hopkinton side of the river indicates several buildings are in severe disrepair and do not appear to be salvageable. There are also several open pipes leading from under the buildings to the river which appear to be discharge pipes.

I also drove down Post Office Lane. There are several homes on Post Office Lane which directly abut the site and one owner has notified me that two of the homes utilize private wells for drinking water..

Upon meeting Mr. Carapezza and Joe, we proceeded onto the site. One building which was falling into the river has been removed (photo 9 and 10). The remaining buildings are in poor shape, and only one stone building appears to be salvageable. Mr. Carapezza has indicated that he intends to rebuild every building and create a multi-use commercial/residential development. A 6 foot chain link fence has been installed around the entire property, except for along the waters edge. Mr. Carapezza owns a strip of land on the Hopkinton side of the river also.

We discussed the fact that the SIR report indicated all homes in the area are connected to public water, but that is not the case . Mr. Carapezza agreed that the two homes on Post Office Lane utilize private wells, and that the wells are actually on his property (see photos 15 & 16). We later inspected that property boundary and was able to locate one of the wells. Mr. Carapezza indicated that he offered to tie in those homes to public water when he brings water to his property.

I indicated that we would need more information to confirm that there never was a septic system on the property. Mr. Carapezza indicated that all toilets were on the river side of the building and that pipes appeared to direct discharge to the river. I indicated that we would need more info in the SIR report to that effect, and diagrams/photos of all existing piping on site. I recommended GPR to rule out septic systems/leach fields or other underground/buried objects.

Discussed that they need to conduct more investigation due to the fact that there are private wells, that no VOCs were analyzed for (I mentioned the potential chlorinated solvent use), and need additional soil and groundwater data.

We inspected the area where the high arsenic levels were detected. This is a mounded area near the boiler house and is suspected to be coal ash. Pieces of coal were observed at the surface which Joe indicated came up during excavation.

We also inspected the solid waste area (see photos 13 &14). All solid waste appears to be gone except for two small piles if scrap metal. The area has been graded and there are obvious pieces of broken glass, bricks and debris mixed in with the soil in this area, as well as many intact old bottles.

We discussed the need for more groundwater data, including analytical results and characterization data, as well as gauging and groundwater contour data due to the fact that the river wraps around the site so it is difficult to know what direction the water flows unless you are directly abutting the river.

I advised that we would be issuing comments on the SIR, and if they want to submit a workplan for the additional work, I would be glad to review it.

TIME OF DEPARTURE: 10:30 am

Signature : Cynthia M. Gianfrancesco

DIGITAL PHOTOGRAPHS

Site Name: Pawcatuck Woolen Mill/Potter Hill mill

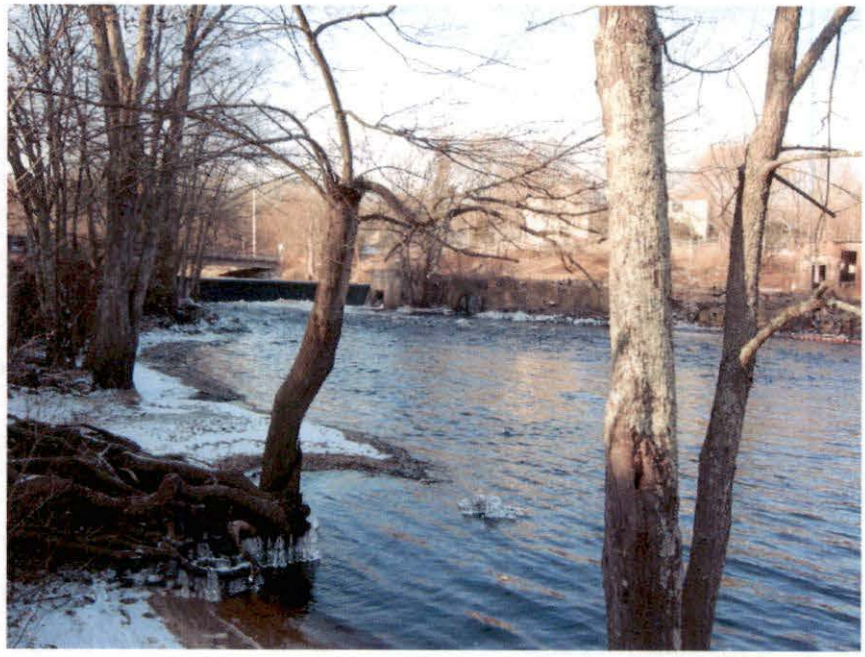
Date Photographs Taken: 1/24/07

Site Address: 198 Potter Hill Rd, Westerly

Inspector(s) Cynthia Gianfrancesco

Photo #

1

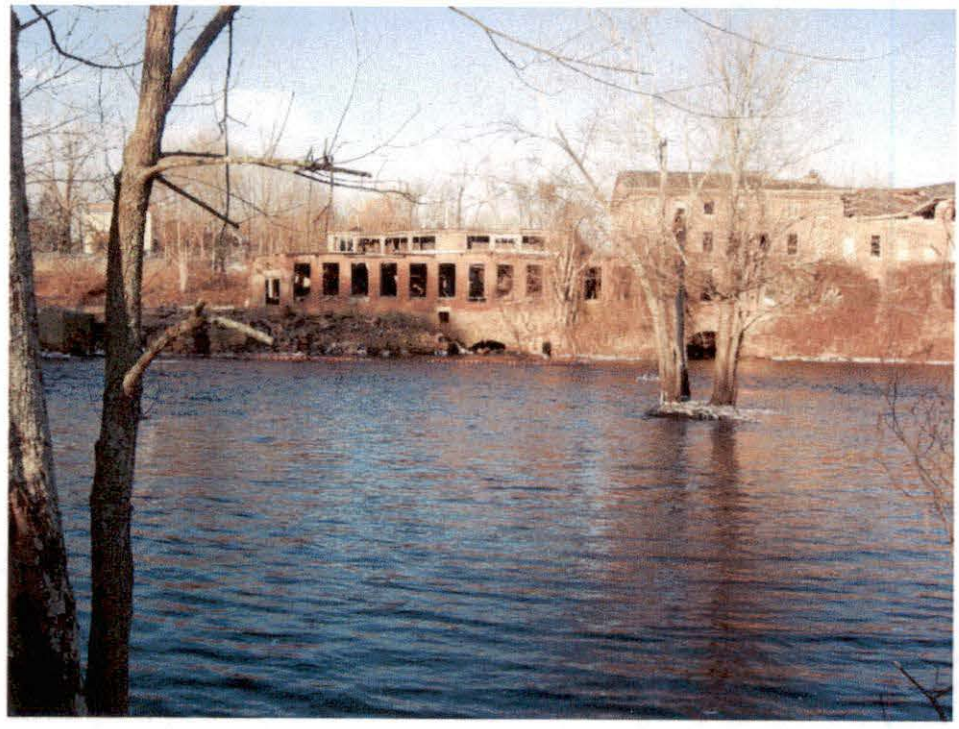


Description:

View from east side of the river looking south towards Potter Hill dam

Photo #

2



Description:

View from east side of river, panning north from above photo

DIGITAL PHOTOGRAPHS

Site Name: Pawcatuck Woolen Mill/Potter Hill mill

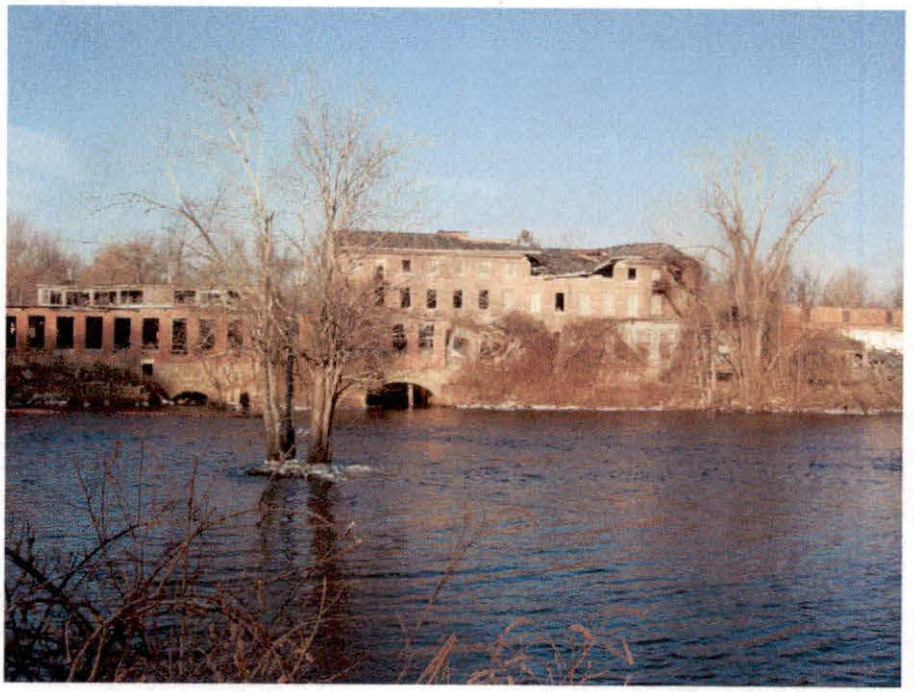
Date Photographs Taken: 1/24/07

Site Address: 198 Potter Hill Rd, Westerly

Inspector(s) Cynthia Gianfrancesco

Photo #

3



Description:

View from east side of river, panning north from above photo

Photo #

4



Description:

View from east side of river – close up of above photo

DIGITAL PHOTOGRAPHS

Site Name: Pawcatuck Woolen Mill/Potter Hill mill

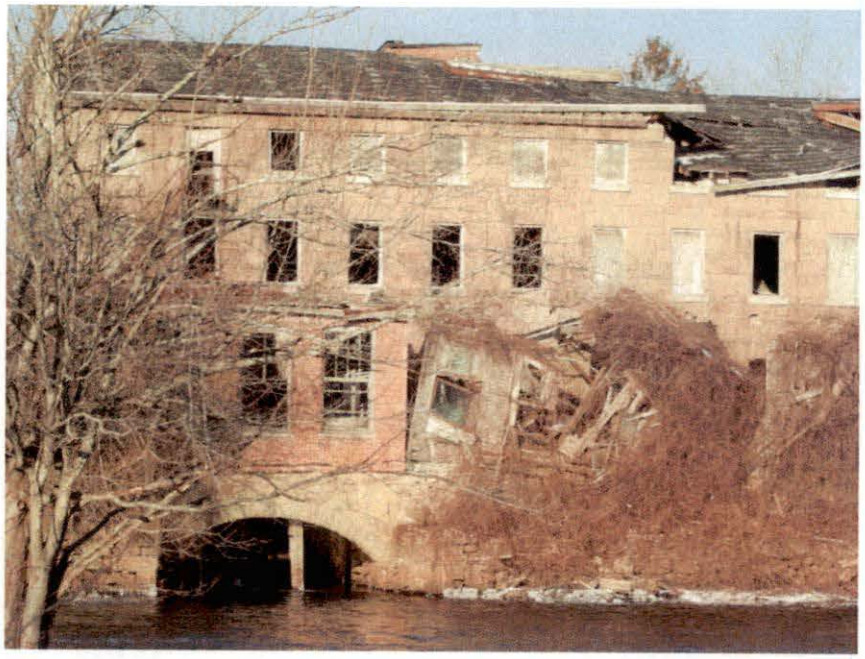
Date Photographs Taken: 1/24/07

Site Address: 198 Potter Hill Rd, Westerly

Inspector(s) Cynthia Gianfrancesco

Photo #

5



Description:

View from east side of river, zoom of photo 3

Photo #

6



Description:

View from east side of river, panning north from above photo

DIGITAL PHOTOGRAPHS

Site Name: Pawcatuck Woolen Mill/Potter Hill mill

Site Address: 198 Potter Hill Rd, Westerly

Date Photographs Taken: 1/24/07

Inspector(s) Cynthia Gianfrancesco

Photo #

7



Description:

View from east side of river, panning north from above photo

Photo #

8



Description:

View from east side of river, zooming from above photo. Note discharge pipes.

DIGITAL PHOTOGRAPHS

Site Name: Pawcatuck Woolen Mill/Potter Hill mill

Date Photographs Taken: 1/24/07

Site Address: 198 Potter Hill Rd, Westerly

Inspector(s) Cynthia Gianfrancesco

Photo #

9



Description:

Former building recently excavated from Rivers edge

Photo #

10



Description:

Former building recently excavated from Rivers edge

DIGITAL PHOTOGRAPHS

Site Name: Pawcatuck Woolen Mill/Potter Hill mill

Site Address: 198 Potter Hill Rd, Westerly

Date Photographs Taken: 1/24/07

Inspector(s) Cynthia Gianfrancesco

Photo #

11



Description:

View of site from north to south

Photo #

12



Description:

View of site from north to south with homes in the distance

DIGITAL PHOTOGRAPHS

Site Name: Pawcatuck Woolen Mill/Potter Hill mill

Date Photographs Taken: 1/24/07

Site Address: 198 Potter Hill Rd, Westerly

Inspector(s) Cynthia Gianfrancesco

Photo # 13



Description:

Area of former solid waste pile which has been removed

Photo # 14



Description:

Area of former solid waste area looking north towards river

DIGITAL PHOTOGRAPHS

Site Name: Pawcatuck Woolen Mill/Potter Hill mill

Date Photographs Taken: 1/24/07

Site Address: 198 Potter Hill Rd, Westerly

Inspector(s) Cynthia Gianfrancesco

Photo # 15



Description:

Homes on Post Office Lane abutting site – fence is assumed property boundary

Photo # 16



Description:

Private well from Post Office Lane located on site.

DIGITAL PHOTOGRAPHS

Site Name: Pawcatuck Woolen Mill/Potter Hill mill

Date Photographs Taken: 1/24/07

Site Address: 198 Potter Hill Rd, Westerly

Inspector(s) Cynthia Gianfrancesco

Photo #

17



Description:

Washing machine inside building

Photo #

18



Description:

Equipment inside wash room building

DIGITAL PHOTOGRAPHS

Site Name: Pawcatuck Woolen Mill/Potter Hill mill

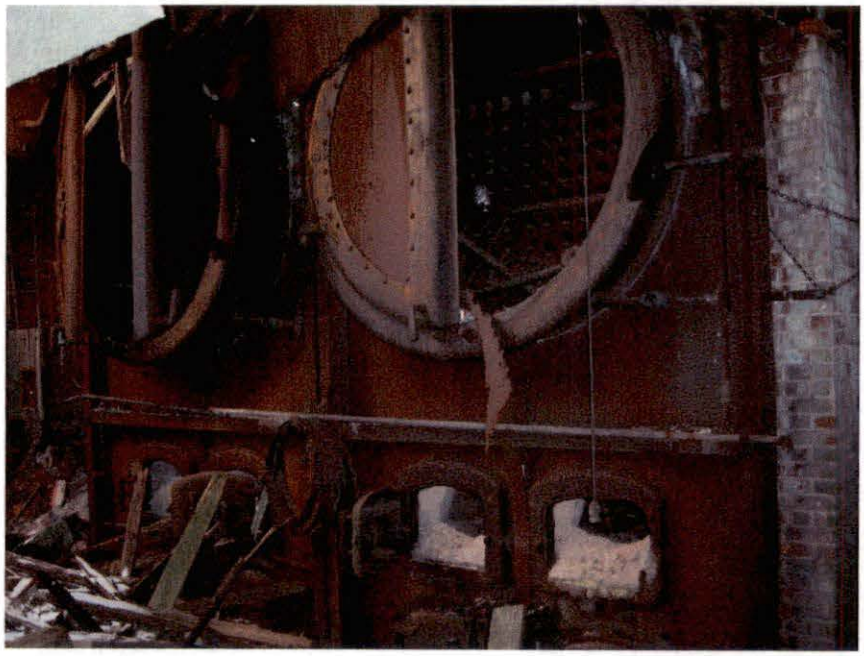
Date Photographs Taken: 1/24/07

Site Address: 198 Potter Hill Rd, Westerly

Inspector(s) Cynthia Gianfrancesco

Photo #

19



Description:

Boiler inside building

Photo #

20



Description:

Debris area in former building foundation location

DIGITAL PHOTOGRAPHS

Site Name: Pawcatuck Woolen Mill/Potter Hill mill

Date Photographs Taken: 1/24/07

Site Address: 198 Potter Hill Rd, Westerly

Inspector(s) Cynthia Gianfrancesco

Photo # 21



Description:

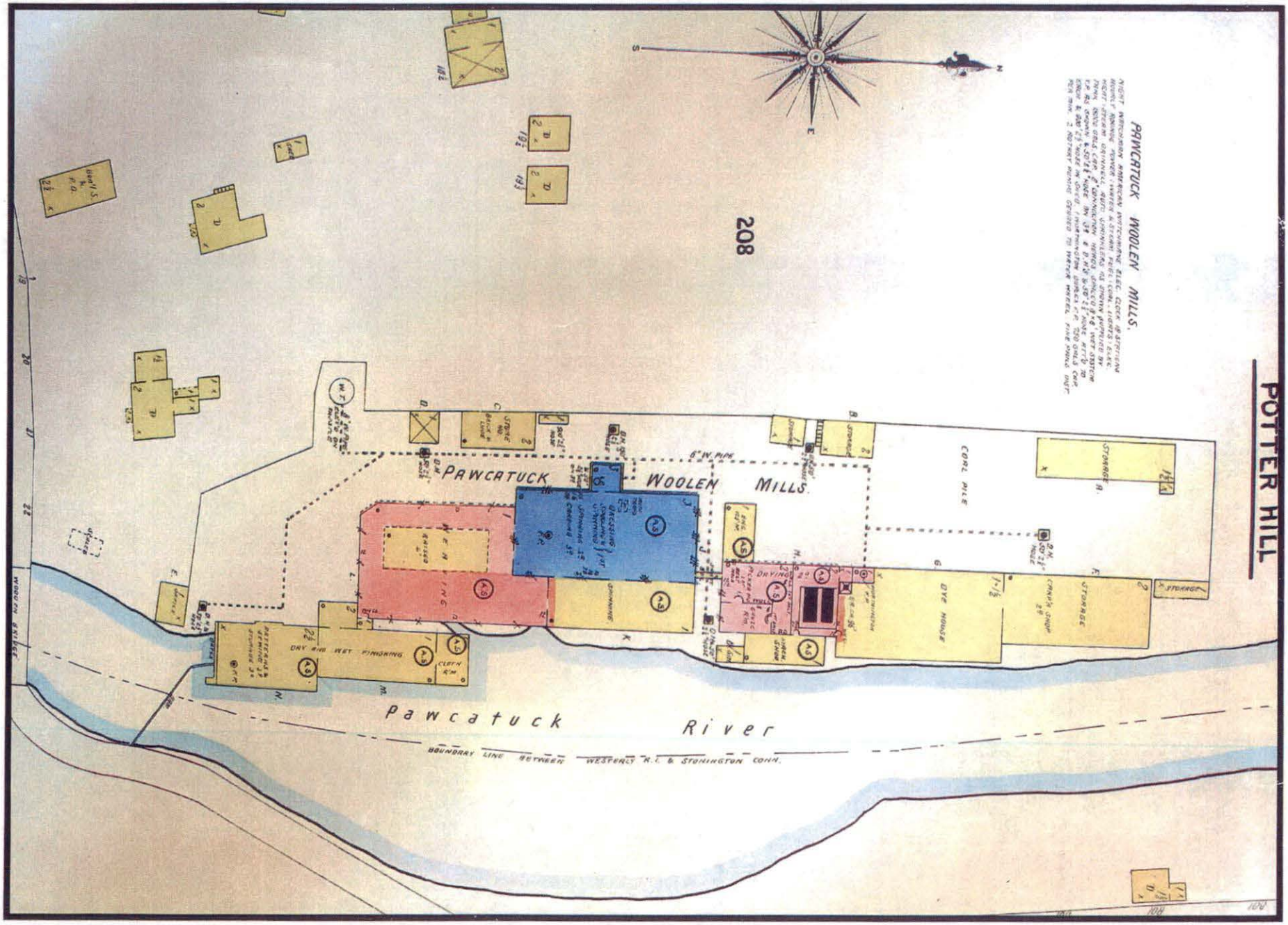
Debris area in former building foundation location

Photo # 22



Description:

View of building from access road looking north



Sanborn 1907

State of Rhode Island Department of
Environmental Management
Office of Land Revitalization &
Sustainable Materials Management
235 Promenade Street, Room 380
Providence, Rhode Island 02908-5767

CERTIFIED MAIL

PROVIDENCE RI 029
17 JUN 2021 PM 5 L

91 7199 9991 7039 7986 8687

FIRST CLASS

ZIP 02
02 4W
00003

US POSTAGE PITNEY BOWES

UNC

RECEIVED

JUL 26 2021

Office of Land Revitalization &
Sustainable Materials Mgmt

Edward Carapezza
336 Woodville Rd
Ashaway, RI 02804

1st NOTICE 6-19-21 YM
2nd NOTICE 6-24

NIXIE 015 DE 1 0007/19/21

RETURN TO SENDER
UNCLAIMED
UNABLE TO FORWARD

BC: 02908576799 *1522-00968-17-37

UNC
02804-2505
02908>5767

RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF LAND REVITALIZATION & SUSTAINABLE MATERIALS MANAGEMENT
235 Promenade Street, Providence, Rhode Island 02908

LETTER OF NON-COMPLIANCE
File No. SR-38-1074
(Formerly Case No. 2006-082)
LNC No. OWM-SR-684

June 16, 2021

CERTIFIED MAIL

Edward Carapezza
Renewable Resources, Inc.
P.O. Box 365
Hopkinton, RI 02833

RE: Pawcatuck Woolen Mill (Potter Hill Mill)
198 Potter Hill Road
Westerly, Rhode Island
Plat Map 8 / Lot 23

Dear Mr. Carapezza:

On October 16, 2006, the Department of Environmental Management (the Department) issued a Letter of Responsibility (LOR) to Renewable Resources, Inc. for the above-referenced property (the Site) pursuant to 250-RICR-140-30-1, the Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases (the Remediation Regulations). The LOR required that Renewable Resources, Inc., as owner of the property, bring the Site into compliance in accordance with the Remediation Regulations and, if necessary, be prepared to conduct remediation of hazardous materials at the Site.

On August 13, 2008, the Department received a Supplemental Site Investigation Report (SIR) from Jacques Whitford (JW), on behalf of the owner, Renewable Resources, Inc. The Department subsequently issued comments via e-mail to JW on December 3, 2008. No response was received for the comments. In 2009 and 2016, meetings were held with the Department staff and stakeholders to discuss demolishing the buildings on site. No reports were received detailing these demolitions.

On November 2, 2020, the Department issued a Request for Status Update Letter to Renewable Resources, Inc., as owner of the property. The Request for Status Update Letter required that Renewable Resources, Inc. submit written intentions to bring the site into compliance by December 2, 2020. Moreover, the Department required a SIR Response to Comments submittal by February 2, 2021 that contained both a status update of the site and a response to the outstanding December 3, 2008 comments. On December 2, 2020, the owner of the site e-mailed the Department with Renewable Resources Inc.'s intentions to complete the required work. However, the Department has not received any further correspondences from the owner or the required SIR Response to Comments submittal. Therefore, the site is out-of-compliance.

As of June 16, 2021, Renewable Resources, Inc. is identified as the current owner of the Site by the Town of Westerly Tax Assessor's Office and as such, Renewable Resources, Inc. is a Responsible Party as defined by Section 1.4(A)(70) of the Remediation Regulations.

In order to complete the requirements of the Remediation Regulations, the Department is requiring that you submit, in writing, Renewable Resources, Inc.'s intentions to bring this site into compliance in accordance with the Remediation Regulations by July 16, 2021. Furthermore, the Department is requiring that Renewable Resources, Inc. submit a SIR Response to Comments as required by the Request for Status Update Letter by September 16, 2021.

If you do not fully comply with the aforementioned requirements, the Department will initiate the appropriate enforcement actions that may include administrative penalties for non-compliance.

If you have any questions regarding this letter or would like the opportunity to meet with Department personnel, please contact me by telephone at (401) 222-2797, ext. 72030, or by E-mail at Stephanie.Cappelli@dem.ri.gov.

Sincerely,

Stephanie Cappelli
Environmental Engineer I
Office of Land Revitalization &
Sustainable Materials Management

Authorized by,

Rachel Simpson
Senior Environmental Scientist
Office of Land Revitalization &
Sustainable Materials Management

cc: Kelly Owens, RIDEM/LRSMM
Town of Westerly

Attachments: Request for Status Update Letter, dated November 2, 2020
SIR Comment Letter, dated December 3, 2008

RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF LAND REVITALIZATION & SUSTAINABLE MATERIALS MANAGEMENT
235 Promenade Street, Providence, Rhode Island 02908

REQUEST FOR STATUS UPDATE
File No. SR-38-1074
(Formerly Case No. 2006-082)

November 2, 2020

Edward Carapezza
Renewable Resources, Inc.
P.O. Box 365
Hopkinton, RI 02833

RE: Pawcatuck Woolen Mill (Potter Hill Mill)
198 Potter Hill Road
Westerly, Rhode Island
Plat Map 8 / Lot 23

Dear Mr. Carapezza:

Effective April 22, 2020, the Rhode Island Department of Environmental Management's (the Department) Office of Waste Management has changed the office name to the Office of Land Revitalization and Sustainable Materials Management (LRSMM), as reflected in the re-codified 250-RICR-140-30-1, Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases (the Remediation Regulations). The purpose of these regulations is to create an integrated program requiring reporting, investigation, and remediation of contaminated sites in order to eliminate and/or control threats to human health and the environment in a timely and cost-effective manner.

The Department's Office of Land Revitalization and Sustainable Materials Management's (LRSMM) Site Remediation Program has recently been performing an administrative review of open cases and has determined that the Site listed above has never officially been closed out. As such, provision of a status update is required at this property.

On August 13, 2008, the Department received a Supplemental Site Investigation Report (SIR) from Jacques Whitford (JW), on behalf of the owner. The Department subsequently issued comments via e-mail to JW on December 3, 2008. No response was received for the comments. In 2009 and 2016, meetings were held with the Department staff and stakeholders about demolishing the buildings on site. No reports were received detailing these demolitions. As such, provision of a status update is required at this property.

As of November 2, 2020, Renewable Resources, Inc. is identified as the current owner of the Site by the Town of Westerly Tax Assessor's Office and as such, Renewable Resources, Inc. is a Responsible Party as defined by Section 1.4(A)(70) of the Remediation Regulations.

In order to complete the requirements of the Remediation Regulations, the Department is requiring that you submit, in writing, Renewable Resources, Inc.'s intentions to bring this site into compliance

in accordance with the Remediation Regulations by December 2, 2020. Furthermore, the Department is requiring that Renewable Resources, Inc. submit a SIR Response to Comments that responds to the December 3, 2008 comments (attached) and contains a status update on the site since the last SIR submission (August 13, 2008) by February 2, 2021.

If you have any questions regarding this letter, please contact me by telephone at (401) 222-2797 ext. 2030, or by E-mail at Stephanie.Cappelli@dem.ri.gov.

Sincerely,

Stephanie Cappelli
Environmental Engineer I
Office of Land Revitalization &
Sustainable Materials Management

cc: Kelly Owens, RIDEM/LRSMM
Rachel Simpson, RIDEM/LRSMM
Town of Westerly

Attachments: SIR Comment Letter, December 3, 2008

Cynthia Gianfrancesco

From: Cynthia Gianfrancesco
Sent: Wednesday, December 03, 2008 11:38 AM
To: 'Unsworth, Joseph'
Cc: Matthew Destefano; 'edward.carapezza.rri@gmail.com'
Subject: Potter Mill

Joe,

I am in the process of reviewing the 8-13-08 Supplemental SIR and have some questions /comments, as follows:

RIDEM Comment Letter dated 1/26/07

Response 1 (Comment A): You indicated that copies of all abutters notices are enclosed. The only notices enclosed are dated December 2006 and indicates work would be completed within 3 months. However, additional investigatory work was conducted in November 2007. I had recommended in my October 30, 2007 email to you that additional notifications to abutters be provided for the additional work. Was that done and if so can you please send me documentation of it? If no additional abutters notification was conducted can you please explain why not?

Response #5 (comment 6) : Can you please confirm the number of soil borings which were conducted? In reading the revised SIR is appears there are B1-B5 (which includes SS-27 - SS-29) and SS-30 and SS-31, but boring logs were only submitted for B1 - B5. Can you please clarify?

Response #8 (comment #20) - I have ask several times for the location of the former on-site supply well to be identified on the site plan, but it is still not there. Do you have any idea where it was? Is there a reason why it still isn't depicted on the site plan?

Response # 9 (Comment #21) - Rule 7.03. I. iv. asks for " The location and distance of all public water supplies which have been active within the previous 2 years and within one (1) mile of the contaminated-site." (as opposed to the location of the nearest Well Head Protection Area which is what you provided). Your response indicates that the nearest public water supply will is located approximately 250 feet northeast of the property. According to RIGIS there may be as many as eleven (11) public water supply wells within one mile of the site. The SIR must identify these in a list, verify that they have all been active within the last 2 years and provide the location (i.e.: address, latitude & longitude, etc) and distance to each water supply well (not the edge of the WHPA). Please provide this information.

Revised SIR Specific Comments

Response #7 (comment #7) - The DEM comment letter of 14 July 2008 indicates that remedial alternative #2 is not acceptable as it is presented because it did not mention the issue of the floodplain. The DEM comment did not indicate that the alternative is invalid, only that it must include information indicating that some excavation or floodplain compensation must be included in order to meet the requirements of the Wetland Regulations. It did not ask for calculations of flood plain impacts at this point - only a site map showing the FEMA floodplain overlaid over the site and proposed capping area, which we have not received. We just want it to be clear in the proposed remedial alternative, and be sure that **everyone** (i.e. the property owner, the Town, the abutting residents, etc) understands that if the floodplain is an issue, it will be addressed in the RAWP. All we're asking for is one more sentence in the proposed remedial alternative that says floodplain compensation will be addressed either through excavation or compensation elsewhere on site, and a revised site plan showing the proposed approximate area of capping and floodplain line. If for some reason this is not feasible, can you please call me so we can discuss? Otherwise, can you please respond accordingly?

Once these comments are addressed, I am prepared to issue a Program Letter. If you have any questions or

concerns, please contact me so we can discuss.

Cynthia

Cynthia M. Gianfrancesco
Principal Environmental Scientist
RIDEM - Office of Waste Management
(401) 222-4700 X 7126
cynthia.gianfrancesco@dem.ri.gov
www.dem.ri.gov

From: Unsworth, Joseph [mailto:Joseph.Unsworth@JacquesWhitford.com]
Sent: Thursday, October 02, 2008 10:23 AM
To: Cynthia Gianfrancesco
Subject: Potter Mill

Cindy,

Mr. Carapezza asked that I inquire about the status of your review of our last submittal. Any information would be appreciated, thanks.

Joseph T. Unsworth, P.E.
Project Manager
Jacques Whitford Company, Inc.
24 Albion Road, Suite 220
Lincoln, RI 02865
(401)-312-8005
(401)-312-8010 (fax)
(401)-465-2173 (cell)
joseph.unsworth@jacqueswhitford.com
www.jacqueswhitford.com

CarbonNeutralBanner

****
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State of Rhode Island and Providence Plantations
Department of Environmental Management
EMERGENCY RESPONSE REPORT

GENERAL INFORMATION

City/Town	WESTERLY	Month Received	October	Number 2007-	982
Complaint Type	Oil Spill	Contractor Hired By?	N/A	Unfounded?	No
Received By	Jill Eastman	Date Received	10/26/2007	Time Received	2:00:00 PM
Investigated By	Jill Eastman	Date Responded	10/29/2007	Time Responded	7:30 AM
Reinspection?	No	**(If Reinspection Please Enter Other Numbers)**		Time Returned	9:00:00 AM

INCIDENT LOCATION

Property Owner					
Address/Pole#/Highway	198 Potter Hill Rd				
City/Town	WESTERLY	LAT		LONG	

COMPLAINANT

Name	anonymous				
Address					
City/Town		State	RI	Zip	
Phone		Disclose Name?	No		

RESPONSIBLE PARTY

Name	Renewable Resources-Edward Carpezza				
Address	40 Showomet Ave				
City/Town	WARWICK	State	RI	Zip	02889
Phone		Extension	0		

NATURE OF COMPLAINT

materials falling into river

MATERIAL AND AMOUNT

Type Of Oil		Petroleum - Gal	0	Oily Debris - Lbs	0	or Tons	0		
Propane Tanks - Each	0	Asbestos - Lbs	0	Car Battery - Each	0	Mercury - Oz	0	or Lbs	0
Other Hazardous Chemicals Description		Gal	0	or Lbs	0	or Tons	0		
Solid Waste - Tons	0	Seaweed - Tons	0						
Other Non-Hazardous Waste Description		Gal	0	or Lbs	0	or Tons	0		

OTHER AGENCIES NOTIFIED

Agency Name	USCG	Contact	Steve Coch	Phone	(203) 515-4609
Agency Name	Westerly Fire Dept	Contact	Dennis	Phone	(401) 596-0402
Agency Name	USEPA	Contact	Janice Tsang	Phone	(617) 413-5053

REMOVAL ACTION

Is Removal Action Necessary? NO

Petroleum Gal	0	Type Of Oil		Oil/Water Gal	0	Oily Debris Lbs	0	or Tons	0
Propane Each	0	or Lbs	0	Asbestos Lbs	0	Car Battery	0	Mercury Oz	0	or Lbs	0
Other Hazardous Waste Description				Gal	0	or Lbs	0	or Tons	0		
Solid Waste Tons	0	Seaweed Tons	0						
Other Non-Hazardous Waste Description				Gal	0	or Lbs	0	or Tons	0		

AST INSPECTION

Number of tanks 0 Total Gallons 0

FINDINGS

Conditional Closure: ☐ NFA: ☐

An NRC report was received at DEM with very little information regarding an old mill that is falling apart and the materials are going into the river. The complainant was anonymous, no mill name was given or an address. I called Westerly police and fire to determine which mill this complaint might be referring to. The police stated there was an old Potter Hill Mill on Potter Hill Rd that is in poor shape and is falling apart. I contacted Dennis from Westerly fire to look at the mill and the Pawcatuck River to determine if there was a noticeable sheen. Dennis stated that he did not see a sheen. I advised him that I would look at it again on Monday morning. USCG and EPA emergency response called to get more information on the NRC reports claim.

10/29/07- I returned to the mill at 7:30am. The mill is in very poor condition and it is fenced off. I observed the mill from the across the street and river. The river moves fairly quick in this area and I was unable to find a sheen. I checked with the Office of Waste Mngt to see if this is a site of theirs. Cindy Gianfrancesco is currently working with the property owner to get a Site Investigation Report approved. The building supposed to be demolished in the future. Apparently the building never used oil to heat the mill therefore no tanks onsite. Coal was used for heat. Coal ash remains at the mill and because the building is in such poor shape, no one knows if anything hazardous remains in the mill at this point.

SIGNATURE Jill Eastman DATE SIGNED

SIGNATURE DATE SIGNED

RECEIVED
O.E.M. / O.W.M.
2008 MAR 31 P 3:48

Revised

REPORT

Site Investigation Report –
198 Potter Hill Road,
Westerly, RI

Renewable Resources

PROJECT NO. 1009825

PROJECT NO. 1009825.

REPORT TO

Dr. Edward Carapezza
Renewable Resources
40 Shawomet Avenue
Warwick, RI 02889

RECEIVED
O.E.M. / O.W.M.
2008 MAR 31 P 3:46

ON

Revised Site Investigation Report – 198 Potter Hill Road, Westerly, RI

March 17, 2008

Jacques Whitford
24 Albion Road, Suite 220
Lincoln, Rhode Island,
02865

Phone: 401-312-8005
Fax: 401-312-8010

www.jacqueswhitford.com

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SITE INVESTIGATION REPORT

1.0 Introduction

This report documents the activities and findings of a Revised Site Investigation Report (SIR) prepared by Jacques Whitford Company, Inc. (Jacques Whitford) for Renewable Resources Inc. at the property located at 198 Potter Hill Road in Westerly, Rhode Island, hereinafter referred to as the subject property or site. The subject property is further identified on Westerly Tax Assessor's Plat Map 8, as Lot 23. The subject property is approximately 4.55 acres in size (see **Figures 1 and 2**). The subject property is currently zoned "RR-60", defined as Rural Residential with a minimal lot size of 60,000 square feet.

This report has been prepared for the exclusive use of Renewable Resources Inc. (the Client) solely for the purpose of an environmental evaluation of the subject property to comply with requirements of the Rhode Island Department of Environmental Management's (RIDEM) regulations, and more specifically, to complete an SIR in accordance with Section 7.00 of the Remediation Regulations. This SIR relies extensively on the findings of a previously completed Phase I Environmental Site Assessment (ESA) and a Phase II ESA. The Phase I ESA and Phase II ESA can be found in **Appendix A and B,** respectively. These investigations were completed to identify potential recognized environmental conditions (RECs) detected during the investigations. Based on the results of the Phase II ESA and in accordance with Sections 5.0 and 7.03B of the RIDEM's Remediation Regulations, a Release Notification Form was submitted to the RIDEM and is included in **Appendix C**.

The attached reports contain detailed information regarding the subject property history, and the environmental setting at the subject property and abutting properties. Although summarized herein, these reports should be read in their entirety in order to gain a thorough understanding of the subject property conditions.

1.1 Site Information

The Westerly Tax Assessor records did not contain any information on the buildings on the subject property. However, Jacques Whitford observed nine buildings, some of which were interconnected. Many of the buildings were in various states of disrepair. The roofs of many buildings were collapsed into the building. Additionally, foundations of several former buildings were observed on the subject property. The main building is a three story building made of granite block that is approximately 115 feet by 60 feet. There are two one story additions on the east side of the main building, one is 30 feet by 20 feet and made of brick and the other is 85 feet by 20 feet and made of brick and wood. A 100 foot by 70 foot building is connected to the main building to the south and is one story and made of brick. The former boiler building is 75 feet by 54 feet, is located to the north of the main building, and is two stories and made of brick. Another one story brick building is located to the north of the former boiler building. This building is 95 feet by 64 feet. Two wooden buildings are located north of this building and are 90 feet by 40 feet and 32 feet by 10 feet, respectively. One separate building was observed to the west of the former boiler building. This building is made of wood, is two stories high and 100 feet by 30 feet.

The subject property has been vacant for over 40 years and no utilities appear to be active at the subject property. Electricity and telephone service are available for the subject property. Municipal water is available in the area of the subject property. There were no records at the Westerly Water Department for the subject property. The subject property formerly relied on an

onsite well for water, which was stored in a storage tank tower on the site. There are no municipal sewers in the area of the subject property. The field property card from the Westerly Tax Assessor indicates that the subject property utilizes a septic system, however, the current site owner indicated that he believed that all wastewater was formerly discharged directly to the adjacent Pawcatuck River. In order to assess the location of historic discharges, on February 1, 2007, Joseph T. Unsworth, P.E. and Dr. Edward Carapezza inspected the basement of the main building and all other buildings with crawl spaces. All piping in the basement of the main building is routed to one common pipe that discharges to the river. No pipes or other methods of discharge were observed in the walls of the basement.

Pipes were observed in the building where apparent washing of wool was completed. A total of six pipes protrude from the eastern wall of this building. Also, there appears to be an open area in the eastern wall of this building where wash water may have discharged into the river.

The first building on the southern portion of the site (the single story brick building) is underlain by the raceway. No other building has a basement. There were no pipes observed protruding from any of the buildings with crawl spaces. Based on the observations made, it is likely that all waste was discharged from the seven pipes and opening in the east wall of the building where washing was completed. There is no evidence that a septic system has ever been utilized at the site.

The subject property buildings are not currently heated. Also on February 1, 2007, the boiler building was thoroughly inspected for evidence of any use of fuel oil in the boiler at the site. The boiler is a direct coal fired boiler. There are no burners on the boiler that would be used to fire fuel oil. The boilers still contain remnants of unburned coal. Additionally, there is no evidence of fill/vent pipes or fill ports anywhere on the site. Based on these observations, it is believed that coal was always used to fire the boiler.

1.2 Site Setting

The site is located in a moderately developed area consisting of primarily residential and agricultural properties with some commercial and industrial properties nearby. The Pawcatuck River abuts the property to the east and north. Further east is undeveloped woodlands and further north are residential properties. Undeveloped woodlands abut the property to the south and residential and agricultural properties abut the property to the west. The subject property building is bound by Potter Hill Road to the south (see **Figure 2**). Potter Hill Road is a two-lane public road, which is maintained by the Town of Westerly.

1.3 Site History

According to the Westerly Tax Assessor's Office in Westerly Town Hall there have been many different deeds associated with the subject property. Records indicate that the subject property is currently owned by Renewable Resources Inc. Please refer to **Table 1** for a partial listing of reported previous property owners and dates of acquirement. **Table 2** is a list of occupants of the property with approximate dates of operation.

The research of the history of the site included internet searches and visits to the National Archives in Washington D.C., Rhode Island Historic Preservation Society, libraries in Ashaway, Hope Valley and Westerly, and the American Textile Museum in Lowell, MA. There was a reference that the mill was used for "mens fabrics only", which may indicate that the dyeing was limited to blues, browns, black, and greens. Historically, mens clothing was not dyed with reds, yellows, purple, etc. Available information also indicates that the mill was considered a small mill (i.e., <20 looms).

Two historic maps of the site were obtained and are include as **Figure 3** and **Figure 4**. The maps are dated 1895 and 1907. The maps depict the site as being limited to by the river to the north and east. The property is depicting to not extend beyond the buildings on the western part of the site. These figures indicate that the areas to the west of the buildings could not have been used for a septic system during the time period of the maps. The 1907 map has "coal pile" on it, which is consistent with the assumption that coal was used to fuel the boilers that are still at the site.

Based on the historical research conducted by Jacques Whitford, it appears as though the subject property was first developed approximately in the mid 1800s as a woolen mill. Available information indicates that the subject property was used for the production wool textiles until approximately the early 1960s. The property appears to have been vacant since that time.

2.0 Specific Objectives

The objectives of this SIR are to evaluate the location, extent, and characterization of potential sources of contamination. Specific objectives include assessing potential impacts to the site from former industrial uses at the subject property including coal storage.

3.0 Previous Environmental Investigations

Two previous investigations are relied upon in this SIR to fulfill the requirements of Section 7.00 of the RIDEM's Remediation Regulations. Jacques Whitford previously completed a Phase I ESA and a Phase II ESA on the subject property. Copies of these reports are contained in **Appendix A** and **B,** respectively. The following section summarizes the results of these reports.

3.1 Phase I ESA

Jacques Whitford completed a Phase I ESA for the site, dated March 14, 2006. Based on the Phase I ESA completed in accordance with American Standards Testing Materials (ASTM) standards, several RECs and business risks were found, and were identified as follows:

- Asbestos containing materials may exist in the buildings.
- Painted surfaces were observed to be in poor condition and may contain lead based paint.
- The subject property is not served by municipal sewers. Records available from The Town of Westerly indicate that the subject property utilizes a septic system. However according to the current property owner, all wastewater was believed to be directly discharged to the adjacent Pawcatuck River.
- Coal may have been used for fuel on the subject property.
- An area of dumping was observed in the north western part of the subject property. Miscellaneous debris was observed including several rusted 55 gallon drums. None of the drums contained any liquid and were rusted.
- Former buildings at the subject property appear to have been demolished on the subject property.
- Significant water damage was observed on the ceiling and floors of the majority of the buildings.

- Electrical equipment is present in at least one building that potentially contains PCBs and/or mercury.

The Phase I ESA recommended that a Phase II ESA be completed to assess whether the identified RECs at the subject property have impacted soil and/or groundwater at the subject property.

The Phase I ESA contains a discussion of the historical uses of the site and past owners. At the time of the Phase I and II ESAs, the site was vacant.

3.2 Phase II ESA

As part of the Phase II ESA, a Conceptual Site Model (CSM) was developed for the site, based on the RECs identified in the Phase I ESA. The following section discusses the developed CSM.

3.2.1 Substances of Concern (SOCs)

Coal may have been used for fuel on the subject property. Metals and polynuclear aromatic hydrocarbons are typical SOCs associated with coal. An area of dumping was observed in the north western part of the subject property. Miscellaneous debris was observed including several rusted 55 gallon drums. None of the drums contained any liquid and were rusted. Various materials could have been buried in this are including chemical containing volatile organic compounds (VOCs), metals, and/or coal/coal ash.

3.2.2 Conceptual Site Model

A Conceptual Site Model includes identifying Areas of Concern (AOC), SOCs from each AOC, potential release mechanisms from each AOC, potential media impacted by each AOC, and potential migration pathways from each AOC. During the Phase I ESA, Jacques Whitford identified two potential AOCs requiring further investigation, which are summarized in the following bulleted paragraphs:

AOC #1 – Northwestern Debris Area: A mound of buried debris was observed in the northwestern portion of the site. Drums were observed near the debris pile. The unlabelled drums all were rusted and did not contain any liquids. Some drums were intact and some were not. No odors or other evidence of a release was observed in the area of the drums.

AOC #2 – Potential Former Coal Storage: The site likely stored coal for use as fuel in the boilers that still exist on the site. Jacques Whitford reviewed aerial photographs dating back to 1939 to assess exterior areas that could have been used for coal storage. Based on a review of the aerial photographs, the only area that appears to been able to be used for coal storage is west of the building near the former boiler building.

Table 3 provides a description of each AOC, the associated SOCs, potential release mechanisms, potential impacted media, and potential migration pathways. The Scope of Work in Section 3.0 provides the methods to assess each of the AOCs. In order to assess whether a release has occurred from the AOCs, the following subsurface investigation was completed.

3.2.3 Test Pits and Soil Sampling

The objective of the investigation was to assess potential impacts from the AOCs. On Monday, April 3, 2006, a Case 580K rubber tired backhoe, contracted by the Client, was utilized to

complete six test pits (TP-1 through TP-6) at the site. Refer to **Figure 2** for test pit locations. Test pits TP-1 through TP-3 were completed in the buried debris pile on the northwest area of the site. Test pits TP-4 through TP-6 were completed west of the site building near the former boiler building.

Soil samples were collected from each of the test pits for lithologic classification and profiling of potential impacts. The test pits were advanced to approximately 6 feet below ground surface (bgs). Test pit logs are presented in Appendix A of the Phase II ESA in **Appendix B**. All collected soil samples were assessed for evidence of impacts by visual and olfactory examination. Debris and possible ash were observed in some of the test pits, however no olfactory evidence of impacts were observed. Soil samples were also field-screened for the presence of volatile organic compounds (VOCs) using a HNu Model 101 photoionization detector (PID) equipped with a 10.6 eV bulb and an organic vapor detection range of 0.1 to 10,000 parts-per-million (ppm). No VOCs were detected in any of the soil samples collected.

Two soil samples were collected for laboratory analysis. One soil sample was collected from TP-3 and one from TP-5. TP-3 contained a large amount of debris including possible burnt wood material. TP-3 contained more debris and more various materials than the other test pits in the buried debris area. A soil sample was also collected from TP-5. TP-5 contained what appeared to be cloth material and/or coal ash. None of the other test pits completed west of the building appeared to contain these materials. The soil samples collected were submitted to Spectrum Analytical, Inc. (Spectrum Analytical) laboratory in Agawam, Massachusetts, for analysis of Priority Pollutant 13 Metals by USEPA Method 200.7/7471A and PAHs by USEPA Method 8270.

4.0 Additional Investigation

Due to the detection of arsenic in the soil sample obtained near the former boiler building at concentrations greater than RIDEM's Residential Direct Exposure Criteria (RDEC) and as required by the RIDEM, the additional investigation was completed.

4.1 Soil Sampling

To assess the extent of soils impacted near the former boiler building, an additional twenty six surface soil samples were collected from the area near test pit TP-5 on September 5, 2006, October 23, 2006, and November 20, 2006. The samples collected on October 23, 2006 and November 20, 2006 were collected utilizing a hand auger that was decontaminated in between samples. The samples collected on October 23, 2003 were collected using a Geoprobe that was used to install the monitoring wells, as discussed in Section 3.2.3. All twenty six soil samples were submitted to the laboratory for analysis of arsenic. Six of the samples were submitted for analysis of RCRA 8 metals and three samples were submitted for analysis of PAHs.

On November 8, 2007, two soil samples, identified as SS-32 and SS-33, were collected from the locations of two soil samples previously collected that contained the highest reported concentration of lead (i.e., SS-20 and SS-23). Soil samples SS-32 and SS-33 were collected utilizing a hand auger and were collected from 0 -2 foot bgs. These samples were submitted to the laboratory for testing of leachable lead utilizing the Synthetic Precipitation Leaching Procedure (SPLP) method. Additionally, soil samples SS-30 and SS-31 were collected from the area where the buried debris was removed in the northwestern area of the site. These two soil samples were collected utilizing the Geoprobe rig and were collected from 0-2 foot bgs interval.

Soil samples SS-30 and SS-31 were submitted for analysis of VOCs, SVOCs, and Priority Pollutant 13 Metals.

Samples were collected in laboratory prepared containers. The samples were labeled and prepared for storage and transportation to Spectrum Analytical. To retard volatilization and biodegradation, the samples were cooled to less than 4°C and stored until laboratory pickup. Chain-of-Custody (COC) protocols were followed for the transfer of samples to the laboratory. Laboratory certificates of analysis for the wells located on the site are contained **Appendix D**.

4.2 Soil Borings and Monitoring Well Installation

On Monday, October 23, 2006, a track-mounted Geoprobe 6600 unit, operated by Aquifer Drilling and Testing of Bloomfield, CT, was utilized to advance two borings (B-1 and B-2) at the site and install two monitoring wells (MW-1 and MW-2). On Thursday, November 8, 2007, a truck-mounted Geoprobe 6600, operated by Alternative Subsurface Explorations of North Scituate, RI, was utilized to install three additional monitoring wells (MW-3 through MW-5) and collect soil samples at the site. The soil samples were collected in 1.5-inch inner diameter (ID) polyethylene tubes inside a 2.25-inch outer diameter (OD) sample barrel and sampling was conducted continuously from the surface to 15 feet below ground surface (bgs). Refer to **Figure 2** for soil boring locations.

Soil samples were collected for lithologic classification and profiling of potential impacts. Groundwater was encountered in at depths ranging from approximately 5 feet below ground surface (bgs) to 8 feet bgs. Refusal was encountered during the installation of the monitoring wells MW-3 through MW-5 at depths ranging from 18.5 feet bgs in MW-5 to 33 feet bgs in MW-4. Soil boring logs are contained in **Appendix E.**

All retrieved samples were assessed for evidence of impacts by visual and olfactory examination. No odors or other evidence of impacts were observed in any of the soil samples collected from the borings. The samples were also field-screened for the presence of volatile organic compounds (VOCs) using a HNu photoionization detector (PID) equipped with a 10.6 eV bulb and an organic vapor detection range of 0.1 to 10,000 parts-per-million (ppm). No VOCs were detected in any of the soil samples.

One soil sample was collected from each of boring B-3 (SS-27), B-4 (SS-28), and B-5 (SS-29). The soil samples were collected from the five to seven foot bgs interval, which was above the apparent observed groundwater table. These three soil samples were submitted to the laboratory for analysis of VOCs and the 16 metals in the Remediation Regulations. All soil samples collected for VOC analysis (i.e., SS-27 through SS-31) were obtained following methods appropriate for method 5035. Jacques Whitford is supplied with methanol preserved VOA vials that contain a pre-weighed amount of methanol. The soil samples are placed into the vials to a certain volume and weighed by the lab upon receipt of the samples to determine the soil/methanol ratio. The laboratory data sheets report any soil samples that were received outside of the appropriate ratio range. None of the soil samples were reported outside the required ratio range.

A 1-inch groundwater monitoring well was installed in borings B-1 through B-5 at depths of approximately 15 feet bgs to 33 feet bgs. The wells consist of 1-inch (in) inside diameter (ID), PVC with 10 feet of 0.010-in slotted screen. The screen was set at a depth that allowed it to intercept the apparent water table, which was encountered approximately 9 feet bgs in both of the monitoring wells. The wells were then sandpacked with clean #1 Morie sand to approximately two feet above the top of the screen. A one foot bentonite seal was placed on top of the sandpack and then non-impacted soil cuttings from the boring were used to fill the

hole to approximately six inches bgs. A flush mounted road box was installed on each of the wells.

All monitoring wells were developed the day they were installed. Development includes high rate pumping of the wells to remove sediments in the well and constant agitation of the well during the pumping to ensure sediments that may settle on the bottom of the well are entrained and pumped from the well. Since the monitoring wells at the site had high rates of recharge, none of the wells went dry during the development and therefore no water was added to the wells.

4.3 Groundwater Sampling

On October 26, 2006, Jacques Whitford collected groundwater samples from monitoring wells MW-1 and MW-2. On November 14, 2007, Jacques Whitford collected groundwater samples from monitoring wells MW-1 through MW-5. The groundwater samples were collected following standard *ASTM Designation D: 4448-85A* protocols utilizing a peristaltic pump and new dedicated silicone pump head tubing. This silicone tubing was attached to new, dedicated, ¼" O.D. polyethylene tubing, which extended down the well to approximately the midpoint of the screen. Samples were collected in laboratory prepared containers. The samples were labeled and prepared for storage and transportation to Spectrum Analytical for analysis of RCRA 8 metals and PAHs. To retard volatilization and biodegradation, the samples were cooled to less than 4°C and stored until laboratory pickup. Chain-of-Custody (COC) protocols were followed for the transfer of samples to the laboratory. Laboratory certificates of analysis for the wells located on the site are contained **Appendix D**.

4.4 Groundwater Flow Direction

On November 14, 2007, Jacques Whitford conducted a groundwater elevation survey of each of the five groundwater monitoring wells sampled during this investigation. The calibrated surveying instrument used for this survey was the Wild Heerbrugg NA20 Level® with corresponding tripod and leveling staff. An arbitrary immovable benchmark was used as a reference point. Groundwater contours were calculated and plotted on the site figure, using data obtained from surveying the wells and measuring depths to groundwater. These contour lines were mathematically interpolated, and then plotted using a computer program. Based on the hydrological survey and calculated groundwater elevation contours, the groundwater in the area of the subject property is flowing generally in a easterly/northeasterly direction. The attached figure depicts the calculated groundwater contours and estimated groundwater flow direction.

4.5 Sediment Sampling

A total of eleven sediment samples were collected from the Pawcatuck River. On November 7, 2007, sediment samples SED-1 through SED-8 were collected. Sediment samples SED-1 through SED-7 were collected from the point in the river adjacent to where pipes protrude from the building as depicted on the attached figure. Sediment sample SED-8 was collected from under the main building where the raceway discharges and where a pipe was observed to potentially formerly discharge. As discussed below, metals and polynuclear aromatic hydrocarbons (PAHs) were detected in sediment sample SED-1. In order to assess the extent of impacts in the area of SED-1, sediment samples SED-9 through SED-11 were collected on December 5, 2007. All the sediment samples were collected from at about 0-1 foot below the river bottom utilizing a hand auger. The eight sediment samples obtained on November 7, 2007 were collected starting from the most downstream locations (SED-1) and collected moving upstream so that sediments disturbed would not cross contaminate subsequent samples.

Samples were collected in laboratory prepared containers. The samples were labeled and prepared for storage and transportation to Spectrum Analytical. To retard volatilization and biodegradation, the samples were cooled to less than 4°C and stored until laboratory pickup. COC protocols were followed for the transfer of samples to the laboratory. Laboratory certificates of analysis for the wells located on the site are contained **Appendix D**.

5.0 Results

The results of the analytical testing for soil, groundwater, and sediment samples are summarized in **Tables 4, 5 and 6**. As can be seen on the tables, arsenic, beryllium, and lead were detected in at least one soil sample at concentrations greater than RIDEM criteria. Beryllium and lead were detected at concentrations slightly greater than the RDEC in one sample each. Beryllium was detected in sample TP5/S1 at a concentration of 0.405 ppm and in sample SS-25 at a concentration of 16.6 ppm. RIDEM's RDEC for beryllium is 0.4 ppm. Lead was detected in sample SS-20 at a concentration of 156 ppm. RIDEM's RDEC for lead is 150 ppm. Arsenic was detected in twenty three of the thirty two soil samples analyzed. Detected concentrations ranged from 1.71 ppm to 58.9 ppm. Fifteen of the soil samples had arsenic concentrations greater than the RIDEC of 7 ppm. All fifteen soil samples were from the area near the former boiler house, in the area of test pit TP-5. Leachable lead was detected in one of the two soil samples analyzed by the SPLP method. Leachable lead was detected in sample SS-33 at a concentration of 0.0201 mg/L which is less than the GA Leachability Criteria of 0.04 mg/L. Several PAHs were detected in the soil samples analyzed, however, none were detected at concentrations greater than the applicable RDEC.

As can be seen on the attached table, no SVOCs were detected in any of the groundwater samples. One VOC was detected in one groundwater sample. The groundwater sample collected from MW-4 contained methyl tert-butyl ether (MTBE) at concentration of 1.0 ug/L which is less than the GA Groundwater Objective of 40 ug/L. Four metals, barium, copper, nickel and zinc, were detected in at least one groundwater sample. None of the metals were reported at concentrations greater than the applicable GA Groundwater Objective.

As required by the RIDEM, the sediment results were compared to nationally published sediment criteria guidelines. As suggested by the RIDEM, the sediment results were compared to those published in the "*Development and Evaluation of Consensus Based Sediment Quality Guidelines for Freshwater Ecosystem"s*, D.D. MacDonald, et al. If these guidelines did not have a sediment criteria for a parameter then the RDEC was used for comparison. Two VOCs were detected in one sediment sample. 1,4-Dichlorobenzene was detected in sediment sample SED-2 at a concentration of 0.111 ppm which is less than the RDEC of 27 ppm. Toluene was detected in SED-8 at a concentration of 0.200 ppm which is less than the RDEC of 190 ppm. Fourteen of the sixteen metals tested were detected in at least one sediment sample. Arsenic was detected in SED-1 and SED-4 at 8.68 ppm and 7.17 ppm, respectively. The sediment criteria for arsenic is 30 ppm. Beryllium was detected in SED-1 at a concentration of 0.773 ppm which is greater than the RDEC of 0.4 ppm. Copper, chromium, lead and zinc were detected in at least one sediment sample at a concentration greater than the applicable sediment criteria. No other metals were reported at concentrations greater than the applicable RDEC or sediment criteria.

Several SVOCs were detected in sediment samples SED-1 and SED-8. With the exception of naphthalene, the SVOCs detected are polynuclear aromatic hydrocarbons (PAHs). Seven PAHs were detected in at least one sediment samples at a concentration greater than the applicable sediment criteria or RDEC. The highest concentration of PAHs was detected in

sample SED-1. No PAHs were detected in the five sediment samples (SED-2 through SED-6) immediately upstream of SED-1. SED-8 was collected from beneath the main building in the discharge of the raceway. In order to assess the extent of PAHs and metals in the area of SED-1, sediment samples SED-9, SED-10, and SED-11 were collected and analyzed for PAHs and metals. No metals were reported in SED-9, SED-10, or SED-11 at concentrations greater than the sediment criteria or RDEC. The concentration of PAHs decreased significantly in SED-9 as compared to SED-1, which indicates that the PAHs in the area of SED-1 do not extend far into the river. PAHs were detected in SED-10 at concentrations similar to SED-1, however, PAHs were not detected in sample SED-11, which also indicates that the PAHs are limited to the area near SED-1 and do not extend downstream.

6.0 Summary of Environmental Data

Based on the results from this investigation, it appears that an area of soils near the former boiler building appears to have been impacted by historic coal storage and use at the site. Arsenic, barium, and lead were detected at concentrations greater than the RDEC. Test pit TP-5 was completed in an apparent mounded area and contained what appeared to be coal ash and slag. Based on the soil sampling and analysis completed, the area impacted by the mounded ash and slag appears to be approximately 9,750 square feet. The impacted soils do not appear to be impacting the groundwater at the site or other soils.

The source of the PAHs and metals in the sediments is not known. The suite of PAHs and metals detected does not appear to be related to the former wool dyeing operations at the site but are similar to those detected in the soils near the former boiler house. The PAHs and metals could also be the result of atmospheric deposition from burning coal (either at the site or upstream of the site) or erosion from roads, in particular the bridge over the river on Potter Hill Road. During the recent re-construction of this bridge between 2002 and 2004, it is likely that sediments impacted by road materials or other upstream sources were disturbed in the river and transported downstream. The area of SED-1 is located where there is a significant decrease in the river flow velocity which will result in particulates being deposited on the bottom of the river. The high organic content of the sediments would result in significant adsorption of the contaminants. Also, being in this low velocity area prevents the sediments from being scoured during high flow periods which may explain the decrease in concentration closer to the center of the river and near the beginning of the curve in the river. The concentrations of PAHs in the sediments are higher than the concentration of PAHs in the soils near the former boiler house. .This likely indicates that although the site may have contributed to the PAHs and metals in the sediments, other off-site sources also likely attributed to the impacts to the sediments.

6.1 Quality Assurance and Quality Control (QA/QC)

All soil samples were collected in pre-cleaned, laboratory supplied containers containing the appropriate preservative for the analysis conducted. The samples were labeled and prepared for storage and transportation to the laboratory. To retard volatilization and biodegradation, the samples were cooled to less than 4°C and stored until laboratory pickup. Chain-of-Custody (COC) protocols were followed for the transfer of samples to the laboratory.

We reviewed all the analytical data generated as part of the SIR. The Reportable Detection Limits (RDLs) for EDB were greater than the RIDEM RDEC for soil samples and greater than the GA Groundwater Objective for groundwater samples. The RDL for benzo(a)pyrene in groundwater samples was also greater than the GA Groundwater Objective. We requested that Spectrum Laboratory re-issue the laboratory data affected by the RDLs with Method

Detection Limits (MDLs) The MDLs for EDB in the soil and sediment samples were less than the RDEC. The MDL for EDB in groundwater samples was reported as 0.7 ppb which is slightly greater than the GA Groundwater Objective of 0.5 ppb. The MDL for benzo(a)pyrene in the groundwater samples were less than the GA Groundwater Objective of 0.2 ppb except for the groundwater samples from MW-2. The MDL for benzo(a)pyrene in the samples from MW-2 was reported as 0.212 ppb, which is slightly greater than the GA Groundwater Objective.

Neither EDB and nor benzo(a)pyrene were not reported in any soil or groundwater sample at concentrations greater than the MDLs. Due to this fact and that no other VOCs or PAHs (except MTBE in MW-4) were reported at concentrations greater than the MDLs, it is Jacques Whitford's opinion that the EDB and benzo(a)pyrene data meets the objectives of the investigation.

7.0 Physical Setting

As required by Section 7.03 of the Remediation Regulations, the physical setting of the subject property and surrounding area must be assessed. the average elevation of the subject property is approximately 30 feet above mean sea level. The area of the subject property has a topography that is hilly, with significant hills located to the southeast and southwest.

Jacques Whitford reviewed a United States Department of Agriculture Soil Conservation Service Soil Survey for Rhode Island. Based on a review of this survey, the northern portion of the subject property contains soils that are classified as "RU", defined as Rumney fine sandy loam. This nearly level, poorly drained soil is on flood plains. Slopes range from 0 to 3 percent but are dominantly less than 2 percent. Areas are long and narrow and range mostly from 5 to 30 acres. Typically, the surface layer is very dark grayish brown fine sandy loam about 5 inches thick. The subsoil is dark grayish brown, mottled fine sandy loam 17 inches thick. The substratum is gray and dark grayish brown sand to a depth of 60 inches or more. The permeability of this soil is moderately rapid in the surface layer and subsoil and rapid to very rapid in the substratum. Available water capacity is moderate, and runoff is slow. The soil has a seasonal high water table at a depth of about 6 inches from late fall through spring and is subject to frequent flooding. The soil is very strongly acid through slightly acid.

The southern portion of the subject property contains soils that are classified as "CeC", defined as Canton and Charlton fine sandy loams, very rocky, 3 to 15 percent slopes. These gently sloping to sloping, well drained soils are on side slopes and crests of glacial upland hills and ridges. Stones and boulders cover 2 to 10 percent of the surface, and rock outcrops cover up to 10 percent. Areas are irregular in shape and mostly range from 3 to 250 acres. The mapped acreage of this unit is approximately 50 percent Canton soils, 30 percent Charlton soils, and 20 percent other soils. The areas of this unit consist of either Canton soils or Charlton soils or both. The soils were mapped together because they have no major differences in use and management.

Typically, the Canton soils have a surface layer of very dark grayish brown fine sandy loam about 3 inches thick. The subsoil is dark yellowish brown, yellowish brown, and light olive brown fine sandy loam 19 inches thick. The substratum is olive gray gravelly loamy sand to a depth of 60 inches or more. Typically, the Charlton soils have a surface layer of very dark brown fine sandy loam about 2 inches thick. The subsoil is 25 inches thick. The upper 15 inches is dark yellowish brown fine sandy loam, and the lower 10 inches is yellowish brown gravelly sandy loam. The substratum is light brownish gray gravelly sandy loam to a depth of 60 inches or more.

Included with these soils in mapping are small areas of somewhat excessively drained Gloucester soils, well drained Paxton and Narragansett soils, and moderately well drained Sutton soils. Also included are small areas of soils that have slopes of more than 15 percent, small areas of soils where more than 10 percent of the surface is stony, and areas where bedrock is less than 40 inches from the surface.

The permeability of the Canton soils is moderately rapid in the surface layer and subsoil and rapid in the substratum. Available water capacity is moderate, and runoff is medium. This soil is extremely acid through strongly acid. The permeability of the Charlton soils is moderate to moderately rapid. Available water capacity is moderate, and runoff is medium. This soil is very strongly acid through medium acid.

Most areas of these soils are in woodland, and the soil is suited to trees. A small acreage is cleared and used for pasture. These soils are suitable for community development but are limited by stoniness, bedrock outcrops, and slope. Onsite sewage disposal systems need careful design and installation to prevent effluent from seeping to the surface. Stones and boulders need to be removed for landscaping. The use of straw bale sediment barriers, siltation basins, and temporary diversions and quickly establishing plant cover help to control erosion during construction. Stones and rock outcrops make these soils unsuitable for cultivated crops and severely hinder the use of farming equipment.

According to the Bedrock Geologic Map of Rhode Island, Rhode Island Map Series No. 1, dated 1994, the area of the subject property lies within the rocks that are part of the Sterling Igneous Suite, and mapped as "Zsgg", which is defined as granite gneiss. This consists of pale-pink to gray medium-grained granite gneiss commonly with small porphyroclasts of microcline/orthoclase. Similar to alaskite gneiss, but with more than 3 % dark minerals. Compositions range from quartz monzonite to granite. Composed of sodic plagioclase quartz microline, biotite, opaque minerals; minor muscovite common; garnet more rare; accessory apatite and zircon; sphene present in some rocks; secondary chlorite. Typically is compositionally homogeneous, with strong foliation and locally well developed lineation defined by major minerals. Includes some rock mapped formerly as Ten Rod Granite Gneiss, Hope Valley Alaskite Gneiss, Potter Hill Granite Gneiss, and Scituate Granite Gneiss.

Review of the RIDEM Groundwater Zoning Map reveals that the subject property's area is located in a "GA" groundwater classification zone. This classification of groundwater is defined as "groundwater that may be suitable for public or private drinking water without treatment".

Review of the RIDEM's Groundwater Wellhead Protection Area Map reveals that the subject property is not located within a wellhead protection area. The closest wellhead protection area is located approximately 250 feet to the northeast of the subject property.

Based on observations, the depth to groundwater in the area of the subject property is 5 to 10 feet below grade. Groundwater flow direction is east/northeasterly towards the Pawcatuck River.

The closest surface water body to the subject property is the Pawcatuck River that abuts the subject property to the east and north. The Pawtucket River is classified by the RIDEM as a Class B surface water body. Class B surface water bodies are defined as "These waters are designated for fish and wildlife habitat and primary and secondary contact recreational activities. They shall be suitable for compatible industrial processes and cooling, hydropower, aquacultural uses, navigation, and irrigation and other agricultural uses. These waters shall have good aesthetic value." No other environmentally sensitive receptors were identified within 500 feet of the subject property.

aesthetic value." No other environmentally sensitive receptors were identified within 500 feet of the subject property.

According to the FEMA Flood Insurance Map for Westerly, Rhode Island, Community Panel Number 4400240010B, dated January 2, 1981, most of the subject property is located in a Zone A flood zone, defined as areas located within the 100-year flood plain. The Zone A flood zone is associated with the Pawcatuck River.

According to the RIDEM database, the subject property is not located within a habitat of rare species.

8.0 Conclusions

Based on the previously completed investigations and subsequent investigation, the following are Jacques Whitford's conclusions regarding the subject property:

- The subject property is currently vacant but was used for textile manufacturing, specifically a woolen mill.
- No manmade structures have been impacted by a release of a hazardous material.
- No odors were detected at the site and no stressed or stained vegetation was observed.
- No free liquids were observed on the surface of the subject property.
- No DNAPLs or LNAPLs were detected in the groundwater at the site.
- No stockpiled soils were observed on the site other than the mound near the boiler house that contained the coal ash in soils.
- No hazardous substances exist at the site other than that detected in the soil, groundwater and sediment samples.
- Groundwater at the subject property is a GA resource. Groundwater at the subject property flows in an easterly/northeasterly direction.
- The subject property and surrounding area are serviced by municipal water and sewer. Two abutting properties utilize groundwater for drinking water. One of the abutting properties obtains drinking water from a well located on the subject property.
- Coal was used and stored at the property.
- Metals and PAHs exist in surface soils at concentrations greater than RIDEM's RDEC. The impacted soils appear to be limited to an area near a mound containing coal ash and slag.
- No impacts from the coal ash and slag to groundwater were detected.
- No sources of groundwater contamination have been detected.
- No source of contamination was detected in the buried debris that was excavated in the northwest portion of the site or the underlying soils.
- The metals and PAHs in soils is not expected to impact any sensitive environments, impact offsite sources due to becoming air borne or through erosion, and will not volatilize.
- Sediments in a limited area appear to have been impacted by coal ash and other off-site sources.

9.0 Development of Remedial Alternatives

The proposed future development of the site may include residential and commercial uses. Potential future exposures at the site include direct exposure to the soils in the area of the mound that contains coal ash and slag soils. The following section provides remedial alternatives for controlling the risks associated with these exposures.

9.1 Remedial Alternatives

Pursuant to the Remediation Regulations, the following three remedial alternatives were developed in order to achieve compliance with the regulations:

1. The first remedial alternative considered is "no further action" at the subject property. The "no further action" alternative assumes that there will be no restrictions on future development or soil movement at the subject property. Since metals were detected in soils above the RIDEM's RDEC "no further action" cannot be considered a viable remedial alternative. Also, the impacted soils near the former boiler house are located in a flood zone associates with the Pawcatuck River. This remedial alternative could result in erosion of the impacted soils during floods that could impact the river.

2. The second alternative considered is capping the impacted soils at the site with an engineered cap, and implementation of an Environmental Land Use Restriction (ELUR) with the purpose of maintaining the cap and requiring proper management of the impacted soils during future excavation activities. This remedial alternative will eliminate direct exposure to the impacted soils. The ELUR will protect future constructions workers from exposure to the impacted soils and ensure that the impacted soils are managed properly. Additionally, this remedial alternative will eliminate the possible erosion of sediments from flooding of the site. This remedial alternative controls the potential exposures, controls erosion from flooding, and results in compliance with RIDEM regulations and therefore can be considered a viable remedial alternative.

3. The third alternative considered is the excavation of the impacted soils and disposing of them at a licensed facility. The area of impacted soils measures approximately 9,750 square feet. Assuming that approximately two feet of soil will need to be excavated, a total of 722 cubic yards will require disposal. Assuming a soil density of 1.3 tons per cubic yard results in 938 tons of soil. At a cost of $75/ton for disposal, the total disposal cost will be approximately $70,350. It is currently planned that the area of the impacted soils will be capped with an asphalt parking area as part of the property redevelopment. Therefore, the increased cost to excavate, transport, and disposal of the soils is not warranted since direct exposure to the impacted soils will be eliminated as part of the redevelopment.

9.2 Recommended Remedial Alternatives

Based on the results of this and the previous investigations, the preferred remedial alternative is remedial alternative No. 2. Once a Remedial Decision Letter is issued by the RIDEM, a RAWP will be submitted to the RIDEM for review. The RAWP will include how the impacted soils will be capped and a draft ELUR. The contamination is not subject to any other RIDEM regulations. However, the capping of the impacted area is located closer than 200 feet from the Pawcatuck River and is therefore within the wetlands buffer of the river which is subject to the RIDEM's *Rules and Regulations Governing the Administration and Enforcement of the Freshwater*

Wetlands Act. Section 6.08 of these regulations exempt activities associated with remediation of hazardous material releases from obtaining a permit in accordance with those regulations.

10.0 Certification

The information contained in the report is accurate to the best of knowledge known by the undersigned preparer of this report.

Joseph T. Unsworth, P.E. — Date: 3/20/08

The undersigned owner/operator, responsible for the preparation and submittal of the report, certifies that the report is a complete and accurate representation, and that it includes all known facts about the discharge or release that has resulted, or may result, in the exceedance of a groundwater quality standard promulgated pursuant to RIGL 46-13.1 and 46-12.

Dr. Edward Carapezza — Date: 3/20/08

11.0 Limitations

Information obtained from the Client, public agencies, site inspection, limited sampling, and laboratory chemical analysis were used to characterize the subject property. Although the services provided are extensive, findings and conclusions are limited to and by the qualitative and quantitative information obtained. Further subsurface investigation methods are available that could further define the subject property soil and groundwater conditions. If information becomes available concerning the subject property that was not included in this report, it should be made available to Jacques Whitford so that conclusions and/or recommendations can be re-examined and modified, where applicable.

No attempt was made to determine the compliance of present or former owners or operators of the subject property with Federal, State, or Municipal environmental or land use laws or regulations.

Because geological formations are inherently heterogeneous in nature, the professional services and opinions provided by Jacques Whitford under this agreement are not guaranteed to be a representation of complete subject property conditions.

Events occurring on the subject property after December 5, 2007 (the last date Jacques Whitford Personnel visited the subject property) are beyond the scope of this report. Jacques

Whitford makes no expressed or implied representations or warranties regarding any changes in condition of the premises after this date.

Jacques Whitford has retained a copy of this report. No additions or deletions are permitted without the written consent of Jacques Whitford and the Client. Use of this report in whole or in part by parties other than those authorized by Jacques Whitford and the Client is prohibited.

12.0 References

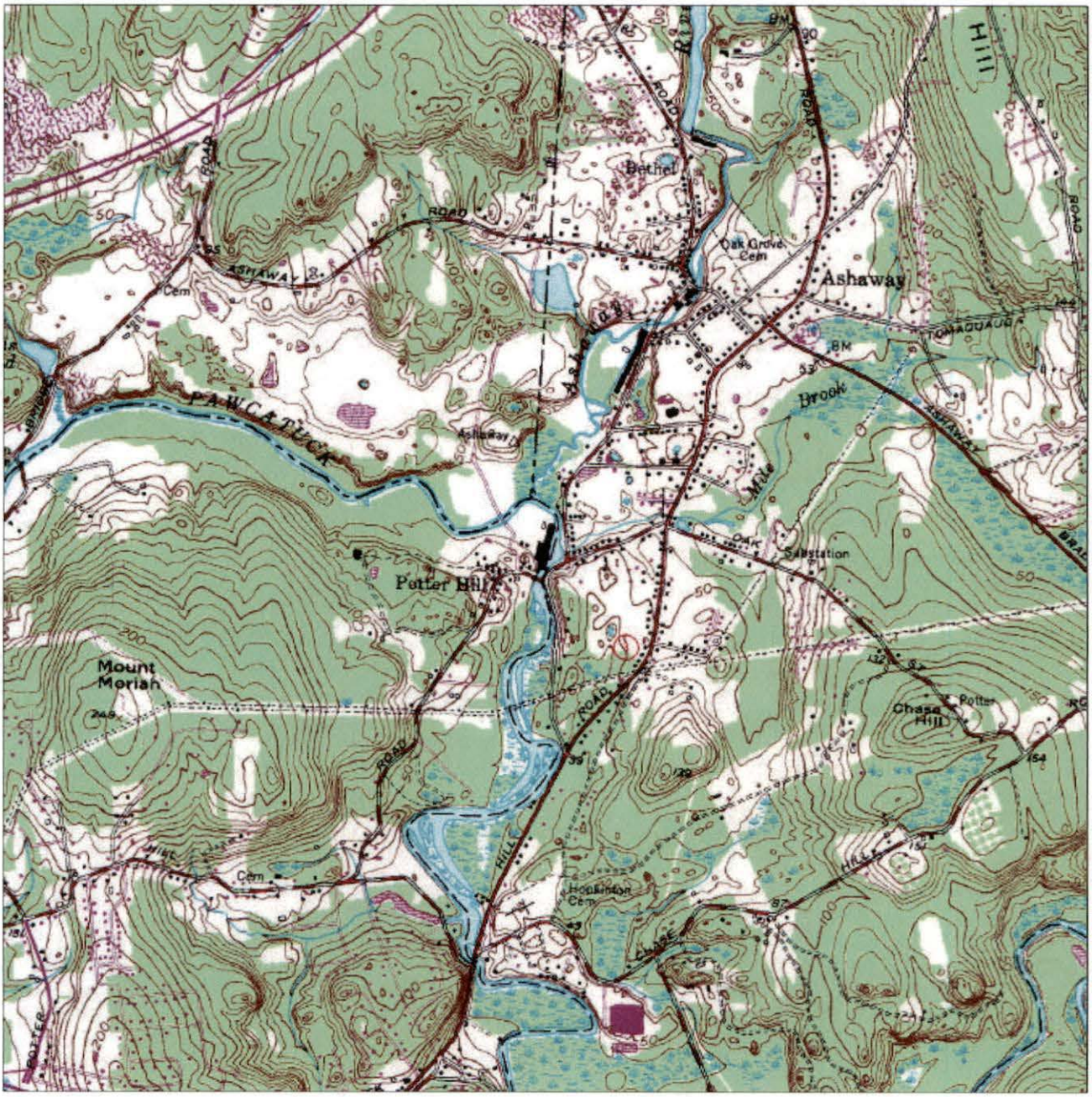
Providence, Rhode Island Quadrangle Topographic Map developed by the United States Geologic Survey

Groundwater Classification Areas developed by the Rhode Island Department of Environmental Management

Phase II Environmental Site Assessment, by Jacques Whitford Company, Inc., April 26, 2006

Phase I Environmental Site Assessment, by Jacques Whitford Company, Inc., March 14, 2006

Rhode Island Department of Environmental Management, Soil Database, Bedrock Database, Groundwater Classification Database, FIRM Database, Watershed Database, and Rare Species Database



SOURCE: USGS TOPOGRAPHIC MAP 1984

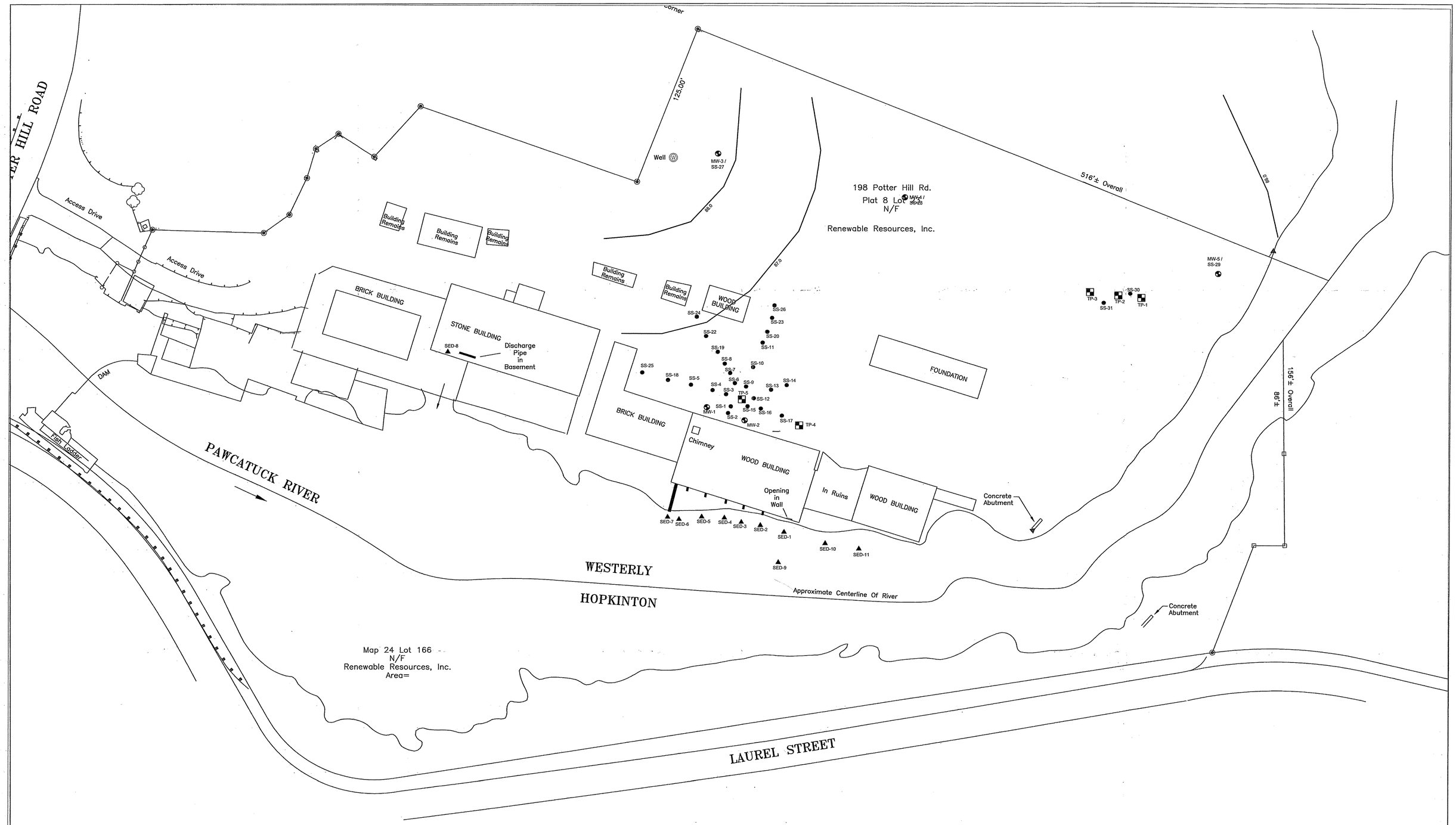
Jacques Whitford Company, Inc.

JACQUES WHITFORD LOCATION: LINCOLN, RI		BASEMAP SOURCE: ASHAWAY QUAD	
DATE PREPARED: 2-14-06	PREPARED BY: MJB	APPROXIMATE SCALE: 1:24,000	
PROJECT NAME/FILE NAME: MILL BLDG./LOCUS		PROJECT NUMBER/PHASE: 1009825.	

DRAWING TITLE: **SITE LOCATION MAP**
POTTER HILL ROAD
WESTERLY, RI

PREPARED FOR: RENEWABLE RESOURCES

FIGURE NO. 1



LEGEND

MW-1 MONITORING WELLS

SS-1 SOIL SAMPLES

TP-1 TEST PITS

SED-1 SEDIMENT SAMPLES

NOTE

1. PLAN DEVELOPED FROM AN UNTITLED, UNDATED SITE PLAN PROVIDED BY THE CLIENT IN ELECTRONIC FORMAT.
2. MONITORING WELL LOCATIONS DETERMINED IN THE FIELD BY REFERENCING EXISTING SITE FEATURES. ALL LOCATIONS ARE APPROXIMATE.

Jacques Whitford Company, Inc.

Jacques Whitford

JACQUES WHITFORD LOCATION: Lincoln, Rhode Island

DRAWING TITLE: **SAMPLE LOCATION PLAN**

POTTER HILL MILL
POTTER HILL ROAD
WESTERLY, RHODE ISLAND

DATE PREPARED:	DESIGNED BY:	DRAWN BY:	CHECKED BY:	REVIEWED BY:
1/4/08	–	RLS	JTU	–
REVISION DATE:	REVISION NO:	DRAWN BY:	CHECKED BY:	REVIEWED BY:

PROJECT NAME/FILE NAME:	PROJECT NUMBER/PHASE:	SCALE:
Potter Hill Mill	1009825.	1"=40'

PREPARED FOR: RENEWABLE RESOURCES

DWG NO. 3



Figure 3 - 1895 Historic Map

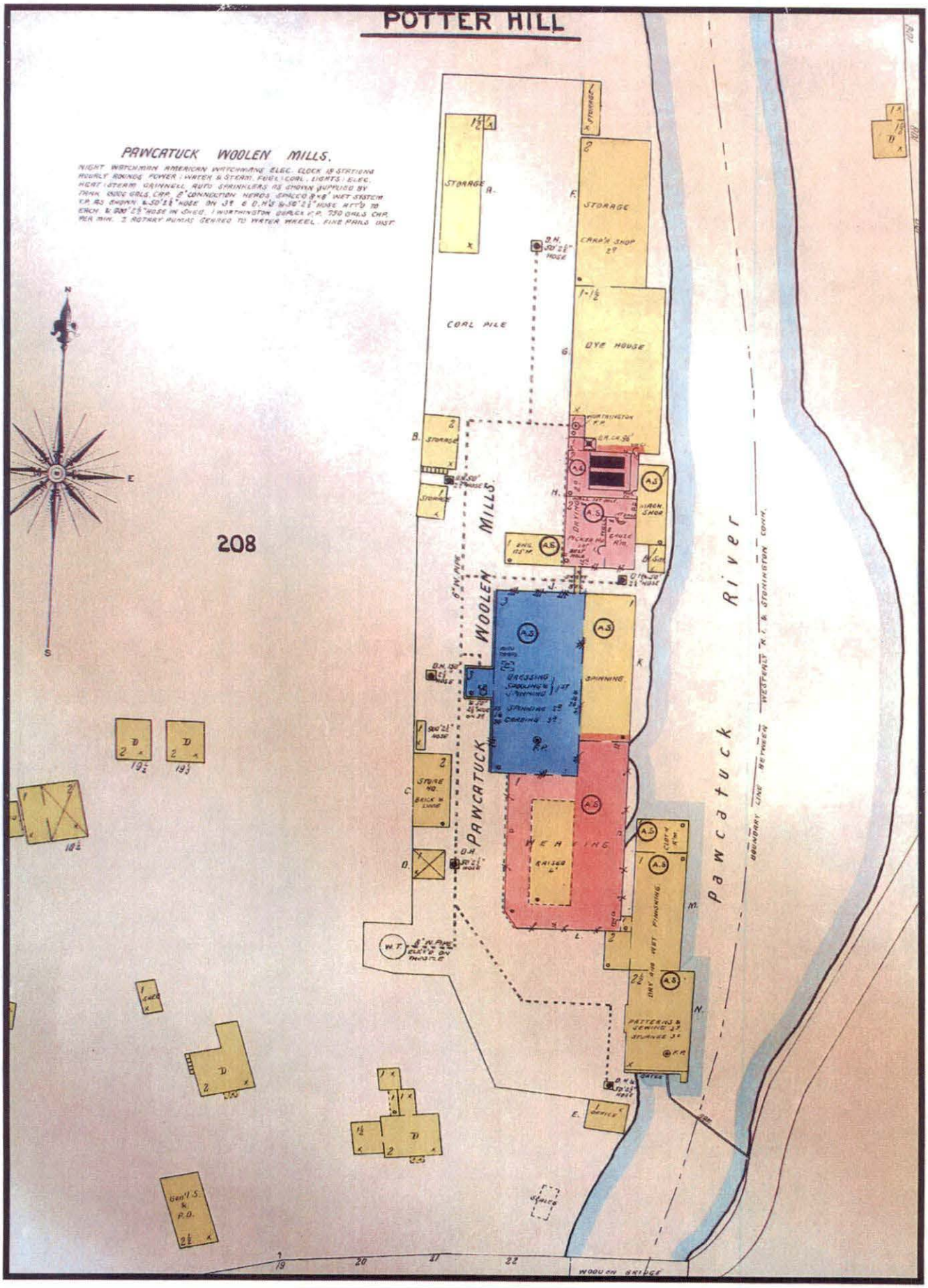


Figure 4 - 1907 Historic Map

Table 1 – Previous Property Owners

Date	Owner	Book/Page
10/08/1992	Renewable Resources Inc.	432/53
8/15/1955	Helen E. Cottrell	74/354
5/6/1930	Swift River Woolen Co.	53/443
3/12/1930	Fredrick T. Lawrence	53/190

Table 2 – Historical Property Occupants

Date	Owner
1955-1958	Westerly Woolen Mills
1930-1955	Swift River Woolen Mills
1907-1930	Pawcatuck Woolen Mills
1885-1907	J.P. Campbell Mills
1843-1870	E&H Babcock Mills

Table 3 – Summary of Conceptual Site Model

Area of Concern	Substances of Concern	Potential Release Mechanism	Potentially Impacted Media	Potential Migration Pathways
Northwestern Debris Area	VOCs/Metals/PAHs	Miscellaneous materials buried including drums that could have rusted and leaked contents.	Soils and groundwater	SOCs can be adsorbed onto subsurface soils and/or released to groundwater
Potential Former Coal Storage	Metals/PAHs	Coal stored on unpaved areas could result in coal being mingled with soils.	Soil beneath former coal piles. Coal typically does not result in groundwater contamination.	SOCs can be adsorbed onto subsurface soils but are typically do not impact groundwater.

TABLE 4
SUMMARY OF SOIL ANALYSIS

Parameter	RIDEM RDEC	TP3/S1 3'-5' 4/3/06	TP5/S1 3'-5' 4/3/06	SS1 0'-2' 9/5/06	SS2 0'-2' 9/5/06	SS3 0'-2' 9/5/06	SS4 0'-2' 9/5/06	SS5 0'-2' 9/5/06	SS6 0'-2' 9/5/06	SS7 0'-2' 9/5/06	SS8 0'-2' 9/5/06	SS9 0'-2' 9/5/06	SS10 0'-2' 9/5/06	SS11 0'-2' 9/5/06	SS12 0'-2' 9/5/06	SS13 0'-2' 9/5/06
VOCs		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
SVOCs (ppm)																
Acenaphthene	43	ND	ND	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Anthracene	35	ND	ND	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Benzo(a)anthracene	0.9	ND	0.240	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Benzo(a)pyrene	0.4	ND	0.232	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Benzo(b)fluoranthene	0.9	ND	0.299	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Benzo(g,h,i)perylene	0.8	ND	0.203	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Benzo(k)fluoranthene	0.9	ND	ND	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Chrysene	0.4	ND	0.357	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Dibenzo(a,h)anthracene	0.4	ND	ND	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Fluoranthene	20	ND	0.566	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Fluorene	28	ND	ND	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Indeno(1,2,3-cd)pyrene	0.9	ND	ND	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Phenanthrene	40	ND	0.322	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Pyrene	13	ND	0.424	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Metals (ppm)																
Antimony	10	ND	ND	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Arsenic	7	4.9	**10.4**	1.71	ND	**18.9**	**19.4**	**58.9**	**22.5**	**14.7**	**8.54**	ND	ND	**14.0**	4.01	3.22
Barium	5,500	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Beryllium	0.4	0.375	**0.405**	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Cadmium	39	0.618	0.503	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Chromium	390	46.7	0.280	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Copper	3,100	73.6	23.6	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Lead	150	134	101	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Manganese	390	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Mercury	23	0.621	ND	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Nickel	1,000	6.06	9.39	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Selenium	390	ND	ND	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Silver	200	ND	ND	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Thallium	5.5	ND	ND	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Vanadium	550	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Zinc	6,000	81.8	127	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT

Notes: * RIDEM Standards from *"Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases"*
RDEC – Residential Direct Exposure Criteria
All results are in ppm
ND – Not Detected above laboratory detection limits
NT – Not Tested

TABLE 4
SUMMARY OF SOIL ANALYSIS

Parameter	RIDEM RDEC	SS14 0'-2' 9/5/06	SS15 0'-2' 9/5/06	SS16 0'-2' 9/5/06	SS17 0'-2' 9/5/06	SS18 0'-2' 10/23/06	SS19 0'-2' 10/23/06	SS20 0'-2' 10/23/06	SS21 0'-2' 10/23/06	SS22 0'-2' 10/23/06	SS23 0'-2' 10/23/06	SS24 0'-2' 10/23/06	SS25 0'-2' 11/20/06
VOCs		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
SVOCs (ppm)													
Acenaphthene	43	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Anthracene	35	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Benzo(a)anthracene	0.9	NT	NT	NT	NT	ND	ND	0.224	NT	NT	NT	NT	NT
Benzo(a)pyrene	0.4	NT	NT	NT	NT	0.186	ND	0.215	NT	NT	NT	NT	NT
Benzo(b)fluoranthene	0.9	NT	NT	NT	NT	0.249	ND	0.228	NT	NT	NT	NT	NT
Benzo(g,h,i)perylene	0.8	NT	NT	NT	NT	ND	ND	ND	NT	NT	NT	NT	NT
Benzo(k)fluoranthene	0.9	NT	NT	NT	NT	0.254	0.179	0.218	NT	NT	NT	NT	NT
Chrysene	0.4	NT	NT	NT	NT	0.230	0.231	0.266	NT	NT	NT	NT	NT
Dibenzo(a,h)anthracene	0.4	NT	NT	NT	NT	ND	ND	ND	NT	NT	NT	NT	NT
Fluoranthene	20	NT	NT	NT	NT	0.397	0.387	0.413	NT	NT	NT	NT	NT
Fluorene	28	NT	NT	NT	NT	ND	ND	ND	NT	NT	NT	NT	NT
Indeno(1,2,3-cd)pyrene	0.9	NT	NT	NT	NT	ND	ND	ND	NT	NT	NT	NT	NT
Phenanthrene	40	NT	NT	NT	NT	0.325	0.262	0.319	NT	NT	NT	NT	NT
Pyrene	13	NT	NT	NT	NT	0.334	0.312	0.424	NT	NT	NT	NT	NT
Metals (ppm)													
Antimony	10	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Arsenic	7	3.57	**7.71**	**13.1**	4.88	**10.3**	**25.8**	**21.8**	**13.5**	**20.5**	6.05	ND	16.6
Barium	5,500	NT	NT	NT	NT	60.5	68.1	116	88.8	83.8	83.9	NT	NT
Beryllium	0.4	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Cadmium	39	NT	NT	NT	NT	0.441	ND	0.325	0.341	0.417	0.428	NT	NT
Chromium	390	NT	NT	NT	NT	12.9	8.71	18.6	9.73	11.7	128	NT	NT
Copper	3,100	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Lead	150	NT	NT	NT	NT	39.6	28.1	**156**	45.2	69.8	150	NT	NT
Manganese	390	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Mercury	23	NT	NT	NT	NT	ND	0.0507	0.152	0.154	0.0512	0.516	NT	NT
Nickel	1,000	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Selenium	390	NT	NT	NT	NT	2.42	3.91	3.00	ND	2.08	ND	NT	NT
Silver	200	NT	NT	NT	NT	ND	ND	ND	3.08	ND	1.16	NT	NT
Thallium	5.5	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Vanadium	550	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Zinc	6,000	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT

Notes: * RIDEM Standards from *"Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases"*
RDEC – Residential Direct Exposure Criteria
All results are in ppm
ND – Not Detected above laboratory detection limits
NT – Not Tested

TABLE 4
SUMMARY OF SOIL ANALYSIS

See Revised Table 4 in Supplemental SIR

Parameter	RIDEM RDEC	SS-26 0'-2' 11/20/06	SS-27 5'-7' 11/7/08	SS28 5'-7' 11/7/08	SS29 5'-7' 11/7/08	SS30 0'-2' 11/7/08	SS31 0'-2' 11/7/08	SS32 0'-2' 11/7/08	SS33 0'-2' 11/7/08
VOCs		NT	ND	ND	ND	ND	ND	NT	NT
SVOCs (ppm)									
Acenaphthene	43	NT	ND	ND	ND	ND	ND	NT	NT
Anthracene	35	NT	ND	ND	ND	ND	ND	NT	NT
Benzo(a)anthracene	0.9	NT	ND	ND	ND	ND	ND	NT	NT
Benzo(a)pyrene	0.4	NT	ND	ND	ND	ND	ND	NT	NT
Benzo(b)fluoranthene	0.9	NT	ND	ND	ND	ND	ND	NT	NT
Benzo(g,h,i)perylene	0.8	NT	ND	ND	ND	ND	ND	NT	NT
Benzo(k)fluoranthene	0.9	NT	ND	ND	ND	ND	ND	NT	NT
Chrysene	0.4	NT	ND	ND	ND	ND	ND	NT	NT
Dibenzo(a,h)anthracene	0.4	NT	ND	ND	ND	ND	ND	NT	NT
Fluoranthene	20	NT	ND	ND	ND	ND	0.184	NT	NT
Fluorene	28	NT	ND	ND	ND	ND	ND	NT	NT
Indeno(1,2,3-cd)pyrene	0.9	NT	ND	ND	ND	ND	ND	NT	NT
Phenanthrene	40	NT	ND	ND	ND	ND	ND	NT	NT
Pyrene	13	NT	ND	ND	ND	ND	ND	NT	NT
SPLP Lead (mg/L)**	0.04	NT	ND	NT	NT	NT	NT	ND	0.0201
Metals (ppm)									
Antimony	10	NT	ND	ND	ND	ND	ND	NT	NT
Arsenic	7	NT	ND	ND	ND	ND	ND	NT	NT
Barium	5,500	NT	7.93	18.1	8.09	NT	NT	NT	NT
Beryllium I/C 1.3ppm	0.4	**16.6**	ND	ND	ND	ND	ND	NT	NT
Cadmium	39	NT	ND	ND	ND	0.613	ND	NT	NT
Chromium	390	NT	3.75	4.27	3.13	67.2	9.96	NT	NT
Copper	3,100	NT	2.71	1.51	ND	32.0	5.82	NT	NT
Lead	150	NT	ND	1.41	ND	140	14.8	NT	NT
Manganese	390	NT	55.2	380	168	NT	NT	NT	NT
Mercury	23	NT	ND	ND	ND	0.0355	0.100	NT	NT
Nickel	1,000	NT	ND	1.37	1.58	4.43	1.92	NT	NT
Selenium	390	NT	ND	ND	ND	ND	ND	NT	NT
Silver	200	NT	55.2	ND	ND	ND	ND	NT	NT
Thallium	5.5	NT	ND	ND	ND	ND	ND	NT	NT
Vanadium	550	NT	4.69	8.05	5.47	NT	NT	NT	NT
Zinc	6,000	NT	7.67	13.2	11.9	68.5	81.4	NT	NT

Notes:

* RIDEM Standards from *"Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases"*
** SPLP Results are compared to the GA Leachability Criteria in mg/L
RDEC – Residential Direct Exposure Criteria
All results are in ppm
ND – Not Detected above laboratory detection limits
NT – Not Tested

Table 5

SUMMARY OF GROUNDWATER ANALYSIS

Parameter	GA Groundwater Objective	MW-1		MW-2		MW-3	MW-4	MW-5
		10/26/06	11/14/07	10/26/06	11/14/07	11/14/07	11/14/07	11/14/07
PAHS		ND	NT	ND	NT	ND	ND	ND
VOCs – MTBE (ppb)	40	NT	ND	NT	ND	ND	1.0	ND
Metals (ppm)								
Antimony	0.006	NT	ND	NT	ND	ND	ND	ND
Arsenic	NE	ND	ND	ND	ND	ND	ND	ND
Barium	2.0	0.02	NT	0.0166	NT	NT	NT	NT
Beryllium	0.004	NT	ND	NT	ND	ND	ND	ND
Cadmium	0.005	ND	ND	ND	ND	ND	ND	ND
Chromium	0.1	ND	ND	ND	ND	ND	ND	ND
Copper	NE	NT	0.011	NT	ND	ND	0.0061	ND
Lead	0.015	ND	ND	ND	ND	ND	ND	ND
Mercury	0.002	ND	ND	ND	ND	ND	ND	ND
Nickel	0.1	NT	0.0068	NT	0.0060	ND	0.0097	ND
Selenium	0.05	ND	ND	ND	ND	ND	ND	ND
Silver	NE	ND	ND	ND	ND	ND	ND	ND
Thallium	0.002	NT	ND	NT	ND	ND	ND	ND
Zinc	NE	NT	0.0703	NT	0.0926	0.0274	0.0532	0.0223

Notes: * RIDEM Standards from *"Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases"*
VOC results are in ppb, metals results are in ppm
ND – Not Detected above laboratory detection limits
NT – Not Tested

TABLE 6

SUMMARY OF SEDIMENT SAMPLE ANALYSIS

Parameter	SEDIMENT	SED-1 0'-1' 11/7/08	SED-2 0'-1' 11/7/08	SED-3 0'-1' 11/7/08	SED-4 0'-1' 11/7/08	SED-5 0'-1' 11/7/08	SED-6 0'-1' 11/7/08	SED-7 0'-1' 11/7/08	SED-8 0'-1' 11/7/08	SED-9 0'-1' 12/5/08	SED-10 0'-1' 12/5/08	SED-11 0'-1' 12/5/08
VOCs (ppm)												
1,4-Dichlorobenzene	27	ND	0.111	ND	ND	ND	ND	ND	ND	NT	NT	NT
Toluene	190	ND	ND	ND	ND	ND	ND	ND	0.200	NT	NT	NT
SVOCs (ppm)												
Acenaphthene	43	1.85	ND	ND	ND	ND	ND	ND	ND	0.194	0.823	ND
Acenaphthylene	23	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.187	ND
Anthracene	**845**	1.62	ND	ND	ND	ND	ND	ND	ND	0.198	1.21	ND
Benzo(a)anthracene	**1.05**	**4.25**	ND	ND	ND	ND	ND	ND	**3.52**	0.458	**3.32**	ND
Benzo(a)pyrene	**1.45**	**3.63**	ND	ND	ND	ND	ND	ND	**3.54**	0.432	**2.89**	ND
Benzo(b)fluoranthene	0.9	**3.18**	ND	ND	ND	ND	ND	ND	**3.65**	0.365	**3.00**	ND
Benzo(g,h,i)perylene	0.8	**1.32**	ND	ND	ND	ND	ND	ND	**1.62**	0.240	**1.63**	ND
Benzo(k)fluoranthene	0.9	**2.89**	ND	ND	ND	ND	ND	ND	**3.56**	0.385	**1.73**	ND
Chrysene	**1.29**	**4.03**	ND	ND	ND	ND	ND	ND	**4.19**	0.473	**2.91**	ND
Dibenzo(a,h)anthracene	0.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.398	ND
Dibenzofuran	NE	1.34	ND	ND	ND	ND	ND	ND	ND	NT	NT	NT
Fluoranthene	**2.23**	**11.1**	ND	ND	ND	ND	ND	0.392	**7.85**	1.25	**7.07**	ND
Fluorene	**0.536**	**1.61**	ND	ND	ND	ND	ND	ND	ND	ND	**0.731**	ND
Indeno(1,2,3-cd)pyrene	0.9	**1.72**	ND	ND	ND	ND	ND	ND	**1.75**	0.293	**1.95**	ND
Naphthalene	**0.561**	**1.40**	ND	ND	ND	ND	ND	ND	ND	ND	0.468	ND
Phenanthrene	**1.17**	**10.5**	ND	ND	ND	ND	ND	ND	**2.92**	0.943	**5.88**	ND
Pyrene	**1.52**	**8.76**	ND	ND	ND	ND	ND	0.273	**6.85**	0.934	**5.48**	ND
Metals (ppm)												
Antimony	10	4.67	ND	ND	ND	ND	ND	ND	ND	NT	NT	ND
Arsenic	**33**	8.68	6.10	2.03	7.17	ND	ND	4.87	ND	3.72	1.72	ND
Barium	5,500	67.5	59.8	9.52	35.1	22.9	20.6	48.4	27.4	27.1	22.9	NT
Beryllium	0.4	**0.773**	ND	ND	ND	ND	ND	ND	ND	NT	NT	ND
Cadmium	**4.98**	1.15	ND	ND	ND	ND	ND	ND	ND	ND	NT	ND
Chromium	**111**	**126**	78.5	15.6	**139**	**134**	73.0	48.8	25.0	30.2	27.4	2.01
Copper	**128**	**1,410**	34.4	7.96	34.0	31.1	47.5	**141**	18.1	NT	NT	ND
Lead	**128**	**1,050**	28.8	17.0	75.6	35.7	62.7	101	51.0	26.2	116	ND
Manganese	390	86.6	107	62.2	72.2	59.5	74.0	91.9	64.6	NT	NT	NT
Nickel	**48.6**	9.72	6.48	1.52	5.99	6.00	2.94	3.54	2.50	NT	NT	NT
Mercury	**1.06**	**2.23**	**3.06**	0.166	**3.77**	0.159	0.410	0.215	0.303	0.0602	0.245	ND
Selenium	390	ND	ND	ND	ND	ND	ND	ND	ND	2.38	2.89	ND
Silver	200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Thallium	5.5	ND	ND	ND	ND	ND	ND	ND	ND	NT	NT	ND
Vanadium	550	16.7	18.9	5.14	14.2	9.53	8.04	7.20	7.21	NT	NT	NT
Zinc	**459**	261	44.3	25.6	**1,280**	176	70.7	70.0	75.4	NT	NT	4.72

Notes: Bolded sediment criteria from *Development and Evaluation of Consensus Based Sediment Quality Guidelines for Freshwater Ecosystems*
Unbolded sediment criteria are Residential Direct Exposure Criteria from *"Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases"*

APPENDIX A

Phase I ESA

REPORT

Phase I Environmental Site Assessment –
198 Potter Hill Road
Westerly, RI

Prepared for:

Renewable Resources

PROJECT NO. 1009825

PROJECT NO. 1009825

REPORT TO	Renewable Resources Inc. C/O Dr. Edward Carapezza 900 North Strafford, Suite 2428 Arlington, VA 22203
ON	Phase I Environmental Site Assessment – 198 Potter Hill Road, Westerly, RI

March 14, 2006

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Joseph T. Unsworth, P.E. Project Manager	Vincent L. Jacques, P.E. Senior Reviewer

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PHASE I ENVIRONMENTAL SITE ASSESSMENT

1.0 EXECUTIVE SUMMARY

Jacques Whitford Company, Inc. (Jacques Whitford) has performed a Phase I Environmental Site Assessment (ESA) in accordance with the American Society of Testing and Materials (ASTM) Standard Practice Designation E 1527-00 on the property located at 198 Potter Hill Road in Westerly, RI, hereinafter referred to as the subject property. Based upon our assessment, the following paragraphs summarize noteworthy site information and environmental issues, if applicable.

Subject Property Information

LAND AREAS: According to records on file at the Westerly Tax Assessor's office, the subject property consists of one land parcel identified on Westerly Tax Assessor's Plat Map Plat Map 8, as Lot 23. The Lot 23 contains approximately 4.55 acres.

IMPROVEMENTS: The Westerly Tax Assessor records did not contain any information on the buildings on the subject property. However, Jacques Whitford observed nine buildings, some of which were interconnected. Many of the buildings were in various states of disrepair. The roofs of many buildings were collapsed into the building. Additionally, foundations of several former buildings were observed on the subject property. The main building is a three story building made of granite block that is approximately 115 feet by 60 feet. There are two one story additions on the east side of the main building, one is 30 feet by 20 feet and made of brick and the other is 85 feet by 20 feet and made of brick and wood. A 100 foot by 70 foot building is connected to the main building to the south and is one story and made of brick. The former boiler building is 75 feet by 54 feet, is located to the north of the main building, and is two stories and made of brick. Another one story brick building is located to the north of the former boiler building. This building is 95 feet by 64 feet. Two wooden buildings are located north of this building and are 90 feet by 40 feet and 32 feet by 10 feet, respectively. One separate building was observed to the west of the former boiler building. This building is made of wood, is two stories high and 100 feet by 30 feet.

UTILITIES: The subject property has been vacant for over 40 years and no utilities appear to be active at the subject property. Electricity and telephone service are available for the subject property. Municipal water is available in the area of the subject property. There were no records at the Westerly Water Department for the subject property. The subject property formerly relied on an onsite well for water, which was stored in a storage tank tower on the site. There are no municipal sewers in the area of the subject property. The field property card from the Westerly Tax Assessor indicates that the subject property utilizes a septic system, however, the current site owner indicated that he believed that all wastewater was formerly discharge directly to the adjacent Pawcatuck River. The subject property buildings are not currently heated. The boilers remaining in the former boiler building appear to have been fueled by coal.

CURRENT USAGE: The subject property is currently vacant and reportedly has been for over forty years.

HISTORICAL USAGE: Based on the historical research conducted by Jacques Whitford, it appears as though the subject property was first developed in the mid 1800s as a woolen mill. Available information indicates that the mill was a woolen mill until the mid 1900s. Several of the machines used in the woolen operations remain in the buildings.

Conclusions

Jacques Whitford has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527-00 on the property located at 198 Potter Hill Road in Westerly, Rhode Island. Any exceptions to, or deletions from, this practice is described in Sections 2.3 and 2.4 of this report. Jacques Whitford has discovered potential recognized environmental conditions and environmental business risks, which are summarized in the following bulleted paragraphs:

- Asbestos containing materials may exist in the buildings.
- Painted surfaces were observed to be in poor condition and may contain lead based paint.
- The subject property is not served by municipal sewers. Records available from The Town of Westerly indicate that the subject property utilizes a septic system. However according to the current property owner, all wastewater was believed to be directly discharged to the adjacent Pawcatuck River.
- Coal may have been used for fuel on the subject property.
- An area of dumping was observed in the north western part of the subject property. Miscellaneous debris was observed including several rusted 55 gallon drums. None of the drums contained any liquid and were rusted.
- Former buildings at the subject property appear to have been demolished on the subject property.
- Significant water damage was observed on ceiling and floors of the majority of the buildings.
- Electrical equipment is present in at least one building that potentially contains PCBs and/or mercury.

Based on the noted recognized environmental conditions, Jacques Whitford believes there is a **Low to Moderate** risk of potential liability associated with the subject property.

Based on the noted Findings and Opinions obtained and developed for this report, Jacques Whitford believes that further environmental investigation is warranted on the subject property. Based on the information obtained as part of the Phase I ESA and observations made during the investigation, the following are recommended:

- Completion of a Phase II ESA to assess the extent of impacts to soil and groundwater at the subject property. The Phase II ESA should include the completion of test pits in the area of the observed dumping and areas of potential coal storage. Also, unless it can be determined that a septic system did not exist at the subject property, soils borings should be completed and monitoring wells installed to assess impacts from the potential septic system.
- Prior to any demolition and/or renovations, an asbestos survey and pain chip sampling should be completed for all buildings on the subject property.
- A hazardous material disposal contractor should be hired to remove and dispose of all PCB and mercury containing materials (if any) in the buildings.
- All debris piles should be removed from the subject property and disposed of at appropriate disposal facilities.

- Since the buildings will required either demolition or extensive rehabilitations, Jacques Whitford does not recommend a mold survey at this time.

2.0 INTRODUCTION

Jacques Whitford Company, Inc. (Jacques Whitford) has performed a Phase I Environmental Site Assessment (ESA) on the property located at 198 Potter Hill Road in Westerly, Rhode Island, hereinafter referred to as the subject property.

Joseph T. Unsworth, P.E. and Robert Snyder, Jacques Whitford Project Manager and Engineer, respectively, performed the site inspection on Monday, February 27, 2006. Mr. Unsworth also performed records research, inquiries, and other tasks associated with this ESA and with the preparation of this report. Mr. Vincent L. Jacques, P.E., Jacques Whitford Senior Reviewer, has reviewed the stated summary of Findings and concurs with the stated Conclusions and Recommendations.

2.1 Purpose

As per Section 1.1 of the American Society of Testing and Materials (ASTM) Standard Practice Designation E 1527-00, the purpose of this assessment is to identify recognized environmental conditions, as defined in Section 3.3.31 of the same Standard Practice; that is "the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, ground water, or surface water of the property". This practice is intended to permit a user to satisfy one of the requirements to qualify for the innocent landowner defense to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA); that is, the practices that constitute "all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice" as defined in 42 USC § 9601(35)(B).

2.2 Detailed Scope of Services

Jacques Whitford has performed a Phase I ESA in accordance with the ASTM Standard Practice Designation E 1527-00 on the property located at 198 Potter Hill Road in Westerly, Rhode Island and further identified on Westerly Tax Assessor's Plat Map 8 as Lot 23. This report has been prepared for the exclusive use of Renewable Resources (Client), by the authority of Dr. Edward Carapezza.

Jacques Whitford obtained information to characterize the subject property and to compile a site-specific environmental assessment through the review of reasonably ascertainable public records, a surficial site inspection, and historical research of previous owners and operations of the subject property. Reasonably ascertainable information is defined by ASTM E 1527-00 as publicly available information obtainable from a source within reasonable time and cost constraints, which is also practically reviewable.

The intention of Jacques Whitford's review of reasonably ascertainable public records was to obtain and review records, which could identify recognized environmental conditions in connection with the subject property. Such public records includes records on file at the local Tax Assessor's office regarding the subject property's Plat Map, Block, and Lot location, land and property improvements and dimensions, current and historical utilization, as well as the Zoning designation(s) of the area in which the subject property is located. The legal description of the subject property, as well as information concerning previous land transfers and ownership, is also included in this report. Furthermore, public records concerning the subject property, as well as additional properties within

appropriate minimum search distances as defined in Section 7.2.1.1 of ASTM E 1527-00, are also reviewed for the preparation of this report. Said records include both Federal and State Environmental listings.

A component of the site assessment is Jacques Whitford's site visit and surficial inspection of the subject property and improvements, in an attempt to identify recognized environmental conditions on or in the immediate vicinity of the subject property. Joseph T. Unsworth, P.E. and Robert Snyder, of Jacques Whitford, conducted this visual reconnaissance of interior and exterior portions of the subject property on Monday, February 27, 2006. Observations of adjoining properties to the subject property were made from the subject property, as well as from easily accessible public rights-of-way. A Site Plan sketch was created based on the observations of the subject property's characteristics noted at the time of the conducted inspections.

2.3 Significant Assumptions

It is assumed that this investigation is being conducted to identify recognized environmental conditions concerning the subject property, and to permit the user to satisfy one of the requirements to qualify for the innocent landowner defense to CERCLA liability. This investigation may mention but does not fully address non-scope considerations such as, but not limited to, asbestos containing materials (ACM), radon, lead-based paint (LBP), lead in drinking water, mold, wetlands, regulatory compliance, cultural and historical resources, industrial hygiene, health and safety, ecological resources, endangered species, indoor air quality, and/or high voltage power lines, although, one or more may be mentioned in the report as a business environmental risk concern.

2.4 Limitations and Exceptions of Assessment

This report has been prepared for the exclusive use of the Client and should not be reproduced or disseminated without the written approval of Jacques Whitford and the Client. Jacques Whitford has retained a copy of this report. No additions or deletions are permitted without the express written consent of Jacques Whitford. Use of this report in whole or in part by parties other than the Client is prohibited.

Information obtained from public records review, the site inspection, and interviews were used to characterize the subject property. Although the services provided are extensive, findings and conclusions are limited to and by the information obtained. If information becomes available concerning the subject property that was not included in this report, it should be made available to Jacques Whitford so that the conclusions and/or recommendations can be re-examined and modified, if applicable. Further non-intrusive and intrusive investigations and assessment methods are available that could further characterize the subject property's building materials as well as the subsurface soil and groundwater conditions.

Due to the collapsed roofs and structurally unsafe floors, portions of some of the buildings could not be observed.

The Site Plan is a sketch of the subject property, which identifies observations of site characteristics of significance. These plans are not drawn to scale and should not be relied upon as an engineering plan.

Jacques Whitford's interviews are limited by the quality and completeness of answers provided to the proposed questions during the interview(s).

The extent of historical research performed by Jacques Whitford is limited to availability, cost, and timeliness of utilizing various resources such as aerial photographs, historical Sanborn Maps, Land Evidence Records (deeds pertaining to historical site ownership), and local directories, all of which

may indicate the historical utilization of the subject property. It should be noted that while the chain-of-ownership research and information provided should be accurate, it should in no way be construed as an actual Title search and should not be utilized or relied upon for any legal purposes. As indicated in the ASTM E 1527-00 Standard, the user should check or engage a title company or title professional to check reasonably ascertainable recorded land title records for environmental liens or activity and use limitations currently recorded against the subject property.

Events occurring on the subject property after February 27, 2006, the date of the inspection, are beyond the scope of this report. Jacques Whitford makes no expressed or implied representations or warranties regarding any changes in condition of the premises after this date.

No environmental site assessment can wholly eliminate uncertainty regarding the potential for recognized environmental conditions in connection with a property. Performance of this Phase I ESA is intended to reduce, but not eliminate uncertainty regarding the potential for recognized environmental conditions in connection with a property, and the ASTM E 1527-00 Standard recognizes reasonable limits of time and cost.

This report does not document compliance by present or past subject property owners (or tenants) with Federal, State, or Local laws and regulations, nor does it claim or imply that all environmental problems past, present or potential have been detected on or nearby the subject property. Although this cannot be considered an exhaustive or all encompassing study, this investigation was performed consistent with customary practice and standards. No warranty expressed or implied is made concerning the accuracy and completeness of the information and conclusions in this report.

2.5 Special Terms and Conditions

The following is a list of terminology that is used throughout this report and therefore should be defined.

Abutting:	Any property that is physically bounded by the subject property.
Actual Knowledge:	The knowledge actually possessed by an individual who is a real person, rather than an entity.
Adjacent:	Any property that is separated from the subject property by an easement or roadway.
Adjoining:	Any property that is considered to be abutting or adjacent to the subject property.
Asbestos Containing Material (ACM):	Any material or product that contains more than 1% asbestos.
Business Environmental Risk:	A risk which can have a material environmental or environmentally-driven impact on the business associated with the current or planned use of a parcel of commercial real estate, not necessarily limited to those environmental issues required to be investigated in the E 1527-00 practice.
Due Diligence:	The process of inquiring into the environmental characteristics of a parcel of commercial real estate or other conditions in connection with a property transaction.
Environmental Professional:	A person possessing sufficient training and experience necessary to conduct a subject property reconnaissance, interviews, and other activities in accordance with the E 1527-00 practice.
Hazardous Substance:	A substance defined as a hazardous substance pursuant to CERCLA

42 USC 9601 (14), as interpreted by USEPA regulations and the courts.

Historical Recognized Environmental Condition: Environmental conditions which in the past would have been considered a recognized environmental condition, but which may or may not be currently considered a recognized environmental condition.

Obvious: That which is plain or evident; a condition or fact that could not be ignored or overlooked by a reasonable observer while visually or physically observing the subject property.

Occupants: Those tenants, subtenants, or other persons or entities using the property or a portion of the subject property.

Owner: Generally the fee owner of record of the subject property.

Practically Reviewable: Information that is practically reviewable means that the information is provided by the source in a manner and in a form that, upon examination, yields information relevant to the subject property without the need for extraordinary analysis of irrelevant data.

Preparer: The person preparing the transaction screen questionnaire pursuant to Practice E 1528.

Reasonable Ascertainable: Information that is (1) publicly available, (2) obtainable from its source within reasonable time and cost constraints, and (3) practically reviewable.

Recognized Environmental Conditions: The presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property.

Subject Property: The real property that is the subject of this ESA.

User: The party seeking to use Practice E 1527 to perform an environmental site assessment of the subject property.

2.6 User Reliance

According to Section 6.5.2.1 of E 1527-00, "An environmental professional is not required to verify independently the information provided but may rely on information provided unless he or she has actual knowledge that certain information is incorrect based on other information obtained in the Phase I Environmental Site Assessment or otherwise actually known to the environmental professional." Jacques Whitford was not provided with any contradictory information from the Client regarding any information gathered during the investigation. As a result, Jacques Whitford has relied on the information gathered without independent verification and has complied this report with the assumptions, limitations, and exceptions noted in Sections 2.3 and 2.4 of this report.

3.0 SITE DESCRIPTION

In order to describe the subject property, records were reviewed and/or obtained from the various sources cited in Section 16.0, References.

Joseph T. Unsworth, P.E., of Jacques Whitford, completed an ASTM Environmental Transaction Screen Questionnaire for the subject property, which can be found in **Appendix D**. Photographs taken during the inspection are presented in **Appendix A**.

3.1 Location and Legal Description

According to records on file at the Westerly Tax Assessor's office, the subject property consists of one land parcel identified on Westerly Tax Assessor's Plat Map Plat Map 8, as Lot 23. Lot 23 contains approximately 4.55 acres (see **Figures 1 and 2**).

Legal descriptions for the various lots of the subject property were discovered on the most recent deeds issued for the subject property, found at the Westerly Clerk's office at the Westerly Town Hall, in Deed Book 432, beginning on Page 53. A copy of the deed can be found in **Appendix E** of this report.

The location of the subject property is depicted on **Figure 1**, which was developed from the *Ashaway, Rhode Island USGS Topographical Quadrangle Map*. **Figure 2** is a not-to-scale Site Plan depicting the entire subject property and adjoining properties to the subject property.

3.2 Site and Vicinity General Characteristics

Jacques Whitford conducted a site visit to visually and physically observe the subject property as well as any structure(s) present on the subject property, on Monday, February 27, 2006. Based on Town records and visual observations, the subject property consists of one parcel of land. Lot 23 is not bound by any roads. Access to the subject property is from Potter Hill Road via a driveway that runs across the southeastern part of Lot 24 and onto the southern part of the subject property. Properties abutting the subject property are residential and agricultural properties to the west, the Pawcatuck River to the east and north, and residential properties further east and north. Jacques Whitford attempted to observe the land and improvements of adjoining properties to the subject property, from the subject property and from accessible public rights-of-way. Based on these observations, it is apparent that the general area of the subject property is a moderately developed area in the north central portion of Westerly, with Hopkinton, RI abutting the subject property to the east, and North Stonington, CT abutting the subject property to the northwest. The subject property is located in a moderately developed area with predominately residential, agricultural, and some commercial properties. According to the most recent Westerly Zoning Map, Lots 23 is located in an area zoned "RR-60", defined as Rural Residential with a minimal lot size of 60,000 square feet.

3.3 Current Uses of the Subject Property

Lots 23 is currently vacant and reportedly has been for over forty years.

3.4 Descriptions of Structures, Roads, and Other Improvements

Descriptions of Structures on the Subject Property: The Westerly Tax Assessor records did not contain any information on the buildings on the subject property. However, Jacques Whitford observed nine buildings, some of which were interconnected. Many of the buildings were in various states of disrepair. The roofs of many buildings were collapsed into the building. Additionally, foundations of several former buildings were observed on the subject property. The main building is a three story building made of granite block that is approximately 115 feet by 60 feet. There are

two one story additions on the east side of the main building, one is 30 feet by 20 feet and made of brick and the other is 85 feet by 20 feet and made of brick and wood. A 100 foot by 70 foot building is connected to the main building to the south and is one story and made of brick. The former boiler building is 75 feet by 54 feet, is located to the north of the main building, and is two stories and made of brick. Another one story brick building is located to the north of the former boiler building. This building is 95 feet by 64 feet. Two wooden buildings are located north of this building and are 90 feet by 40 feet and 32 feet by 10 feet, respectively. One separate buildings was observed to the west of the former boiler building. This building is made of wood, is two stories high and 100 feet by 30 feet.

Descriptions of Roads: Lot 23 is not bound by any roads. Access to the subject property is from Potter Hill Road via a driveway that runs across the southeastern part of Lot 24 and onto the southern part of the subject property (see **Figure 2**). Potter Hill Road is a two-laned, two-directional road maintained by the Town of Westerly.

Utilities: The subject property has been vacant for over 40 years and no utilities appear to be active at the subject property. Electricity and telephone service are available for the subject property. Municipal water is available in the area of the subject property. There were no records at the Westerly Water Department for the subject property. The subject property formerly relied on an onsite well for water and was stored in a storage tank tower on the subject property. The storage tank tower is no longer present on the subject property. This water system reportedly was used for a fire suppression system. Valves and hydrant types equipment were observed near the buildings. There are no municipal sewers in the area of the subject property. The field property card from the Westerly Tax Assessor indicates that the subject property utilizes a septic system, however, the current site owner indicated that he believed that all wastewater was formerly discharge directly to the adjacent Pawcatuck River.

Heating System: The subject property buildings are not currently heated. The boilers remaining in the former boiler building appear to have been fueled by coal.

Sewage Disposal: The field property card from the Westerly Tax Assessor indicates that the subject property utilizes a septic system, however, the current site owner indicated that he believed that all wastewater was formerly discharge directly to the adjacent Pawcatuck River. There was no file available for the subject property at the Westerly Water/Sewer Department.

Source of Potable Water Supply: The subject property is connected to the public drinking water system. Drinking water is supplied to the subject property by The Westerly Water Department, which obtains their water from ten gravel wells located in six well fields that draw water from aquifers or groundwater reservoirs located in the Pawcatuck River Aquifer Region.

3.5 Current Uses of Adjoining Properties

Jacques Whitford attempted to observe the land and improvements of adjoining properties to the subject property from the subject property and from accessible public rights-of-way. Based on research and observations, it is apparent that the adjoining properties to the north, east, and west are residential, and agricultural. Properties to the south of the subject property include one residential lot beyond which is undeveloped land. The Pawcatuck River abuts the subject property to the east and north. Please refer to the appended **Table 2** for a listing of adjoining properties.

4.0 USER PROVIDED INFORMATION

4.1 Title Records

Jacques Whitford was not provided with any information from the Client regarding title and/or ownership records pertaining to the subject property. However, Jacques Whitford reviewed reasonably ascertainable land evidence records at the Westerly Clerk's Office located at Westerly Town Hall in Westerly, RI. Please refer to the appended **Table 1** for a partial listing of chain of ownership/title records.

4.2 Environmental Liens or Activity and Use Limitations

The Client did not provide Jacques Whitford with any information pertaining to any environmental liens, government notifications, or any activity and use limitations involving the subject property. While Standard E 1527-00 does not require the environmental professional to conduct a title search of recorded environmental liens or activity and use restrictions on the subject property, Jacques Whitford did review several, but not all, deeds for the subject property and did not note any environmental liens and/or activity or use limitations on the reviewed deeds that are currently recorded for the subject property.

4.3 Specialized Knowledge

According to Section 5.3 of Standard E 1527-00, if the user is aware of, or has any specialized knowledge or experience pertaining to recognized environmental conditions pertaining to the subject property, or the general area surrounding the subject property, they should make such information available to the environmental professional prior to the on-set of the site reconnaissance activities. The Client did not provide Jacques Whitford with any information pertaining to any specialized knowledge regarding recognized environmental conditions existing at the subject property.

4.4 Valuation Reduction for Environmental Issues

In accordance with Section 5.4 of Standard E 1527-00, if the Client or user has actual knowledge that the purchase price of the subject property is significantly less than the purchase price of comparable properties, the user and/or Client should try to identify an explanation for the lower price and to make written record of such explanation. The Client did not provide Jacques Whitford with any information pertaining to any purchase price or collateral value reduction.

4.5 Owner, Property Manager, and Occupant Information

Based on research conducted during this investigation, the current owner of Lot 23 is listed as Renewable Resources Inc., which reportedly acquired the subject property in 1992. At the time of Jacques Whitford's inspection, Lot 23 was vacant. Lot 23 has been vacant for over forty years and is not believed to have been "managed" during that time.

4.6 Reason for Performing Phase I ESA

According to information provided by the Client, this Phase I ESA is being conducted to assess if there are any environmental issues associated with the property that the owner will need to address as the property is developed.

4.7 Other Information

Jacques Whitford was not provided with any other additional information from the Client and/or the owner of the subject property.

5.0 RECORDS REVIEW

5.1 Standard Federal Environmental Record Sources

Using software produced and maintained by FirstSearch Technology Corporation (FirstSearch) of Norwood, MA, Jacques Whitford obtained an Environmental FirstSearch™ Report, Jacques Whitford obtained an FirstSearch™ Report, which searches various federal databases, which are presented in the following paragraphs. The FirstSearch™ Report can be found in **Appendix C** of this report.

5.1.1 NPL (National Priority List)

According to the database search results, the subject property is not listed on this database. Furthermore, no properties located within a 1.0-mile radius of the subject property are listed on this database.

5.1.2 CERCLIS (Comprehensive Environmental Response, Compensation, and Liability Information System – Active)

According to the database search results, the subject property is not listed on this database. Furthermore, no properties located within a 0.50-mile radius of the subject property are listed on this database.

5.1.3 CERCLIS-NFRAP (Comprehensive Environmental Response, Compensation, and Liability Information System – No Further Remedial Action Planned)

According to the database search results, the subject property is not listed on this database. Furthermore, no adjoining property to the subject property is listed on this database.

5.1.4 RCRA CORRACTS (Resource Conservation and Recovery Act - Corrective Action Report)

According to the database search results, the subject property is not listed on this database. Furthermore, no properties located within a 1.0-mile radius of the subject property are listed on this database.

5.1.5 RCRIS-TSD (Resource Conservation and Recovery Information System – Treatment, Storage, and Disposal Facilities)

According to the database search results, the subject property is not listed on this database. Furthermore, no properties located within a 0.50-mile radius of the subject property are listed on this database.

5.1.6 RCRIS – LQG and SQG (Resource Conservation and Recovery Information System – Large Quantity Generator and Small Quantity Generator)

According to the database search results, the subject property is not listed on this database. Furthermore, no adjoining property to the subject property is listed on this database.

5.1.7 ERNS (Emergency Response Notification System)

According to the database search results, the subject property is not identified on this database.

5.2 Standard State Environmental Record Sources

Using software produced and maintained by FirstSearch, Jacques Whitford obtained an Environmental FirstSearch™ Report, which searches various state databases, which are presented in the following paragraphs. The Environmental FirstSearch™ Report can be found in **Appendix C** of this report. Where deemed necessary, additional information was obtained from the RIDEM and is notated in the following sections.

5.2.1 SHWS (State Hazardous Waste Sites)

According to the database search results, the subject property is not listed on this database. Furthermore, no properties located within a 1-mile radius of the subject property are listed on this database.

5.2.3 SWF/LF (Solid Waste Facilities/Landfill Sites)

According to the database search results, the subject property is not listed on this database. Furthermore, no properties located within a 0.50-mile radius of the subject property are listed on this database.

5.2.4 LUST (Leaking Underground Storage Tank Facilities)

According to the database search results, the subject property is not listed on this database. Three properties located within a 0.50-mile radius of the subject property are listed on this database. Two of the sites are listed as "SRO- Soil Removal Only" and the other site is listed as inactive. All three sites are located at locations that are not considered upgradeint of the subject property and, therefore, would likely not impact the subject property.

5.2.5 UST (Registered Underground Storage Tank Facilities)

According to the database search results, the subject property is not listed on this database. Furthermore, no adjoining property to the subject property is listed on this database.

5.2.6 SPILLS (Oil & Hazardous Material Response Log/Spill Report)

According to the database search results, the subject property is not listed on this database.

5.3 Database Search Unmappable Properties

Unmappable properties are located in the general vicinity of the subject property. However, due to inaccurate or missing information provided to the database search contractor, from the appropriate governmental/state agency, these properties could not be definitively plotted. Jacques Whitford reviewed the list of unmappable properties in the FirstSearch™ Report, and was able to determine that the subject property was not identified on this unmappable list. Please refer to **Appendix C** to review the FirstSearch™ Report.

5.4 Previous Environmental Site Assessments

Jacques Whitford was not provided with, nor discovered, any previous environmental site assessments conducted at the subject property.

6.0 HISTORICAL USE INFOMRATION ON THE SUBJECT PROPERTY

Jacques Whitford researched historical usage of the subject property by reviewing records from the sources specified in Section 16, conducting interviews of people knowledgeable of the subject property, and conducting a site inspection of interior and exterior portions of the subject property. Pertinent information obtained from the review of these resources is presented in the paragraphs that follow:

6.1 Former Property Owners

Jacques Whitford was not provided with any information from the Client regarding title or ownership records pertaining to the subject property. However, Jacques Whitford reviewed reasonably ascertainable land evidence records at the Westerly Clerk's Office in Westerly Town Hall. Based on a review of these records, it is apparent that there have been many different deeds associated with the subject property. Records indicate that the current owner of Lot 23 is listed as Renewable Resources Inc., which reportedly acquired the subject property in 1992. Please refer to the appended **Table 1** for a listing of reported previous property owners and dates of acquirement, if available.

6.2 Historical Property Usage/Operations

Based on the historical research conducted by Jacques Whitford, it appears as though the subject property was first developed approximately in the mid 1800s as a woolen mill. Available information indicates that the subject property was used for the production wool textiles until approximately the early 1960s. The property appears to have been vacant since that time. Entities that have operated at the subject property include Swift River Woolen Company, Westerly Woolen Company, Potter Hill Woolen Company, and Pawcatuck Woolen Mills

6.3 Historical Use Information on the Adjoining Properties

In an attempt to discover the historical usage of adjoining properties, which may indicate the presence of adverse environmental conditions on, or in close proximity to, the subject property, Jacques Whitford expanded research and review of historical information sources to include suspect adjoining properties. Such tools include, but are not limited to Aerial Photographs, Cole/Polk City Directories, and personal knowledge provided through various conducted interviews.

In summary, it appears that the adjoining properties to the north and northwest have been used for residential uses since at least 1939. Other surrounding properties appear to have been used for agricultural uses until approximately 1962, when the land was allowed to revert to undeveloped woodlands or developed generally for residential uses.

7.0 PHYSICAL SETTING

The location of the subject property is depicted on **Figure 1,** which was developed from the *Ashaway, RI Quadrangle Map.* As can be seen, the average elevation of the subject property is approximately 30 feet above mean sea level. The area of the subject property has a topography that is hilly, with significant hills located to the southeast and southwest.

Jacques Whitford reviewed a United States Department of Agriculture Soil Conservation Service Soil Survey for Rhode Island. Based on a review of this survey, the northern portion of the subject property contains soils that are classified as "RU", defined as Rumney fine sandy loam. This nearly level, poorly drained soil is on flood plains. Slopes range from 0 to 3 percent but are dominantly less than 2 percent. Areas are long and narrow and range mostly from 5 to 30 acres. Typically, the surface layer is very dark grayish brown fine sandy loam about 5 inches thick. The subsoil is dark grayish brown, mottled fine sandy loam 17 inches thick. The substratum is gray and dark grayish brown sand to a depth of 60 inches or more. The permeability of this soil is moderately rapid in the surface layer and subsoil and rapid to very rapid in the substratum. Available water capacity is moderate, and runoff is slow. The soil has a seasonal high water table at a depth of about 6 inches from late fall through spring and is subject to frequent flooding. The soil is very strongly acid through slightly acid.

The southern portion of the subject property contains soils that are classified as "CeC", defined as Canton and Charlton fine sandy loams, very rocky, 3 to 15 percent slopes. These gently sloping to sloping, well drained soils are on side slopes and crests of glacial upland hills and ridges. Stones and boulders cover 2 to 10 percent of the surface, and rock outcrops cover up to 10 percent. Areas are irregular in shape and mostly range from 3 to 250 acres. The mapped acreage of this unit is approximately 50 percent Canton soils, 30 percent Charlton soils, and 20 percent other soils. The areas of this unit consist of either Canton soils or Charlton soils or both. The soils were mapped together because they have no major differences in use and management.

Typically, the Canton soils have a surface layer of very dark grayish brown fine sandy loam about 3 inches thick. The subsoil is dark yellowish brown, yellowish brown, and light olive brown fine sandy loam 19 inches thick. The substratum is olive gray gravelly loamy sand to a depth of 60 inches or more. Typically, the Charlton soils have a surface layer of very dark brown fine sandy loam about 2 inches thick. The subsoil is 25 inches thick. The upper 15 inches is dark yellowish brown fine sandy loam, and the lower 10 inches is yellowish brown gravelly sandy loam. The substratum is light brownish gray gravelly sandy loam to a depth of 60 inches or more.

Included with these soils in mapping are small areas of somewhat excessively drained Gloucester soils, well drained Paxton and Narragansett soils, and moderately well drained Sutton soils. Also included are small areas of soils that have slopes of more than 15 percent, small areas of soils where more than 10 percent of the surface is stony, and areas where bedrock is less than 40 inches from the surface.

The permeability of the Canton soils is moderately rapid in the surface layer and subsoil and rapid in the substratum. Available water capacity is moderate, and runoff is medium. This soil is extremely acid through strongly acid. The permeability of the Charlton soils is moderate to moderately rapid. Available water capacity is moderate, and runoff is medium. This soil is very strongly acid through medium acid.

Most areas of these soils are in woodland, and the soil is suited to trees. A small acreage is cleared and used for pasture. These soils are suitable for community development but are limited by stoniness, bedrock outcrops, and slope. Onsite sewage disposal systems need careful design and installation to prevent effluent from seeping to the surface. Stones and boulders need to be removed for landscaping. The use of straw bale sediment barriers, siltation basins, and temporary

diversions and quickly establishing plant cover help to control erosion during construction. Stones and rock outcrops make these soils unsuitable for cultivated crops and severely hinder the use of farming equipment.

According to the Bedrock Geologic Map of Rhode Island, Rhode Island Map Series No. 1, dated 1994, the area of the subject property lies within the rocks that are part of the Sterling Igneous Suite, and mapped as "Zsgg", which is defined as granite gneiss. This consists of pale-pink to gray medium-grained granite gneiss commonly with small porphyroclasts of microcline/orthoclase. Similar to alaskite gneiss, but with more than 3 % dark minerals. Compositions range from quartz monzonite to granite. Composed of sodic plagioclase quartz microline, biotite, opaque minerals; minor muscovite common; garnet more rare; accessory apatite and zircon; sphene present in some rocks; secondary chlorite. Typically is compositionally homogeneous, with strong foliation and locally well developed lineation defined by major minerals. Includes some rock mapped formerly as Ten Rod Granite Gneiss, Hope Valley Alaskite Gneiss, Potter Hill Granite Gneiss, and Scituate Granite Gneiss.

Review of the RIDEM Groundwater Zoning Map reveals that the subject property's area is located in a "GA" groundwater classification zone. This classification of groundwater is defined as "groundwater that may be suitable for public or private drinking water without treatment".

Review of the RIDEM's Groundwater Wellhead Protection Area Map reveals that the subject property is not located within a wellhead protection area. The closest wellhead protection area is located approximately 250 feet to the northeast of the subject property.

Based on visual observations, the depth to groundwater in the area of the subject property is estimated to be 10 to 15 feet below grade. Groundwater flow direction is expected to be towards the Pawcatuck River, although this can only be verified by conducting a subsurface investigation and associated hydrological survey.

The closest surface water body to the subject property is the Pawcatuck River that abuts the subject property to the east and north.

According to the FEMA Flood Insurance Map for Westerly, Rhode Island, Community Panel Number 4400240010B, dated January 2, 1981, most of the subject property is located in a Zone A flood zone, defined as areas located within the 100-year flood plain. The Zone A flood zone is associated with the Pawcatuck River.

8.0 SITE RECONNAISSANCE

The objective of the site reconnaissance was to identify recognized environmental conditions at, or in the immediate vicinity of, the subject property by means of a visual surficial inspection. Joseph T. Unsworth, P.E. and Robert Snyder conducted this visual reconnaissance of exterior portions of the subject property on Monday, February 27, 2006. Jacques Whitford's reconnaissance consisted of a systematic traverse of the subject property to provide a view of improvements, facilities, and grounds on the subject property. Photographs taken during the site inspection are presented in **Appendix 1**.

8.1 Methodology and Limiting Conditions

The methodology used to perform this ESA is consistent with those specified in the ASTM Designation: *E 1527-00, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process.* Information obtained and presented in this report from interviews conducted by Jacques Whitford of individuals listed in Section 8.0, is limited by the

quality, accuracy, and depth of responses give to Jacques Whitford. Furthermore, Jacques Whitford's visual and physical inspection of exterior characteristics of the subject property is limited, in some instances, by physical obstructions such as parked vehicles, leaves, snow, stored equipment, and other immovable objects. Other assumptions, limitations, and/or exclusions are documented in Sections 2.3 and 2.4.

8.2 General Site Setting

Based on Town records and visual observations, the subject property consists of one lot (see **Figures 1**). The area of the subject property has a topography that is hilly, with significant hills to the southeast and southwest. Lot 23 is not bound by any roads. Access to the subject property is from Potter Hill Road via a driveway that runs across the southeastern part of Lot 24 and onto the southern part of the subject property (see **Figure 2**). Potter Hill Road is a two-laned, two-directional roads maintained by the Town of Westerly. Jacques Whitford attempted to observe the land and improvements of adjoining properties to the subject property, from the subject property and from accessible public rights-of-way. Based on these observations, it is apparent that the general area of the subject property is a moderately developed area in the north central portion of Westerly, with Hopkinton, RI abutting the subject property to the east, and North Stonington, CT abutting the subject property to the northwest. The subject property is located in a moderately developed area with predominately residential, agricultural, and some commercial properties. According to the most recent Westerly Zoning Map, Lots 23 is located in an area zoned "RR-60", defined as Rural Residential with a minimal lot size of 60,000 square feet. **Figure 2** is a Site Plan sketch based on the observations made during the site visit.

8.3 Exterior Observations

Jacques Whitford conducted a visual and olfactory inspection of the exterior areas of the subject property by traversing the subject property in a grid-like pattern to cover the entire area of the subject property. The following paragraphs describe the observations made during the exterior inspection. It should be noted that because of the report format structure of this report, observations made in the following paragraphs actually might pertain to interior observations, which will be indicated, if applicable.

8.3.1 Aboveground Storage Tanks (ASTs)

One potential AST was observed in the in the northwest corner of the subject property. The potential AST appeared to be steel and rusted. The potential AST was located on the ground on the western property boundary. There were no liquids in the potential AST. There was no evidence of a release from the potential AST. A photograph of the potential AST is contained in **Appendix A**.

8.3.2 Underground Storage Tanks (USTs)

No evidence of USTs was observed on the subject property.

8.3.3 Indications of Solid Waste Disposal

Jacques Whitford did observe several areas of debris. Debris was located near the western side of the building near the foundations of former site buildings and other various areas. One pile of debris was observed in the northwest part of the subject property. The debris near the former foundations consisted primarily of wood and metal. Most of the debris pile was covered with soil. Observed debris included metal, wood, and steel drums. Refer to the pictures contained in

Appendix A for photographs of some of the debris observed. Also, an abandoned automobile was observed near the former boiler building.

8.3.4 Hazardous Substances in Connection with Identified Uses

The only containers observed on the exterior of the subject property by Jacques Whitford were the steel drums near the debris pile in the northwestern portion of the subject property. The unlabelled drums all were rusted and did not contain any liquids. Some drums were intact and some were not. No odors or other evidence of a release was observed from any of the drums. Approximately five automobile batteries were observed on the ground next to the building located west of the former boiler building. The batteries appeared to be intact with no evidence of a release observed.

8.3.5 Stressed Vegetation

Jacques Whitford did not observe any areas of stressed vegetation at the subject property.

8.3.6 Stained Soil or Pavement

No stained soil or pavement was observed on the subject property.

8.3.7 Pits, Ponds, or Lagoons

Jacques Whitford did not observe any pits, ponds, or lagoons associated with the subject property.

8.3.8 Odors

Jacques Whitford did not encounter any unusual odors during the site inspection of the subject property.

8.3.9 Pools of Liquid

Jacques Whitford did not visually observe any unidentified pools of the liquid on the subject property.

8.4 Interior Observations

Jacques Whitford conducted a visual and olfactory inspection of portions of the interior areas of the subject property. Several areas of the subject property could not be observed due to debris from collapsed roofs and/or unsafe floors due to deterioration and damage. The following paragraphs describe the observations made during the interior inspection. It should be noted that because of the report format structure of this report, observations made in the following paragraphs actually might pertain to exterior observations, which will be indicated, if applicable.

8.4.1 Unidentified Substance Containers

Jacques Whitford did not observe any unidentified substance containers during the inspection.

8.4.2 Discharge Features

The only discharge feature observed by Jacques Whitford was a pit in the floor of the building to the north of the former boiling building. Based on an observed hole in the side of the of the pit, this pit appears to discharge directly to the Pawcatuck River. No odors or staining were observed in the pit.

8.4.3 Polychlorinated Biphenyls (PCBs)

PCBs are a family of man-made chemicals that contain 209 individual compounds with varying toxicity. Commercial formulations of PCBs enter the environment as mixtures consisting of a variety of PCBs and impurities. Some commercial PCB mixtures are known in the United States by their industrial trade name, Aroclor. Due to their insulating and nonflammable properties, PCBs have been used widely as coolants and lubricants in transformers, capacitors, and other electrical equipment. PCBs have also been found in window caulking and other building applications. The manufacture of PCBs stopped in the United States in October 1977 because of evidence that PCBs accumulate in the environment and may cause health hazards for humans. Jacques Whitford did not observe any potential PCB containing equipment with the exception of the electrical panel associated with the elevator in the main building.

8.4.4 Asbestos Containing Materials (ACM)

Asbestos is the name for a group of naturally-occurring silicate minerals that can be separated into fibers. The fibers are strong, durable, and resistant to heat and fire. They are also long, thin, and flexible, so that they can even be woven into cloth. Due to these qualities, asbestos has been used in thousands of consumer, industrial, maritime, automotive, scientific, and building products. During the twentieth century, some 30 million tons of asbestos have been used in industrial sites, homes, schools, shipyards, and commercial buildings in the United States. Common ACMs included pipe-covering, insulating cement, insulating block, refractory and boiler insulation materials, transite board, fireproofing spray, joint compound, vinyl floor tile, ceiling tile, mastics (glue), roofing products, and duct insulation for HVAC applications. Inhalation of asbestos fibers can result in deleterious health effects.

For buildings constructed prior to 1980, the year ACM were banned, interested parties should assume that building materials such as vinyl floor tiling and mastics, acoustical ceiling tiles, roofing materials, cove-base molding, joint and window compounds, flexible fabric ductwork connectors, fire doors, electrical cable coverings, etc. contain asbestos unless proven by laboratory analysis or otherwise. Due to age of the buildings, it is possible that ACM exist in the buildings.

8.4.5 Lead-Based Paint (LBP)

Many houses, apartments, and other buildings built before 1978 have paint that contains lead (called lead-based paint). Lead from paint, chips, and dust can pose serious health hazards if not taken care of properly. Lead exposure is one of the most common preventable poisonings of childhood. It is estimated that one out of every six children in the United States, or a total of over three million children, have blood levels in the toxic range. Lead is a potent poison that can affect individuals at any age. Children with developing bodies are especially vulnerable because their rapidly developing nervous systems are particularly sensitive to the effects of lead.

Due to the age of the subject property buildings, it is possible that lead-based paint was utilized within the buildings. Jacques Whitford observed the majority of painted surfaces to be in very poor condition.

9.0 INTERVIEWS

9.1 Interview with Owner

Dr. Edward Caprapezza, current property owner, was present during Jacques Whitford's site reconnaissance. Comments considered noteworthy by Dr. Caprapezza have been included in the relevant sections of this report. In summary Dr. Carapezza stated that the site has been vacant since the 1960s, was serviced by an onsite well, and discharged all waste to the Pawcatuck River.

9.2 Interview with Manager of the Subject Property

The subject property is vacant and there was no manager of the subject property.

9.3 Interview with Occupants

The subject property is vacant and therefore, there are no occupants.

9.4 Interview with Local Government Officials

Interviews with local government officials included personnel of the Westerly Tax Assessor's Office, the Westerly Fire Department, and the Westerly Building Department. Comments considered noteworthy by these individuals have been included in the relevant sections of this report.

9.5 Interview with Others

No other individuals were interviewed during the course of this investigation.

10.0 FINDINGS

Based on Jacques Whitford's research and observations of the subject property and its surrounding area, Jacques Whitford has discovered potential recognized environmental conditions and/or environmental business risks, which are summarized in the following bulleted paragraphs:

- Asbestos containing materials may exist in the buildings.
- Painted surfaces were observed to be in poor condition and may contain lead based paint.
- The subject property is not served by municipal sewers. Records available from the Town of Westerly indicate that the subject property utilizes a septic system. However, according to the current property owner, all wastewater was believed to be discharged directly to the adjacent Pawcatuck River.
- Coal may have been used for fuel on the subject property.
- An area of dumping was observed in the north western part of the subject property. Miscellaneous debris was observed, including several rusted and unlabelled 55 gallon drums. None of the drums contained any liquid and were rusted.
- Former buildings at the subject property appear to have been demolished on the subject property.
- Significant water damage was observed on ceiling and floors of a majority of thethe buildings.

11.0 OPINION

Based on the noted recognized environmental conditions, Jacques Whitford believes there is a **Low** to **Moderate** risk of potential liability associated with the subject property. This opinion is based on observations and historic information indicate that the subject property has been used for industrial uses. An onsite septic system may have been used for the disposal of sanitary waste and process wastewater. Additionally, the there may be asbestos and lead based paint in the buildings. Other potential liabilities include PCB and/or mercury containing materials and mold growth resulting from the extensive water intrusion. Soils and groundwater at the subject property may have been impacted from improper disposal of hazardous materials and/or petroleum products, demolition of former structures, and the use and storage of coal.

12.0 CONCLUSIONS

Jacques Whitford has performed a Phase I ESA in conformance with the scope and limitations of ASTM Practice E 1527-00, on the property located and identified as Lot 23 on Westerly Tax Assessor's Plat Map 8. Any exceptions to, or deletions from, this practice is described in Sections 2.3 and 2.4 of this report. This assessment has revealed recognized environmental conditions in connection with the subject property, as listed in **Section 9, Findings**, of this report. Based on the noted recognized environmental conditions, Jacques Whitford has formulated the opinion stated in **Section 10.0, Opinion**, of this report.

Based on the noted Findings and Opinions obtained and developed for this report, Jacques Whitford believes that further environmental investigation is warranted on the subject property. Based on the information obtained as part of the Phase I ESA and observations made during the investigation, additional investigations are recommended. Specifically, the following are recommended:

- Completion of a Phase II ESA to assess the extent of impacts to soil and groundwater at the subject property. The Phase II ESA should include the completion of test pits in the area of the observed dumping and areas of potential coal storage. Also, unless it can be determined that a septic system did not exist at the subject property, soils borings should be completed and monitoring wells installed to assess impacts from the potential septic system.

- Prior to any demolition and/or renovations, an asbestos survey and pain chip sampling should be completed for all buildings on the subject property.

- A hazardous material disposal contractor should be hired to remove and dispose of all PCB and mercury containing materials (if any) in the buildings.

- All debris piles should be removed from the subject property and disposed of at appropriate disposal facilities.

- Since the buildings will required either demolition or extensive rehabilitations, Jacques Whitford does not recommend a mold survey at this time.

13.0 DEVIATIONS

All deletions, deviations, and/or additions from the Standard Practice E 1527-00 pertaining to this subject property and associated report, are described in Sections 2.2.3 and 2.2.4 of this report.

14.0 ADDITIONAL SERVICES

No other additional services were requested by the Client and are therefore not provided as part of this Phase I ESA report.

15.0 SIGNATURE(S) OF ENVIRONMENTAL PROFESSIONAL(S)

Joseph T. Unsworth
Project Manager

Date

Vincent L. Jacques, P.E.
Senior Reviewer

Date

16.0 QUALIFICATION(S) OF ENVIRONMENTAL PROFESSIONAL(S)

Please see resume(s) contained in **Appendix 6**.

17.0 REFERENCES

Interviews

Westerly Tax Assessor Personnel, February 27, 2006

Westerly Building Department Personnel, February 27, 2006

Westerly Fire Department Personnel, February 27, 2006

Dr. Edward Carapezza, February 27, 2006

Resources Consulted

Federal Environmental Databases/Source

National Priority List (NPL), EPA

Comprehensive Environmental Response, Compensation, and Liability Information System – Active (CERCLIS), EPA

Comprehensive Environmental Response, Compensation, and Liability Information System – No Further Remedial Action Planned (CERCLIS-NFRAP), EPA

Resource Conservation and Recovery Act - Corrective Action Report (RCRA CORRACTS), EPA

Resource Conservation and Recovery Information System – Treatment, Storage, and Disposal Facilities (RCRIS-TSD), EPA

Resource Conservation and Recovery Information System – Large Quantity Generator and Small Quantity Generator (RCRIS – LQG and SQG), EPA

Emergency Response Notification System (ERNS), EPA

State Environmental Databases/Source/Last EDR Contact Date

State Hazardous Waste Sites (SHWS), RIDEM

Solid Waste Facilities/Landfill Sites (SWF/LF), RIDEM

Leaking Underground Storage Tank Facilities (LUST), RIDEM

Registered Underground Storage Tank Facilities (UST), RIDEM

Oil & Hazardous Material Response Log/Spill Report (SPILLS), RIDEM

Agencies Consulted

Rhode Island Department of Environmental Management (RIDEM), Providence, Rhode Island

Westerly Library, Westerly, Rhode Island

Other Resources

Ashaway, Rhode Island Quadrangle Topographic Map developed by the United States Geologic Survey and retrieved from Topozone.com

Soil Survey of Rhode Island developed by the United States Department of Agriculture Soil Conservation Service and the Rhode Island Agricultural Experiment Station, issued July 1981

Wellhead Protection Areas developed by the Rhode Island Department of Environmental Management, issued 1991

Groundwater Classification Areas developed by the Rhode Island Department of Environmental Management, issued 1991

Bedrock Geologic Map of Rhode Island, Rhode Island Map Series No. 1, compiled by O.D. Hermes, L.P. Gromet, D.P. Murray and Assisted by N.A. Hamidzada, issued 1994

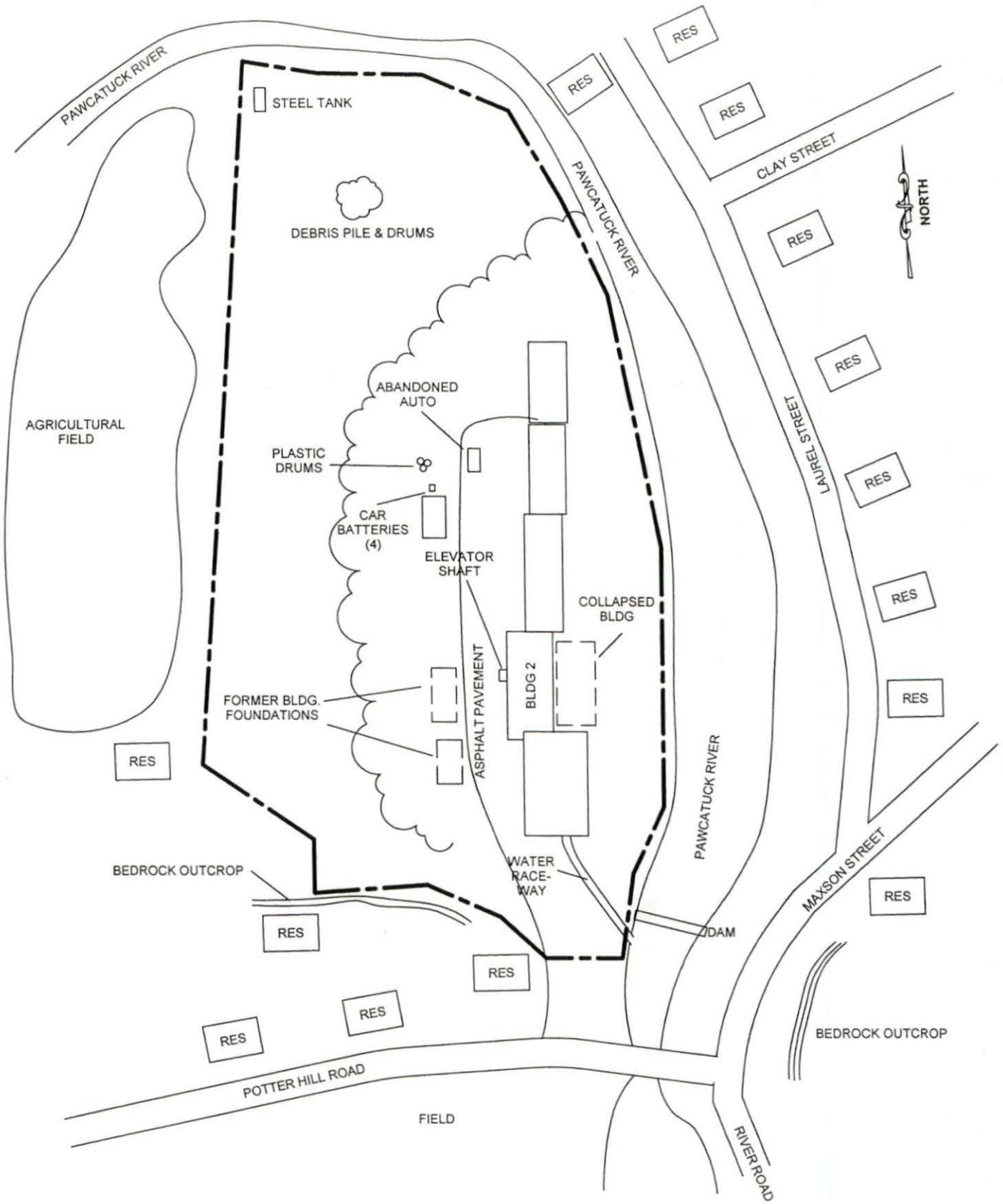
Flood Insurance Rate Map (FIRM) developed by the Federal Emergency Management Agency and the Federal Insurance Administration, dated 1982



SOURCE: USGS TOPOGRAPHIC MAP 1984

Jacques Whitford Company, Inc.

JACQUES WHITFORD LOCATION: LINCOLN, RI	BASEMAP SOURCE: ASHAWAY QUAD	NORTH	DRAWING TITLE: SITE LOCATION MAP POTTER HILL ROAD WESTERLY, RI
DATE PREPARED: 2-14-06 / PREPARED BY: MJB	APPROXIMATE SCALE: 1:24,000		
PROJECT NAME/FILE NAME: MILL BLDG./LOCUS	PROJECT NUMBER/PHASE: 1009825.		PREPARED FOR: RENEWABLE RESOURCES FIGURE NO. 1



Jacques Whitford Company, Inc.

JACQUES WHITFORD LOCATION: 24 ALBION ROAD, SUITE 220, LINCOLN, RI					DRAWING TITLE: **SITE PLAN** 198 POTTER HILL ROAD WESTERLY, RI
DATE PREPARED: 3-8-06	DESIGNED BY: JTU	DRAWN BY: WL	CHECKED BY: VLJ	REVIEWED BY: JTU	
REVISION DATE:	REVISION NO:	DRAWN BY:	CHECKED BY:	REVIEWED BY:	
PROJECT NAME/FILE NAME: 198 POTTER HILL		PROJECT NUMBER/PHASE: 1009825	SCALE: NTS		PREPARED FOR: Renewable Resources Inc.

FIGURE NO. 2

Table 1: Chain-of-Ownership Summary

Date	Owner	Book/Page
Plat Map 8, Lot 23		
10/08/1992	Renewable Resources	432/53
8/15/1955	Helen E. Cottrell	74/354
5/6/1930	Swift River Woolen Co.	53/443
3/12/1930	Fredrick T. Lawrence	53/190

Table 2: Adjoining Properties Summary

Plat/Lot	Current Owner	Observed Usage/Occupants
8/24	Allison B. Goodsell	residential
8/18	Lloyd & Ann Baker	residential
8/22	Dale Ann Edwards	residential

APPENDIX A

Photographs

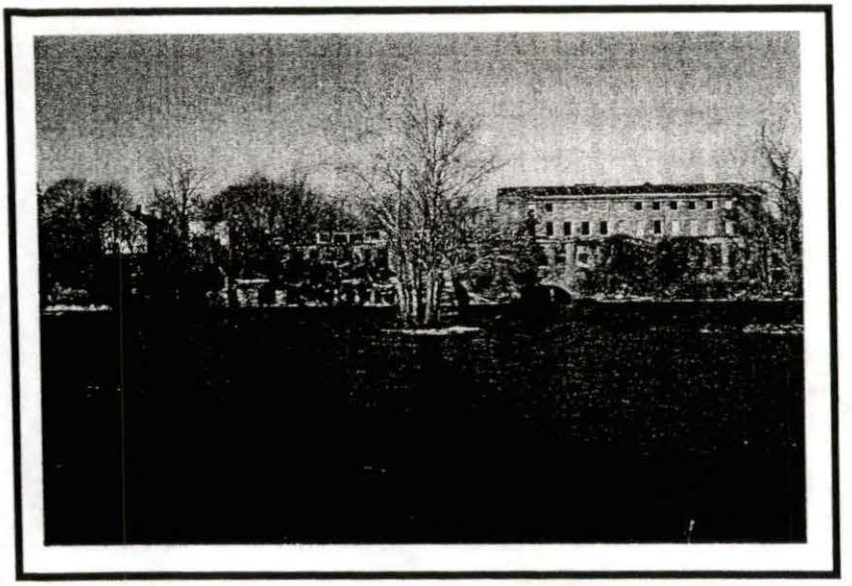


Photo 1
A view of the subject property building looking west from across the Pawcatuck River.

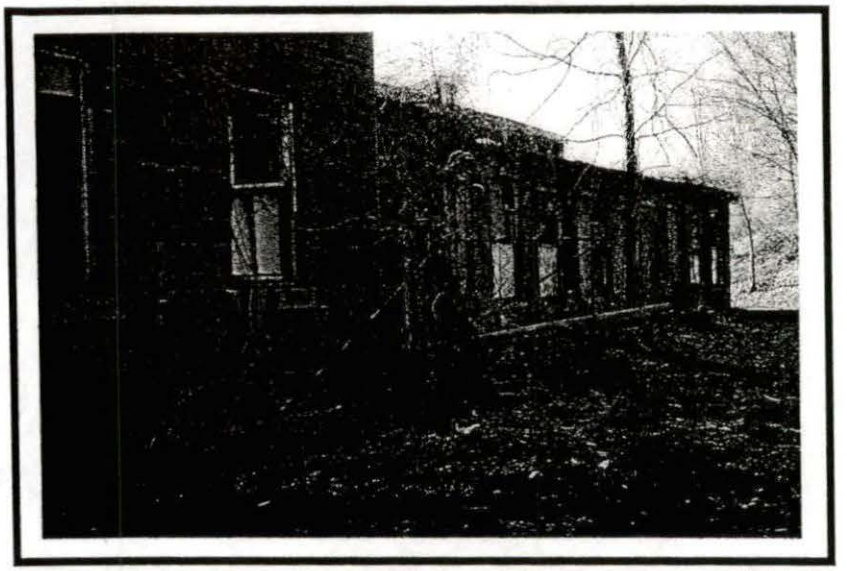


Photo 2
A view of the southwestern part of the subject property buildings.



Photo 3
A view of the western side of the main building.



Photo 4
A view of the northwest part of the subject property buildings.



Photo 5
A view of the building located to the west of the former boiler building.

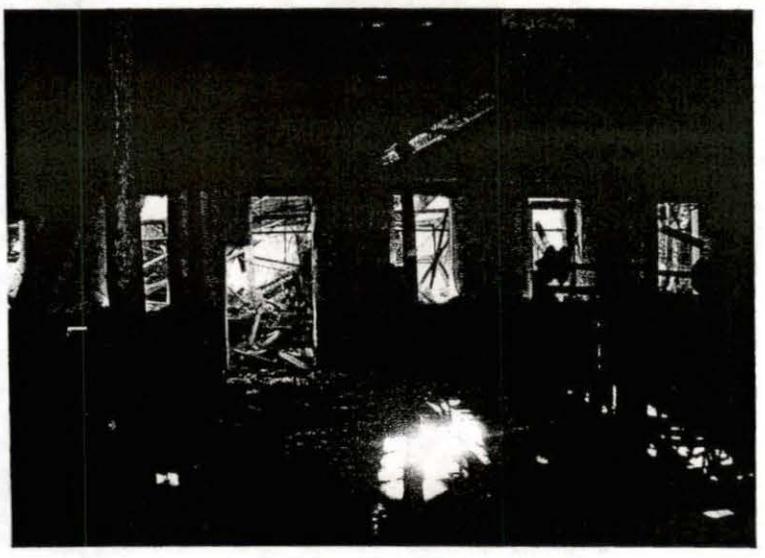


Photo 6
A view of first floor of main building.

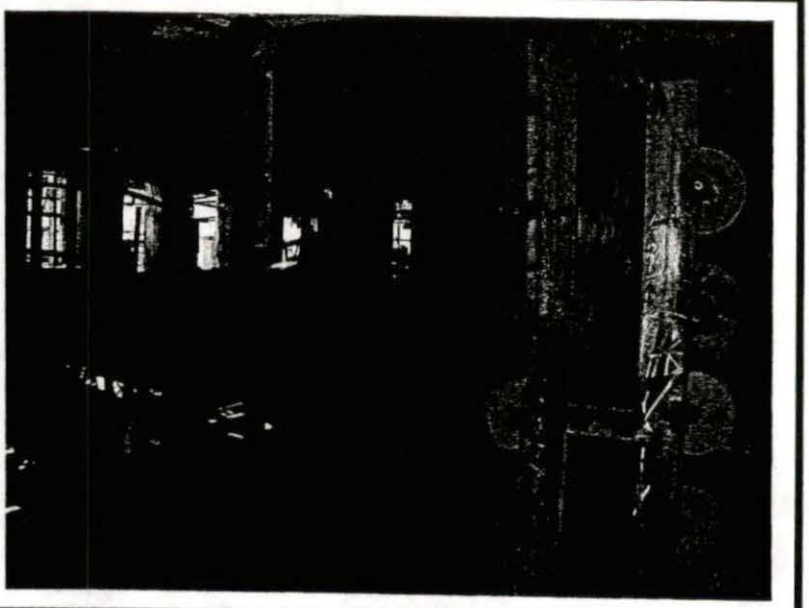


Photo 7
A view of second floor of main building.

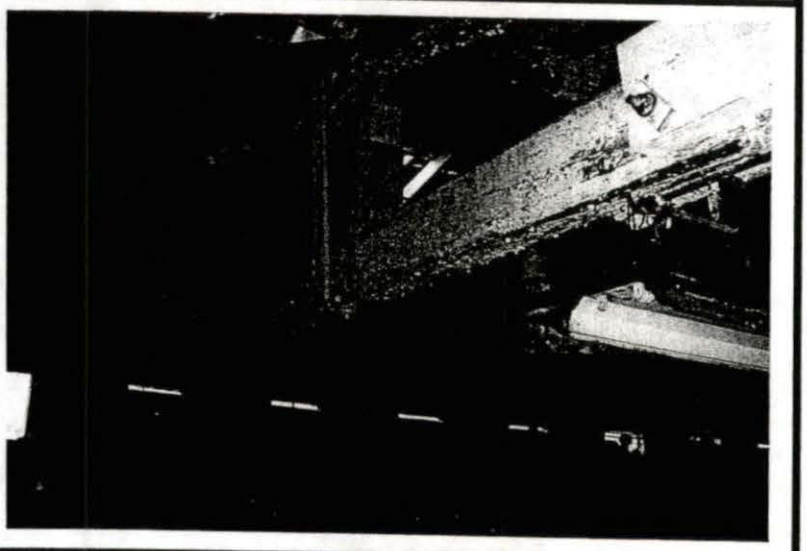


Photo 8
A view of the roof of main building.



Photo 9
A view of southern most building.

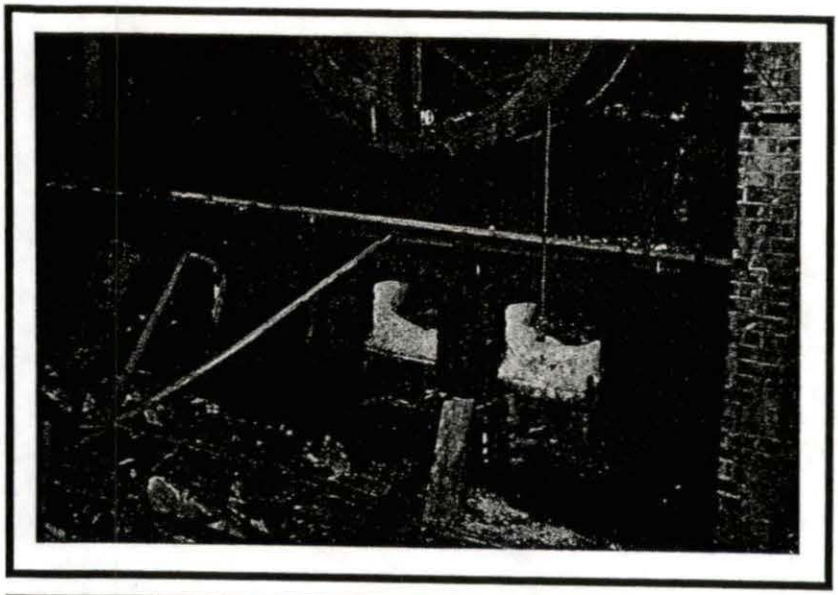


Photo 10
A view of boilers in former boiler building.

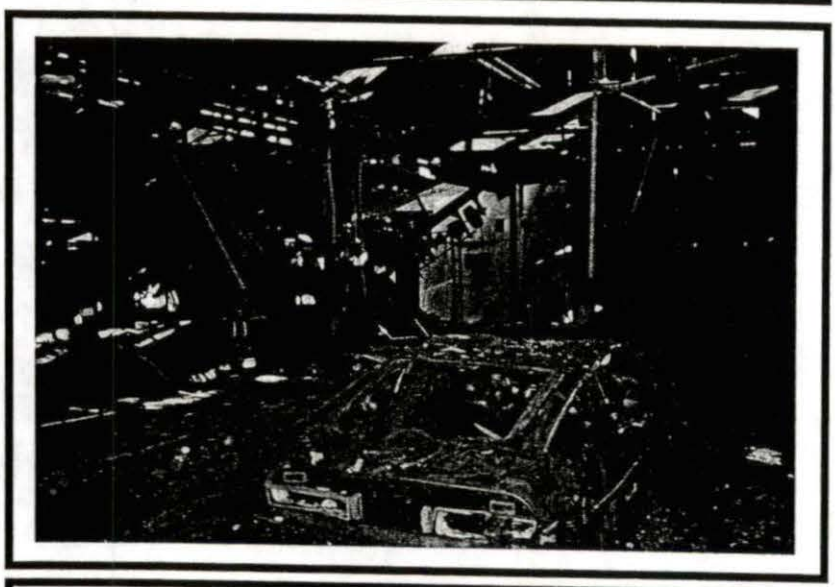


Photo 11
A view of the building north of the former boiler building.

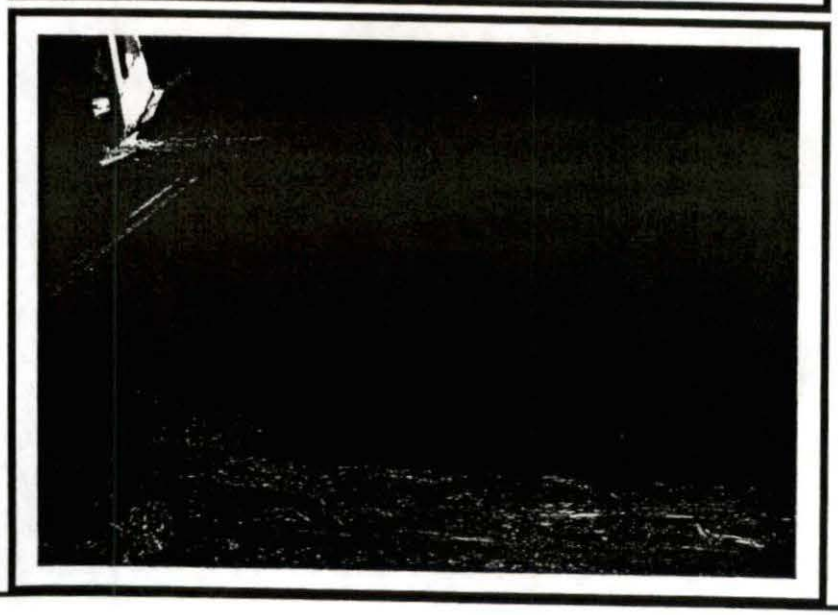


Photo 12
A view of pit in floor of building north of the former boiler building.



Photo 13
A view of debris on top of foundation of former building, west of main building.



Photo 14
A view of the buried debris and drums in the northwest part of the subject property.

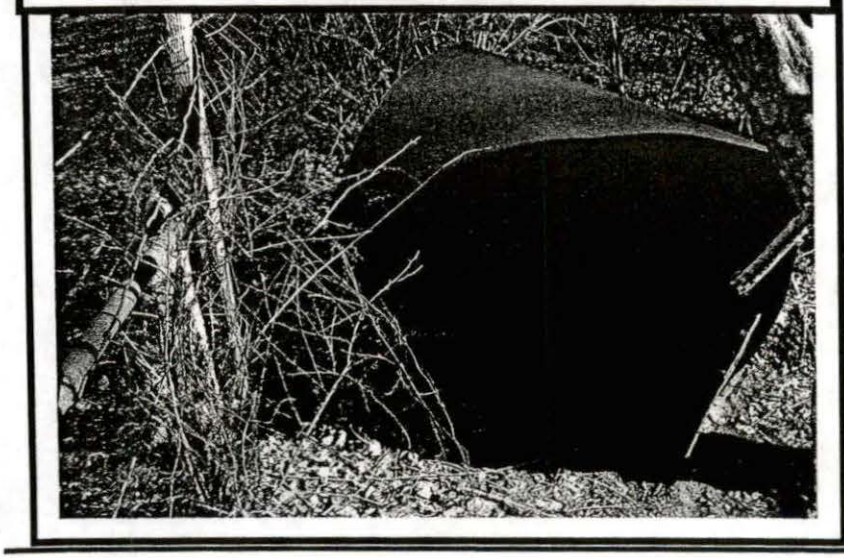


Photo 15
Potential tank located on the northwestern subject property boundary.



Photo 16
A view of cut plastic drums.



Photo 17
A view of automobile batteries adjacent to building located west of former boiler building.

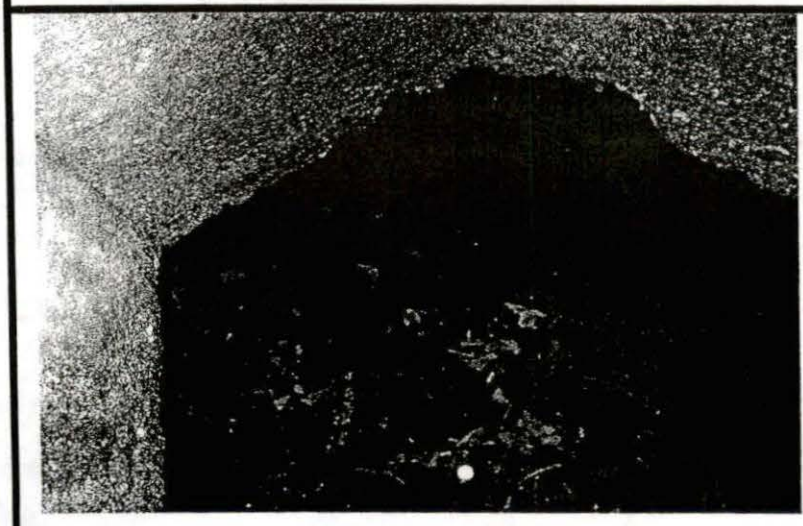


Photo 18
A view of valve in ground (typical).

APPENDIX B

Historical Research Documentation

EDR® Environmental
Data Resources Inc

"Linking Technology with Tradition"®

Sanborn® Map Report

Ship To: Melissa Jacques-Bibeault
Jacques Whitford, Inc.
24 Albion Road
lincoln, RI 02865

Order Date: 2/13/2006 **Completion Date:** 2/15/2006
Inquiry #: 1612788.1s
P.O. #: na
Site Name: Potter Hill Road
Address: Potter Hill Road
City/State: Westerly, RI 02891
Cross Streets:

Customer Project:
1012696EDR 781-551-0470

This document reports that the largest and most complete collection of Sanborn fire insurance maps has been reviewed based on client supplied information, and fire insurance maps depicting the target property at the specified address were not identified.

NO COVERAGE

NOTE: The reseller MUST deliver this report in its entirety to its client.

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT. Purchaser accepts this Report AS IS. Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

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2003 Aerial Photograph


1997 Aerial Photograph



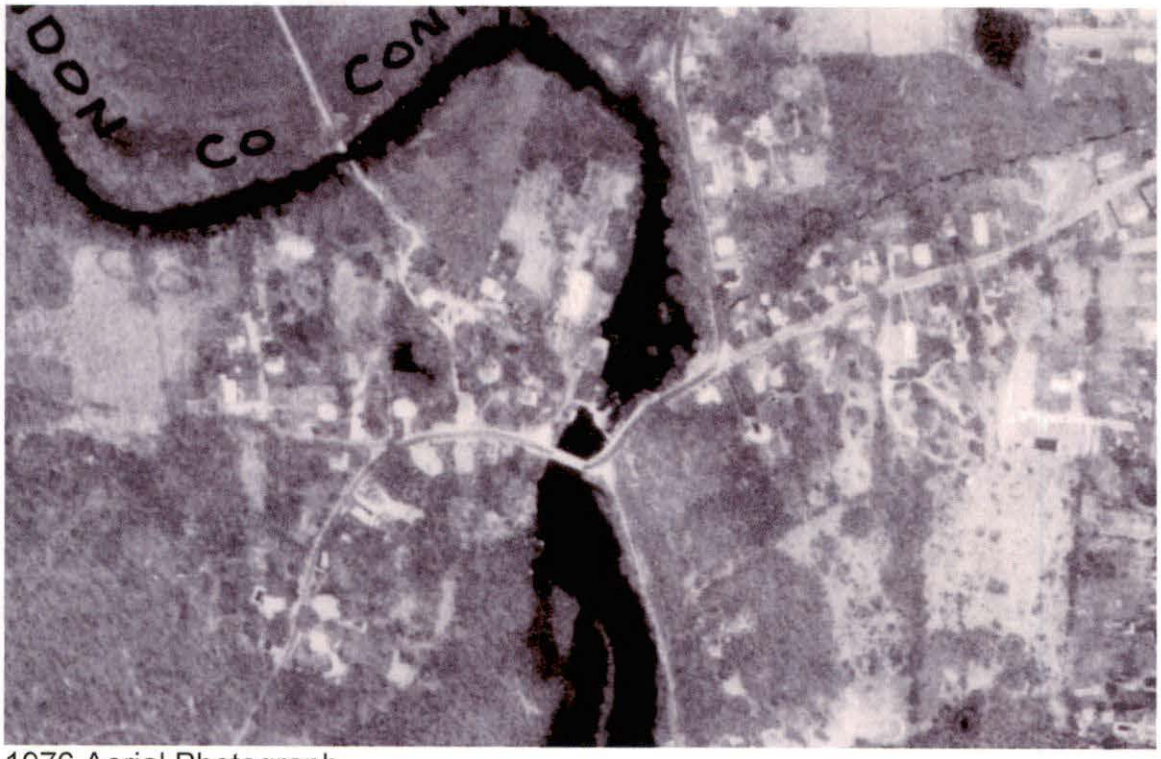
1992 Aerial Photograph



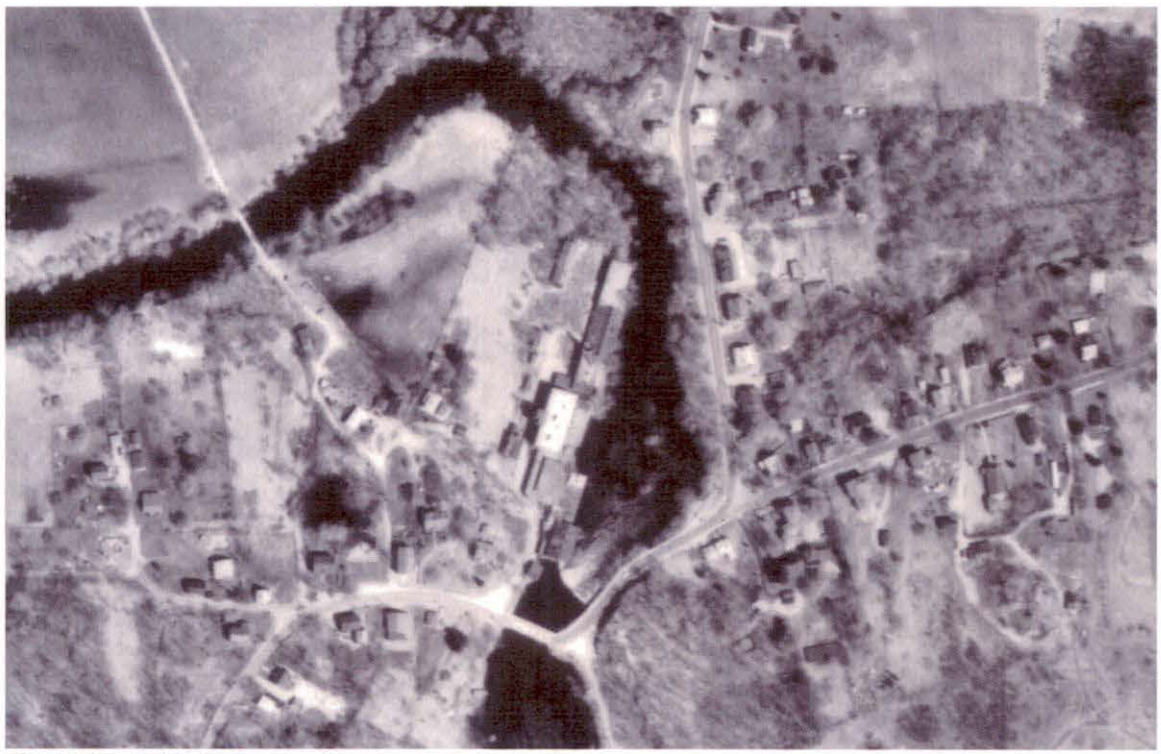
1988 Aerial Photograph



1981 Aerial Photograph



1976 Aerial Photograph



1972 Aerial Photograph



1962 Aerial Photograph



1951-52 Aerial Photograph



1939 Aerial Photograph

APPENDIX C

Regualatory Records Documentation

FirstSearch Technology Corporation

Environmental FirstSearch™ Report

TARGET PROPERTY:

POTTER HILL ROAD

WESTERLY RI 02891

Job Number: 1009825.

PREPARED FOR:

Jacques Whitford, Inc.

24 Albion Road, Suite 220

Lincoln, RI 02865

02-10-06

Tel: (781) 551-0470 *Fax: (781) 551-0471*

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Environmental FirstSearch
Search Summary Report

Target Site: POTTER HILL ROAD
WESTERLY RI 02891

FirstSearch Summary

Database	Sel	Updated	Radius	Site	1/8	1/4	1/2	1/2>	ZIP	TOTALS
NPL	Y	01-13-06	1.00	0	0	0	0	0	0	0
CERCLIS	Y	01-13-06	0.50	0	0	0	0	-	1	1
NFRAP	Y	08-01-05	0.25	0	0	0	-	-	0	0
RCRA TSD	Y	09-22-05	0.50	0	0	0	0	-	0	0
RCRA COR	Y	12-10-05	1.00	0	0	0	0	0	0	0
RCRA GEN	Y	12-10-05	0.25	0	0	0	-	-	2	2
ERNS	Y	12-31-05	0.25	0	0	1	-	-	5	6
FINDS	Y	09-12-05	0.25	0	0	0	-	-	36	36
State Sites	Y	10-04-05	1.00	0	0	0	0	0	4	4
Spills-1990	Y	01-04-01	0.25	0	0	1	-	-	92	93
SWL	Y	04-06-05	0.50	0	0	0	0	-	1	1
REG UST/AST	Y	11-28-05	0.25	0	0	0	-	-	10	10
Leaking UST	Y	10-04-05	0.50	0	0	0	3	-	7	10
- TOTALS -				0	0	2	3	0	158	163

Notice of Disclaimer

Due to the limitations, constraints, inaccuracies and incompleteness of government information and computer mapping data currently available to FirstSearch Technology Corp., certain conventions have been utilized in preparing the locations of all federal, state and local agency sites residing in FirstSearch Technology Corp.'s databases. All EPA NPL and state landfill sites are depicted by a rectangle approximating their location and size. The boundaries of the rectangles represent the eastern and western most longitudes; the northern and southern most latitudes. As such, the mapped areas may exceed the actual areas and do not represent the actual boundaries of these properties. All other sites are depicted by a point representing their approximate address location and make no attempt to represent the actual areas of the associated property. Actual boundaries and locations of individual properties can be found in the files residing at the agency responsible for such information.

Waiver of Liability

Although FirstSearch Technology Corp. uses its best efforts to research the actual location of each site, FirstSearch Technology Corp. does not and can not warrant the accuracy of these sites with regard to exact location and size. All authorized users of FirstSearch Technology Corp.'s services proceeding are signifying an understanding of FirstSearch Technology Corp.'s searching and mapping conventions, and agree to waive any and all liability claims associated with search and map results showing incomplete and or inaccurate site locations.

Environmental FirstSearch
Site Information Report

Request Date:	02-10-06	**Search Type:**	COORD
Requestor Name:	Melissa Jacques-Bibeault	**Job Number:**	1009825.
Standard:	ASTM		

TARGET ADDRESS: POTTER HILL ROAD
WESTERLY RI 02891

Demographics

Sites:	163	**Non-Geocoded:**	158	**Population:**	NA
Radon:	0.7 - 7.7 PCI/L				

Site Location

	Degrees (Decimal)	**Degrees (Min/Sec)**		**UTMs**
Longitude:	-71.797	-71:47:49	**Easting:**	266230.455
Latitude:	41.4147	41:24:53	**Northing:**	4588357.863
			Zone:	19

Comment

Comment:FORMER PAWCATUCK WOOLEN MILLS

Additional Requests/Services

Adjacent ZIP Codes: 1 Mile(s)

ZIP Code	City Name	ST	Dist/Dir	Sel
02804	ASHAWAY	RI	0.00 --	Y
06359	NORTH STONINGTON	CT	0.14 NW	Y

Services:

	Requested?	Date
Sanborns	Yes	02-10-06
Aerial Photographs	No	
Historical Topos	No	
City Directories	No	
Title Search	No	
Municipal Reports	No	
Online Topos	No	

Environmental FirstSearch
Sites Summary Report

TARGET SITE: POTTER HILL ROAD
WESTERLY RI 02891

JOB: 1009825.
FORMER PAWCATUCK WOOLEN MILLS

TOTAL: 163 **GEOCODED:** 5 **NON GEOCODED:** 158 **SELECTED:** 0

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	Page No.
1	ERNS	H30743/FIX FAC	70A LAUREL DR. ASHWAY RI 02804	0.17 NE	1
3	SPILLS	64 LAUREL ST 00-078	64 LAUREL ST HOPKINTON RI 02833	0.23 NE	1
4	LUST	KENYON S VARIETY 1402-LS/SRO - SOIL REMOVAL O	ROUTE 3 AND MAXON ST. HOPKINTON RI 02833	0.32 NE	2
5	LUST	IMPERIAL HOME D+COR 1414-LS/SRO - SOIL REMOVAL O	50 CHASE HILL ROAD HOPKINTON RI 02833	0.35 NE	2
2	LUST	HENDEL CHEVRON 1401-LS/I - INACTIVE	ROUTE 3 POLE 867 HOPKINTON RI 02832	0.36 SE	2

Environmental FirstSearch
Sites Summary Report

TARGET SITE: POTTER HILL ROAD
WESTERLY RI 02891

JOB: 1009825.
FORMER PAWCATUCK WOOLEN MILLS

TOTAL: 163 **GEOCODED:** 5 **NON GEOCODED:** 158 **SELECTED:** 0

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	Page No.
	CERCLIS	WESTERLY DRUMS RI0690390026/NOT PROPOSED	WESTERLY RI 02891	NON GC	N/A
	ERNS	UNKNOWN 224058/UNKNOWN (NRC)	PAWCATUCK RIVER WESTERLY RI 02891	NON GC	N/A
	ERNS	442632/UNKNOWN	BRADFORD FISHING AREA RTE 2 WESTERLY RI 02891	NON GC	N/A
	ERNS	UNKNOWN 424845/MARINE VESSEL (EPA R	NEAR THE CHARLESTOWN BEACH WESTERLY RI 02891	NON GC	N/A
	ERNS	UNKNOWN 153996/FIXED FACILITY	WHITE ROCK ROAD WESTERLY RI 02891	NON GC	N/A
	ERNS	D41256/UNKNOWN	WESTERLY RI 02891	NON GC	N/A
	FINDS	MICROSONICS INC CTD980669600	TECHNOLOGY PK NORTH STONINGT CT 06359	NON GC	N/A
	FINDS	WESTERLY DRUMS 110009321992/FRS	WESTERLY RI 02891	NON GC	N/A
	FINDS	WESTERLY HIGH SCHOOL 110017887795/FRS	23 WARD STREET WESTERLY RI 02891	NON GC	N/A
	FINDS	WESTERLY WATER DEPARTMENT 110012958781/FRS	68 WHITE ROCK RD WESTERLY RI 02891	NON GC	N/A
	FINDS	ASHAWAY ELEMENTARY 110011759098/FRS	12 HILLSIDE AVENUE ASHAWAY RI 02804	NON GC	N/A
	FINDS	ASHAWAY ELEMENTARY SCHOOL 110021651372/FRS	12A HILLSIDE AVENUE ASHAWAY RI 02804	NON GC	N/A
	FINDS	ASHAWAY LINE & TWINE MFG CO 110014362590/FRS	9 LAUREL ST HOPKINTON RI 02804	NON GC	N/A
	FINDS	C & A WALLCOVERINGS 110010364774/FRS	CHASE HILL ROAD ASHAWAY RI 02804	NON GC	N/A
	FINDS	WHEELER MIDDLE SCHOOL 110021679806/FRS	298 NORWICH/WESTERLY ROAD NORTH STONINGT CT 06359	NON GC	N/A
	FINDS	M H GARDEN PARK 110013188264/FRS	20 PROVIDENCE/NEW LONDON TU NORTH STONINGT CT 06359	NON GC	N/A
	FINDS	NORTH STONINGTON TRANSFER STATION 110015768267/FRS	215 WINTERHOG HILL RD NORTH STONINGT CT 06359	NON GC	N/A
	FINDS	NORTH STONINGTON BOARD OF EDUCATIO 110011780661/FRS	P.O. BOX 6001 NORTH STONINGT CT 06359	NON GC	N/A
	FINDS	WHEELER MIDDLE 110011760399/FRS	311 NORWICH/WESTERLY RD NORTH STONINGT CT 06359	NON GC	N/A
	FINDS	US COAST GUARD WESTERLY DRUMS SITE RI0690390026	LAT 41 22.5 N LONG 71 50.0 WESTERLY RI 02891	NON GC	N/A

Environmental FirstSearch
Sites Summary Report

TARGET SITE: POTTER HILL ROAD
WESTERLY RI 02891

JOB: 1009825.
FORMER PAWCATUCK WOOLEN MILLS

TOTAL: 163 **GEOCODED:** 5 **NON GEOCODED:** 158 **SELECTED:** 0

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	Page No.
	FINDS	WHEELER HIGH SCHOOL 110021637308/FRS	298 NORWICH/WESTERLY ROAD NORTH STONINGT CT 06359	NON GC	N/A
	FINDS	BETHEL VILLAGE WATER ASSOCIATION 110012958727/FRS	LYNN LANE HOPKINTON RI 02804	NON GC	N/A
	FINDS	SCWA, NORTH STONINGTON DIVISION (N 110013188255/FRS	ADDRESS NOT IN SDWIS NORTH STONINGT CT 06359	NON GC	N/A
	FINDS	NORTH STONINGTON DPW GARAGE 110015766571/FRS	11 WYASSUP RD NORTH STONINGT CT 06359	NON GC	N/A
	FINDS	NORTH STONINGTON ELEMENTARY 110011760406/FRS	311 NORWICH/WESTERLY RD NORTH STONINGT CT 06359	NON GC	N/A
	FINDS	SCWA, CEDAR RIDGE DIVISION 110013188246/FRS	ADDRESS NOT IN SDWIS NORTH STONINGT CT 06359	NON GC	N/A
	FINDS	HOMEBOUND 110021637344/FRS	297 NORWICH/WESTERLY ROAD NORTH STONINGT CT 06359	NON GC	N/A
	FINDS	GRISWOLD TEXTILE PRINT 110007176849/FRS	WHITE ROCK WESTERLY RI 02891	NON GC	N/A
	FINDS	TOWER STREET SCHOOL 110021688431/FRS	93 TOWER STREET WESTERLY RI 02891	NON GC	N/A
	FINDS	BRANCATOS WESTERLY SANITATION INC RID062304985	POTTER HILL RD WESTERLY RI 02891	NON GC	N/A
	FINDS	BRANCATOS WESTERLY SANITATION INC 110007824818/FRS	POTTER HILL RD WESTERLY RI 02891	NON GC	N/A
	FINDS	CONNECTOR TECHNOLOGY CORP RID981885866	AIRPORT RD WESTERLY RI 02891	NON GC	N/A
	FINDS	DUNN S CORNERS SCHOOL 110021688388/FRS	PLATEAU ROAD WESTERLY RI 02891	NON GC	N/A
	FINDS	CEDAR RIDGE WATER ASSOC 110022521617/FRS	7 POND STREET NORTH STONINGT CT 06359	NON GC	N/A
	FINDS	RITEWAY AUTO SERVICE INC 110007826166/FRS	BRADFORD RD WESTERLY RI 02891	NON GC	N/A
	FINDS	RITEWAY AUTO SVC INC RID981889488	BRADFORD RD WESTERLY RI 02891	NON GC	N/A
	FINDS	RITEWAY AUTO SVC INC RID982746737	BRADFORD RD WESTERLY RI 02891	NON GC	N/A
	FINDS	SPIKES GARAGE RID981898166	WILSON ST WESTERLY RI 02891	NON GC	N/A
	FINDS	SPIKES GARAGE 110007826282/FRS	WILSON ST WESTERLY RI 02891	NON GC	N/A
	FINDS	SPRINGBROOK ELEMENTARY SCHOOL 110021485454/FRS	39 SPRING BROOK ROAD WESTERLY RI 02891	NON GC	N/A

Environmental FirstSearch
Sites Summary Report

TARGET SITE: POTTER HILL ROAD
WESTERLY RI 02891

JOB: 1009825.
FORMER PAWCATUCK WOOLEN MILLS

TOTAL: 163 **GEOCODED:** 5 **NON GEOCODED:** 158 **SELECTED:** 0

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	Page No.
	FINDS	STATE STREET SCHOOL 110021485515/FRS	STATE STREET WESTERLY RI 02891	NON GC	N/A
	FINDS	CONNECTOR TECHNOLOGY CORP 110007826102/FRS	AIRPORT RD WESTERLY RI 02891	NON GC	N/A
	LUST	HENDEL S SUNOCO 3807-LS/I - INACTIVE	ROUTE 2 @ ROUTE 49 WESTERLY RI 02891	NON GC	N/A
	LUST	WESTERLY DOT 3835-LS/I - INACTIVE	COMMERCE ST WESTERLY RI 02891	NON GC	N/A
	LUST	FORMER SHELL FACILITY #136349 45717/1	NORTH STONINGT CT 06359	NON GC	N/A
	LUST	ARLINGTON ACRES 29172/4	151 STEPHENS DR. NORTH STONINGT CT 06359	NON GC	N/A
	LUST	ARLINGTON ACRES 2064/YES	151 STEPHENS DR NORTH STONINGT CT 06359	NON GC	N/A
	LUST	TEXACO STATION 3815-LS/I - INACTIVE	ROUTE 2/ IN CONNECTICUT WESTERLY RI 02891	NON GC	N/A
	LUST	WERI 3836-LS/SRO - SOIL REMOVAL O	ASHAWAY ROAD WESTERLY RI 02891	NON GC	N/A
	RCRAGN	SPIKES GARAGE RID981898166/SGN	WILSON ST WESTERLY RI 02891	NON GC	N/A
	RCRAGN	ASHAWAY LINE AND TWINE 9 LAUREL RIR000502815/LGN	9 LAUREL ST. HOPKINTON RI 02804	NON GC	N/A
	SPILLS	98-556	WESTERLY RI 02891	NON GC	N/A
	SPILLS	ROUTE 1 97-255	ROUTE 1 WESTERLY RI 02891	NON GC	N/A
	SPILLS	STATE BEACH 93-038	STATE BEACH WESTERLY RI 02891	NON GC	N/A
	SPILLS	TRANSFORMER 94-517	POLE 17 OLD HOPKINTON ROAD WESTERLY RI 02891	NON GC	N/A
	SPILLS	WHITE ROCKS ROAD 00-045	WHITE ROCKS ROAD WESTERLY RI 02891	NON GC	N/A
	SPILLS	12097	SHORE ROAD WESTERLY RI	NON GC	N/A
	SPILLS	10801	SHORE RD WESTERLY RI	NON GC	N/A
	SPILLS	98-326	WESTERLY RI 02891	NON GC	N/A
	SPILLS	RAILROAD AVE 97-227	RAILROAD AVE WESTERLY RI 02891	NON GC	N/A

Environmental FirstSearch
Sites Summary Report

TARGET SITE: POTTER HILL ROAD
WESTERLY RI 02891

JOB: 1009825.
FORMER PAWCATUCK WOOLEN MILLS

TOTAL: 163 **GEOCODED:** 5 **NON GEOCODED:** 158 **SELECTED:** 0

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	Page No.
	SPILLS	99-057	WESTERLY RI 02891	NON GC	N/A
	SPILLS	98-697	WESTERLY RI 02891	NON GC	N/A
	SPILLS	AIRPORT ROAD 98-223	AIRPORT ROAD WESTERLY RI 02891	NON GC	N/A
	SPILLS	12214	19 PARK ST WESTERLY RI	NON GC	N/A
	SPILLS	POTTERHILL RD 97-320	POTTERHILL RD WESTERLY RI 02891	NON GC	N/A
	SPILLS	ON BEACH @ MISQUAMICUTT 98-425	ON BEACH @ MISQUAMICUTT WESTERLY RI 02891	NON GC	N/A
	SPILLS	MISQUAMICUT BEACH PARKING 96-171	MISQUAMICUT BEACH PARKING WESTERLY RI 02891	NON GC	N/A
	SPILLS	MAIN ST 97-226	MAIN ST WESTERLY RI 02891	NON GC	N/A
	SPILLS	LUST 94-563	SHORE DRIVE WESTERLY RI 02891	NON GC	N/A
	SPILLS	JOHN STREET 97-380	JOHN STREET WESTERLY RI 02891	NON GC	N/A
	SPILLS	GRANITE ST 98-383	GRANITE ST WESTERLY RI 02891	NON GC	N/A
	SPILLS	END OF QUARRY RD 99-482	END OF QUARRY RD WESTERLY RI 02891	NON GC	N/A
	SPILLS	DUMPSTERS 94-415	MJ MURPHY WESTERLY RI 02891	NON GC	N/A
	SPILLS	CANAL STREET 99-652	CANAL STREET WESTERLY RI 02891	NON GC	N/A
	SPILLS	BOX 418 96-182	49 EAST MAIN ST WESTERLY RI 02891	NON GC	N/A
	SPILLS	2110 PLAINFIELD PIKE 98-334	2110 PLAINFIELD PIKE WESTERLY RI 02891	NON GC	N/A
	SPILLS	11270	MOUNTAIN AVE WESTERLY RI 02891	NON GC	N/A
	SPILLS	CANAL ST 96-526	CANAL ST WESTERLY RI 02891	NON GC	N/A
	SPILLS	9804292/CLOSED	CLARK FALLS NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	SAA 9807522/CLOSED	INTERSECTION RT2 OLD SAYBRO NORTH STONINGT CT 06359	NON GC	N/A

Environmental FirstSearch
Sites Summary Report

TARGET SITE: POTTER HILL ROAD
WESTERLY RI 02891

JOB: 1009825.
FORMER PAWCATUCK WOOLEN MILLS

TOTAL: 163 **GEOCODED:** 5 **NON GEOCODED:** 158 **SELECTED:** 0

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	Page No.
	SPILLS	9705507/CLOSED	WAMPHASSUC CROSSING NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	9605938/CLOSED	WINTECHUG HILL ROAD NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	955650/CLOSED	RT 2 NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	942824/CLOSED	PATRICIA AVE/ANDERSON POND NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	9701646/CLOSED	391 RT 2 IN FRONT OF HOLLY NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	200501447/CLOSED	RTE 2 NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	9702102/CLOSED	823 TENDLETON ROAD NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	200408030/CLOSED	ROUTE 2 NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	11958	HIGH ST WESTERLY RI 02891	NON GC	N/A
	SPILLS	95921/CLOSED	YAWBUX VALLEY RD NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	12853	PIERCE ST WESTERLY RI 02891	NON GC	N/A
	SPILLS	WHITES SEPTIC SERVICE 9802851/CLOSED	ROUTE # 2 NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	UNKNOWN 200108624/CLOSED	ASSEKONK SWAMP NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	UNKNOWN 9802386/CLOSED	LONG POND, OFF ROUTE 184 NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	9605754/CLOSED	RT 617 ACCESS ROAD TO ROTAR NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	200003628/CLOSED	RT 2 NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	945259/CLOSED	I-95 N/B OVERPASS/GREEN FAL NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	944655/CLOSED	PENELTON RD NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	944243/CLOSED	RT 2/RANDALL NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	943479/CLOSED	ACCESS RD/RT 2/RT 49 NORTH STONINGT CT 06359	NON GC	N/A

Environmental FirstSearch
Sites Summary Report

TARGET SITE: POTTER HILL ROAD
WESTERLY RI 02891

JOB: 1009825.
FORMER PAWCATUCK WOOLEN MILLS

TOTAL: 163 **GEOCODED:** 5 **NON GEOCODED:** 158 **SELECTED:** 0

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	Page No.
	SPILLS	946087/CLOSED	RT 2 ROCKY ST NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	915275/CLOSED	RT 2 NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	9705439/CLOSED	WAMPHASSUC CROSSING NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	9906353/CLOSED	COLE PIT ROAD/RT 202 NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	923620/CLOSED	LAKESIDE DR NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	200004985/CLOSED	ROUTE 2 KLANTERN HILL ROAD/ NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	200006804/CLOSED	TRUCK STOP OFF OF I - 95 NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	957191/CLOSED	PENDLETON HILL RD NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	200200659/CLOSED	MECHANIC ST & CLARK ST NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	200401695/CLOSED	RT2 AND MAIN NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	200405047/CLOSED	MYSTIC ROAD NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	9606389/CLOSED	I-84 BETWEEN STILLMAN AND R NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	99-145	WESTERLY RI 02891	NON GC	N/A
	SPILLS	98-189	WESTERLY RI 02891	NON GC	N/A
	SPILLS	98-682	WESTERLY RI 02891	NON GC	N/A
	SPILLS	99-035	WESTERLY RI 02891	NON GC	N/A
	SPILLS	SAA 200005414/CLOSED	DENNISON HILL ROAD NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	99-094	WESTERLY RI 02891	NON GC	N/A
	SPILLS	9604727/CLOSED	CLARK FALLS ROAD POLE # 558 NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	97-300	WESTERLY RI 02891	NON GC	N/A

Environmental FirstSearch
Sites Summary Report

TARGET SITE: POTTER HILL ROAD
WESTERLY RI 02891

JOB: 1009825.
FORMER PAWCATUCK WOOLEN MILLS

TOTAL: 163 **GEOCODED:** 5 **NON GEOCODED:** 158 **SELECTED:** 0

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	Page No.
	SPILLS	99-140	WESTERLY RI 02891	NON GC	N/A
	SPILLS	99-080	WESTERLY RI 02891	NON GC	N/A
	SPILLS	99-221	WESTERLY RI 02891	NON GC	N/A
	SPILLS	99-597	WESTERLY RI 02891	NON GC	N/A
	SPILLS	00-053	WESTERLY RI 02891	NON GC	N/A
	SPILLS	11007	FRANKLIN ST WESTERLY RI 02891	NON GC	N/A
	SPILLS	11271	MOUNTAIN AVE WESTERLY RI 02891	NON GC	N/A
	SPILLS	11152	OAK ST WESTERLY RI 02891	NON GC	N/A
	SPILLS	99-129	WESTERLY RI 02891	NON GC	N/A
	SPILLS	NORTHEAST UTILITIES 914379/CLOSED	FOWLER RD NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	NORTHEAST UTILITIES 954574/CLOSED	NORTH ANGUILLA NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	99-128	WESTERLY RI 02891	NON GC	N/A
	SPILLS	NORTHEAST UTILITIES 94984/CLOSED	RT 2 NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	96-395	WESTERLY RI 02891	NON GC	N/A
	SPILLS	NORTHEAST UTILITIES 914383/CLOSED	REUTMANN RD NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	NORTHEAST UTILITIES 914380/CLOSED	REUTMANN RD NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	RT 216 99-500	RT 216 ASHAWAY RI 02804	NON GC	N/A
	SPILLS	NORTHEAST UTILITIES 951257/CLOSED	RUETEMANN RD NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	12632	JUNCTION OF RTE 1 AND R WESTERLY RI	NON GC	N/A
	SPILLS	AS ABOVE 9704754/CLOSED	PATRICIA AVE. POLE # 1230 NORTH STONINGT CT 06359	NON GC	N/A

Environmental FirstSearch
Sites Summary Report

TARGET SITE: POTTER HILL ROAD
WESTERLY RI 02891

JOB: 1009825.
FORMER PAWCATUCK WOOLEN MILLS

TOTAL: 163 **GEOCODED:** 5 **NON GEOCODED:** 158 **SELECTED:** 0

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	Page No.
	SPILLS	JTL TRUCKING 200403819/CLOSED	ROUTE 95 NORTH OF EXIT 92 NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	NORTHEAST UTILITIES 924238/CLOSED	LANTERN HILL RD NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	12480	JUNCTION OF RTE 1 AND R WESTERLY RI	NON GC	N/A
	STATE	WINNAPAUG WATER STORAGE TANK WINA-HWM/ACTIVE	WINNAPAUG ROAD WESTERLY RI	NON GC	N/A
	STATE	NARR ELECTRIC-WESTERLY MGP NECI-HWM/ACTIVE	INDUSTRIAL DRIVE WESTERLY RI 02891	NON GC	N/A
	STATE	BRAINARD ASSOCIATES 2530/SUSPECTED	ROUTE 184 NORTH STONINGT CT 06359	NON GC	N/A
	STATE	BOWLING LANE PLAYGROUND BLPG-HWM/ACTIVE	BOWLING LANE (PLAT 23, LOT WESTERLY RI	NON GC	N/A
	SWL	WESTERLY SANITARY LANDFILL RISW-2/INACTIVE	OAK STREET WESTERLY RI 02891	NON GC	N/A
	UST	TOWN OF WESTERLY - VACANT LOT 19182	310-312 ATLANTIC AVE WESTERLY RI	NON GC	N/A
	UST	WHITE & COMPANY 16767	AIRPORT RD WESTERLY RI 02891	NON GC	N/A
	UST	WERI RADIO 18562	MARGIN ST WESTERLY RI 02891	NON GC	N/A
	UST	WERI RADIO 18563	ASHAWAY RD WESTERLY RI 02891	NON GC	N/A
	UST	TECHNOLOGY INVESTORS COMPANY 15744	AIRPORT RD WESTERLY RI 02891	NON GC	N/A
	UST	OLD CANAL SEWER PUMPING STATION 03387	CANAL ST WESTERLY RI 02891	NON GC	N/A
	UST	NEW CANAL SEWER PUMPING STATION 03384	CANAL ST WESTERLY RI 02891	NON GC	N/A
	UST	CITGO STATION/FRANKLIN PLAZA 00885	FRANKLIN ST WESTERLY RI 02891	NON GC	N/A
	UST	BEACH STREET SEWER PUMPING STATION 03383	BEACH ST WESTERLY RI 02891	NON GC	N/A
	UST	BRADFORD ROAD SEWER PUMPING STATIO 03382	WESTERLY BRADFORD RD WESTERLY RI 02891	NON GC	N/A

Environmental FirstSearch
Site Detail Report

TARGET SITE: POTTER HILL ROAD
WESTERLY RI 02891

JOB: 1009825.
FORMER PAWCATUCK WOOLEN MILLS

EMERGENCY RESPONSE NOTIFICATION SITE

SEARCH ID: 1 **DIST/DIR:** 0.17 NE **MAP ID:** 1

NAME:
ADDRESS: 70A LAUREL DR.
ASHWAY RI 02804
CONTACT: DRISCOLL JIM

REV: 12-13-93
ID1: H30743
ID2:
STATUS: FIX FAC
PHONE:

CERCLIS (Y/N):

MAT: PAINTING CHEMICALS, THINNERS ETC **QUANT:** 1.00 UNKNOWN

LOCATION: 70A LAUREL DR.
CITY: ASHAWAY RI **REPORTED:** 19930406

SOURCE: FIX FAC **MEDIUM:** WATER
DUMPING PAINT THINNER INTO WOODS
CAUSE: DUMPING
PAINTING AND STORING CHEMICALS WITHOUT PERMIT

ACT: NONE
BY:

STATE SPILLS SITE

SEARCH ID: 2 **DIST/DIR:** 0.23 NE **MAP ID:** 3

NAME: 64 LAUREL ST
ADDRESS: 64 LAUREL ST
HOPKINTON RI 02833
CONTACT:

REV: 4/10/00
ID1: 00-078
ID2:
STATUS:
PHONE:

SPILL DATE: 02-16-00 **SPILL NOTIFIER:**
STAFF:

MATERIAL SPILLED: WASTE OIL/AUTO PRODS
SPILL AMOUNT REPORTED:
INCIDENT: ABANDONED **SOURCE OF SPILL:** CONTAINERS

LUST?: **SOIL CONTAMINATED?:**
PCB LEVEL:

TARGET SITE: POTTER HILL ROAD
WESTERLY RI 02891

JOB: 1009825.
FORMER PAWCATUCK WOOLEN MILLS

LEAKING UNDERGROUND STORAGE TANKS

SEARCH ID: 5 **DIST/DIR:** 0.32 NE **MAP ID:** 4

NAME: KENYON S VARIETY
ADDRESS: ROUTE 3 AND MAXON ST.
HOPKINTON RI
CONTACT:

REV: 10/4/05
ID1: 1402-LS
ID2:
STATUS: SRO - SOIL REMOVAL ONLY
PHONE:

PROJECT DATE: 6/7/1988

LEAKING UNDERGROUND STORAGE TANKS

SEARCH ID: 4 **DIST/DIR:** 0.35 NE **MAP ID:** 5

NAME: IMPERIAL HOME D+COR
ADDRESS: 50 CHASE HILL ROAD
HOPKINTON RI
CONTACT:

REV: 10/4/05
ID1: 1414-LS
ID2:
STATUS: SRO - SOIL REMOVAL ONLY
PHONE:

PROJECT DATE: 7/19/1999

LEAKING UNDERGROUND STORAGE TANKS

SEARCH ID: 3 **DIST/DIR:** 0.36 SE **MAP ID:** 2

NAME: HENDEL CHEVRON
ADDRESS: ROUTE 3 POLE 867
HOPKINTON RI
CONTACT:

REV: 10/4/05
ID1: 1401-LS
ID2:
STATUS: I - INACTIVE
PHONE:

PROJECT DATE: 8/30/1986

Environmental FirstSearch
Street Name Report for Streets within .25 Mile(s) of Target Property

TARGET SITE: POTTER HILL ROAD
WESTERLY RI 02891

JOB: 1009825.
FORMER PAWCATUCK WOOLEN MILLS

Street Name	Dist/Dir	Street Name	Dist/Dir
Christian Hill Rd	0.13 SW		
Church St	0.24 NE		
Clay St	0.09 NE		
Laurel St	0.04 NE		
Maxson St	0.05 SE		
Pequot Ln	0.22 SE		
Post Office Ln	0.10 SW		
Potter Hill Rd	0.03 SE		
River Rd	0.08 SE		

Environmental FirstSearch Database Descriptions

NPL: ***EPA*** NATIONAL PRIORITY LIST - Database of confirmed, proposed or deleted Superfund sites.

CERCLIS: ***EPA*** COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY INFORMATION SYSTEM - Database of current and potential Superfund sites currently or previously under investigation.

NFRAP: ***EPA*** COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY INFORMATION SYSTEM ARCHIVED SITES - database of Archive designated CERCLA sites that, to the best of EPA's knowledge, assessment has been completed and has determined no further steps will be taken to list this site on the National Priorities List (NPL). This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

RCRA TSD: ***EPA*** RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM TREATMENT, STORAGE, and DISPOSAL FACILITIES. - Database of facilities licensed to store, treat and dispose of hazardous waste materials.

RCRA COR: ***EPA*** RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM SITES - Database of RCRA facilities with reported violations and subject to corrective actions.

RCRA GEN: ***EPA*** RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM SITES - Database of facilities that generate or transport hazardous waste or meet other RCRA requirements.LGN - Large Quantity GeneratorsSGN - Small Quantity GeneratorsVGN – Conditionally Exempt Generator.Included are RAATS (RCRA Administrative Action Tracking System) and CMEL (Compliance Monitoring & Enforcement List) facilities.

ERNS: ***EPA/NRC*** EMERGENCY RESPONSE NOTIFICATION SYSTEM - Database of emergency response actions. Data since January 2001 has been received from the National Response System database as the EPA no longer maintains this data.

FINDS: ***EPA*** FACILITY INDEX SYSTEM(FINDS)/FACILITY REGISTRY SYSTEM(FRS) - The index of identification numbers associated with a property or facility which the EPA has investigated or has been made aware of in conjunction with various regulatory programs. Each record indicates the EPA office that may have files on the site or facility. A Facility Registry System site has an FRS in the status field.

STATE SITES: ***CT DEP*** CONTAMINATED AND POTENTIALLY CONTAMINATED SITES - database of Hazardous Waste Facilities as defined by section 22a 134f of the Connecticut General Statute.

STATE SITES: ***RI DEM*** DATABASE OF CERCLA/STATE - database of EPA CERCLA and RI DEM STATE sites containing location and project information.

SPILLS-1990: ***CT DEP*** EMERGENCY RESPONSE ACTIONS AND SPILL RELEASES - database of oil and chemical spills. The database includes discharger, reporter, date of release, cause of incident, and emergency measurement information.

SPILLS-1990: ***RI DEM*** LISTING OF OIL AND CHEMICAL SPILLS - database of spills reported to the Rhode Island Department of Environmental Protection since 1990. The data includes spill date, inspection date, and the amount of spilled material.

SWL: ***CT DEP*** ACTIVE SOLID WASTE LANDFILL FACILITIES - database of landfills including active and closed facilities.

SWL: ***RI DEM*** SOLID WASTE MANAGEMENT FACILITIES LIST - database of permitted waste management facilities. The data includes acreage, owner, operator, and status

REG UST/AST: ***RI DEM*** UNDERGROUND STORAGE TANKS FACILITY MASTER LIST - database of underground storage tanks registered with the Rhode Island Department of Environmental Management. The data includes information regarding tank installation date, capacity, and product stored.

REG UST/AST: ***CT DEP*** REGISTERED UNDERGROUND STORAGE TANKS - database of underground storage tanks, the data includes capacity, substance stored, status, tank material and piping material.

LEAKING UST: ***CT DEP*** LEAKING UNDERGROUND STORAGE TANKS(LUST) - database of lusts, the data reported includes actions, agency, class, and media affected

LEAKING UST: ***RI DEM*** LEAKING UNDERGROUND STORAGE TANKS - database of leaking underground storage tanks that have been reported to the Rhode Island Department of Environmental Management.

RADON: ***NTIS*** NATIONAL RADON DATABASE - EPA radon data from 1990-1991 national radon project collected for a variety of zip codes across the United States.

Environmental FirstSearch Database Sources

NPL: ***EPA*** Environmental Protection Agency

Updated quarterly

CERCLIS: ***EPA*** Environmental Protection Agency

Updated quarterly

NFRAP: ***EPA*** Environmental Protection Agency.

Updated quarterly

RCRA TSD: ***EPA*** Environmental Protection Agency.

Updated quarterly

RCRA COR: ***EPA*** Environmental Protection Agency.

Updated quarterly

RCRA GEN: ***EPA*** Environmental Protection Agency.

Updated quarterly

ERNS: ***EPA/NRC*** Environmental Protection Agency

Updated semi-annually

FINDS: ***EPA*** Environmental Protection Agency

Updated annually

STATE SITES: ***CT DEP*** Connecticut Department of Environmental Protection

Updated quarterly

STATE SITES: ***RI DEM*** Rhode Island Department of Environmental Management

Updated quarterly

SPILLS-1990: ***CT DEP*** Connecticut Department of Environmental Protection's Bureau of Waste Management

Updated quarterly

SPILLS-1990: ***RI DEM*** Rhode Island Department of Environmental Management, Division of Site Remediation

Updated quarterly

SWL: ***CT DEP*** Department of Environmental Protection's Bureau of Waste Management, Solid Waste Program

Updated annually

SWL: ***RI DEM*** Rhode Island Department of Environmental Management, Division of Waste Management

Updated annually

REG UST/AST: ***RI DEM*** Rhode Island Department of Environmental Management, Division of Waste Management

Updated quarterly

REG UST/AST: ***CT DEP*** Connecticut Department of Environmental Protection's Bureau of Waste Management, Underground Storage Tank Enforcement Program.

Updated quarterly

LEAKING UST: ***CT DEP*** The Department of Environmental Protection's Bureau of Waste Management, Underground Storage Tank Enforcement Program

Updated quarterly

LEAKING UST: ***RI DEM*** Rhode Island Department of Environmental Management

Updated quarterly

RADON: ***NTIS*** Environmental Protection Agency, National Technical Information Services

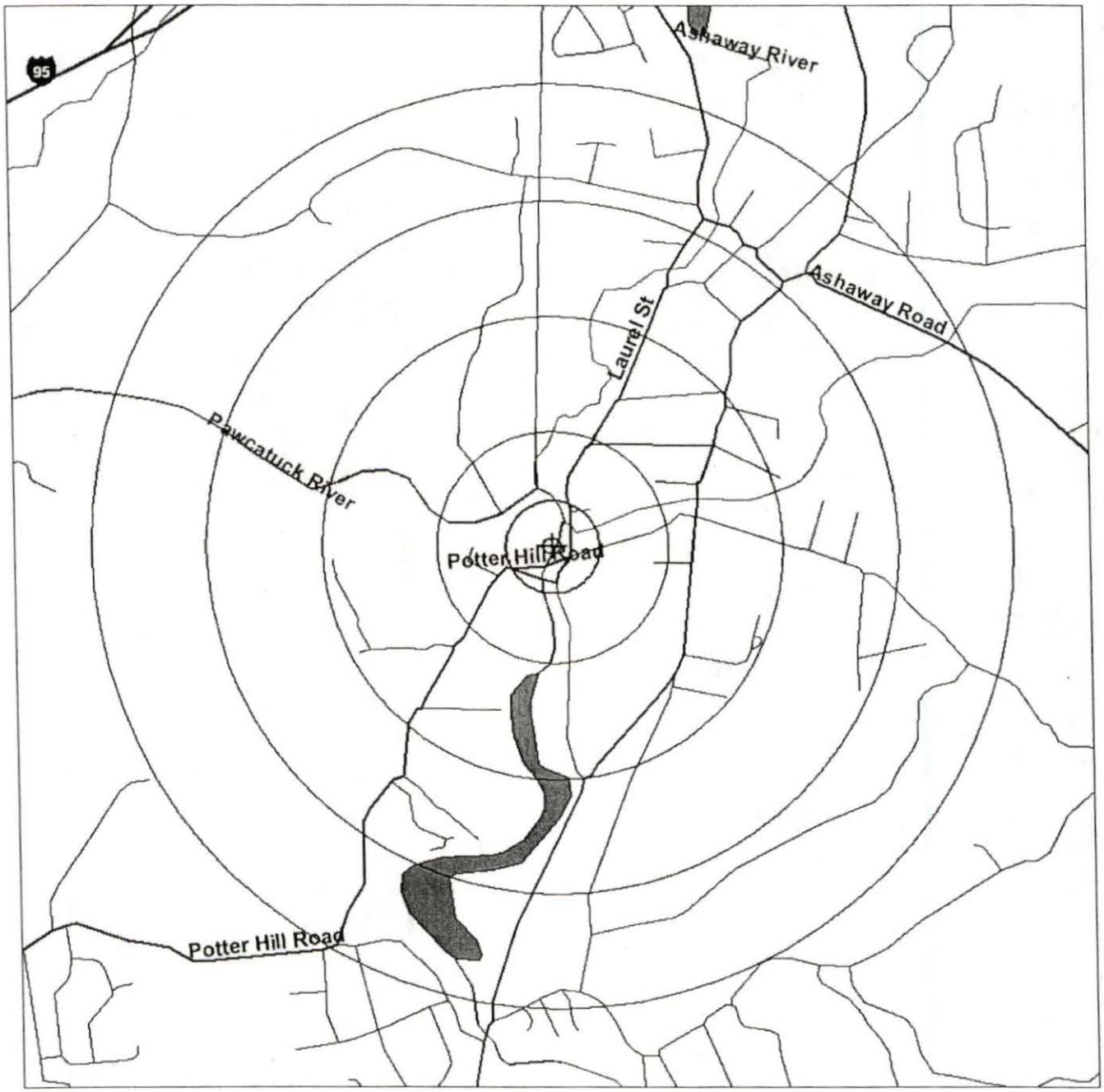
Updated periodically

Environmental FirstSearch

1 Mile Radius

ASTM Map: NPL, RCRACOR, STATE Sites

POTTER HILL ROAD, WESTERLY RI 02891



Source: 2002 U.S. Census TIGER Files

Target Site (Latitude: 41.4147 Longitude: -71.797) .....

Identified Site, Multiple Sites, Receptor .....

NPL, Brownfield, Solid Waste Landfill (SWL) or Hazardous Waste

Railroads .....

Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius

Environmental FirstSearch

.5 Mile Radius

ASTM Map: CERCLIS, RCRATSD, LUST, SWL

POTTER HILL ROAD, WESTERLY RI 02891



Source: 2002 U.S. Census TIGER Files

Target Site (Latitude: 41.4147 Longitude: -71.797) .....

Identified Site, Multiple Sites, Receptor .....

NPL, Brownfield, Solid Waste Landfill (SWL) or Hazardous Waste

Railroads .....

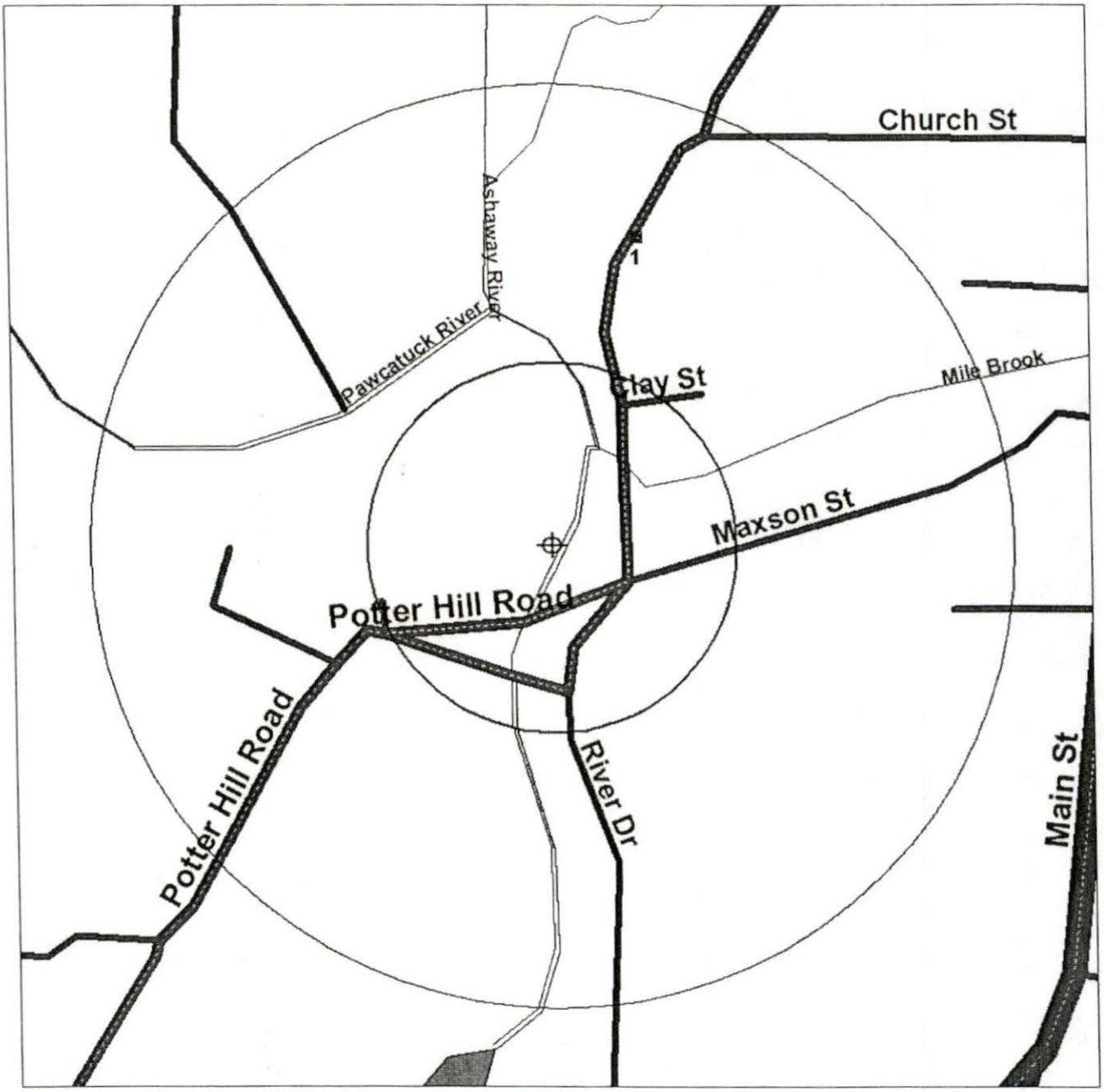
Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius

Environmental FirstSearch

.25 Mile Radius

ASTM Map: RCRAGEN, ERNS, UST

POTTER HILL ROAD, WESTERLY RI 02891



Source: 2002 U.S. Census TIGER Files

Target Site (Latitude: 41.4147 Longitude: -71.797) .....

Identified Site, Multiple Sites, Receptor .....

NPL, Brownfield, Solid Waste Landfill (SWL) or Hazardous Waste

Railroads .....

Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius

Environmental FirstSearch

.5 Mile Radius

ASTM AAI Map: Brownfield

POTTER HILL ROAD, WESTERLY RI 02891



Source: 2002 U.S. Census TIGER Files

Target Site (Latitude: 41.4147 Longitude: -71.797) .....

Brownfield.....

Railroads .....

Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius

Environmental FirstSearch

.5 Mile Radius

ASTM AAI Map: Federal Land Use Sites

POTTER HILL ROAD, WESTERLY RI 02891



Source: 2002 U.S. Census TIGER Files

Target Site (Latitude: 41.4147 Longitude: -71.797) .....

Fed. Land Use: Wilderness Areas, Wildlife Preserves .....

Fed. Land Use: Amer. Indian Sacred Sites, End. Species' Habitats...

Railroads .....

Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius

Environmental FirstSearch

.25 Mile Radius

Non-ASTM Map: Spills 90

POTTER HILL ROAD, WESTERLY RI 02891



Source: 2002 U.S. Census TIGER Files

Target Site (Latitude: 41.4147 Longitude: -71.797) .....

Identified Site, Multiple Sites, Receptor .....

NPL, Brownfield, Solid Waste Landfill (SWL) or Hazardous Waste

National Historic Sites and Landmark Sites .....

Railroads .....

Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius

APPENDIX D

Interview Documentation

Question	Owner			Occupants (If Applicable)			Observed (During Site Visit)		
1a. Is the *property* used for an industrial use?	Yes	No	Unk	Yes	No	Unk	Yes	**No**	Unk
1b. Is any *adjoining property* used for an industrial use?	Yes	No	Unk	Yes	No	Unk	Yes	**No**	Unk
2a. Did you observe evidence or do you have any prior knowledge that the *property* has been used for an industrial use in the past?	Yes	No	Unk	Yes	No	Unk	**Yes**	No	Unk
2b. Did you observe evidence or do you have any prior knowledge that any *adjoining property* has been used for an industrial use in the past?	Yes	No	Unk	Yes	No	Unk	Yes	**No**	Unk
3a. Is the *property* used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility (if applicable, identify which)?	Yes	No	Unk	Yes	No	Unk	Yes	**No**	Unk
3b. Is any *adjoining property* used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility (if applicable, identify which)?	Yes	No	Unk	Yes	No	Unk	Yes	**No**	Unk
4a. Did you observe evidence or do you have any prior knowledge that the *property* has been used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility (if applicable, identify which)?	Yes	No	Unk	Yes	No	Unk	Yes	**No**	Unk
4b. Did you observe evidence or do you have any prior knowledge that any *adjoining property* has been used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility (if applicable, identify which)?	Yes	No	Unk	Yes	No	Unk	Yes	**No**	Unk
5a. Are there currently any damaged or discarded automotive or industrial batteries, pesticides, paints, or other chemicals in individual containers of greater than 5 gal. (19 L) in volume or 50 gal. (190 L) in the aggregate, stored on or used at the *property* or at the facility?	Yes	No	Unk	Yes	No	Unk	**Yes**	No	Unk
5b. Did you observe evidence or do you have any prior knowledge that there have been previously any damaged or discarded automotive or industrial batteries, or pesticides, paints, or other chemicals in individual containers of greater than 5 gal. (19 L) in volume or 50 gal. (190 L) in the aggregate, stored on or used at the *property* or at the facility?	Yes	No	Unk	Yes	No	Unk	**Yes**	No	Unk

6a. Are there currently any industrial *drums* (typically 55 gal. (208 L)) or sacks of chemicals located on the property or at the facility?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
6b. Did you observe evidence or do you have any prior knowledge that there have been previously any industrial *drums* (typically 55 gal. (208 L)) or sacks of chemicals located on the property or at the facility?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
7a. Did you observe evidence or do you have any prior knowledge that *fill dirt* has been brought onto the property that originated from a contaminated site?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
7b. Did you observe evidence or do you have any prior knowledge that *fill dirt* has been brought onto the property that is of an unknown origin?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
8a. Are there currently any *pits, ponds, or lagoons* located on the *property* in connection with waste treatment or waste disposal?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
8b. Did you observe evidence or do you have any prior knowledge that there have been previously, any *pits, ponds, or lagoons* located on the *property* in connection with waste treatment or waste disposal?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
9a. Is there currently any stained soil on the *property*?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
9b. Did you observe evidence or do you have any prior knowledge that there have been previously, any stained soil on the *property*?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
10a. Are there currently any registered or unregistered storage tanks (above or underground) located on the *property*?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
10b. Did you observe evidence or do you have any prior knowledge that there have been previously, any registered or unregistered storage tanks (above or underground) located on the *property*?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
11a. Are there currently any vent pipes, fill pipes, or access ways indicating a fill pipe protruding from the ground on the *property* or adjacent to any structure located on the *property*?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
11b. Did you observe evidence or do you have any prior knowledge that there have been previously, any vent pipes, fill pipes, or access ways indicating a fill pipe protruding from the ground on the *property* or adjacent to any structure located on the *property*?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
12a. Is there currently evidence of leaks, spills or staining by substances other than water, or foul odors, associated with any flooring, drains, walls, ceilings, or exposed grounds on the property?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
12b. Did you observe evidence or do you have any prior knowledge that there have been previously any leaks, spills or staining by substances other than water, or foul odors, associated with any flooring, drains, walls, ceilings, or exposed grounds on the property?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk

13a. If the *property* is served by a private well or non-public water system, is there evidence or do you have prior knowledge that contaminants have been identified in the well or system that exceed guidelines applicable to the water system?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
13b. If the property is served by a private well or non-public water system, is there evidence or do you have prior knowledge that the well has been designated as contaminated by any government environmental/health agency?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
14. Does the *owner* or *occupant* of the *property* have any knowledge of *environmental liens* or governmental notification relating to past or recurrent violations of environmental laws with respect to the *property* or any facility located on the *property*?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
15a. Has the *owner* or *occupant* of the *property* been informed of the past existence of *hazardous substances* or *petroleum products* with respect to the *property* or any facility located on the *property*?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
15b. Has the *owner* or *occupant* of the *property* been informed of the current existence of *hazardous substances* or *petroleum products* with respect to the *property* or any facility located on the *property*?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
15c. Has the *owner* or *occupant* of the *property* been informed of the past existence of environmental violations with respect to the *property* or any facility located on the *property*?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
15d. Has the *owner* or *occupant* of the *property* been informed of the current existence of environmental violations with respect to the *property* or any facility located on the *property*?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
16. Does the *owner* or *occupant* of the *property* have any knowledge of any *environmental site assessment* of the *property* or facility that indicated the presence of *hazardous substances* or *petroleum products* on, or contamination of, the *property* or recommended further assessment of the *property*?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
17. Does the *owner* or *occupant* of the *property* know of any past, threatened, or pending lawsuits or administrative proceedings concerning a release or threatened release of any *hazardous substance* or *petroleum products* involving the *property* by any owner or occupant of the *property*?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
18a. Does the *property* discharge waste water (not including sanitary waste or storm water) onto or adjacent to the *property* and/or into a storm water system?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
18b. Does the *property* discharge waste water (not including sanitary waste or storm water) onto or adjacent to the *property* and/or into a sanitary sewer system?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk

19. Did you observe evidence or do you have any prior knowledge that any *hazardous substances* or *petroleum products*, unidentified waste materials, tires, automotive or industrial batteries, or any other waste materials have been dumped above grade, buried and/or burned on the *property*?	Yes	No	Unk	Yes	No	Unk	(Yes)	No	Unk
20. Is there a transformer, capacitor, or any hydraulic equipment for which there are any records indicating the presence of PCB's?	Yes	No	Unk	Yes	No	Unk	Yes	(No)	Unk

21. Do any of the following Federal government record systems list the property or any property within the search distance noted below:		
Federal National Priorities List - within 1.0 miles (1.6 Km)?	Yes	(No)
Federal CERCLIS List - within 0.5 miles (0.8 Km)?	Yes	(No)
Federal CERCLIS NFRAP List – property & adjoining properties?	Yes	(No)
Federal RCRA CORRACTS Facilities List - within 1.0 miles (1.6 Km)?	Yes	(No)
Federal RCRA non-CORRACTS TSD Facilities List - within 0.5 miles (1.6 Km)?	Yes	(No)
Federal RCRA Generators List - property & adjoining properties?	Yes	(No)
Federal ERNS List - property only?	Yes	(No)
22. Do any of the following state record systems list the property or any property within the search distance noted below:		
State lists of hazardous waste sites identified for investigation or remediation:	Yes	(No)
State – Equivalent National Priorities List - within 1.0 miles (1.6 Km)?	Yes	(No)
State – Equivalent CERCLIS List - within 0.5 mile (0.8 Km)?	Yes	(No)
State Landfill and/or Solid Waste Disposal Site Lists - within 0.5 mile (0.8 Km)?	(Yes)	No
State Leaking UST (LUST) Lists - within 0.5 mile (0.8 Km)?	Yes	(No)
State Registered UST Lists – property & adjoining properties?		
23. Based upon a review of *fire insurance maps* 10.3.1.3 or consultation with the local fire department serving the *property*, all as specified in the guide, are any buildings or other improvements on the *property* or on an *adjoining property* identified as having been used for an industrial use or uses likely to lead to contamination of the *property*?	Yes	(No)

The preparer of the transaction screen questionnaire must complete and sign the following statement.

The ***Owner*** questionnaire was completed by:

Name _____ Title _____

Firm _____ Phone Number _____

Address _____

_____

_____

Date _____

Preparer's Relationship to Site _____

Preparer's Relationship to user (e.g., principal, employee, agent, consultant, client) _____

The ***Occupant*** questionnaire was completed by:

Name _____ Title _____

Firm _____ Phone Number _____

Address _____

_____

_____

Date _____

Preparer's Relationship to Site _____

Preparer's Relationship to user (e.g., principal, employee, agent, consultant, client) _____

The ***Site Visit*** questionnaire was completed by:

Name Joseph Unsworth Title Project Manager

Firm Jacques Whitford Company, Inc. Phone Number 401-312-8005

Address 24 Albion Road, Suite 220

Lincoln, RI 02865

Date 10/7/2005

Preparer's Relationship to Site None

Preparer's Relationship to user (e.g., principal, employee, agent, consultant, client) Consultant

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The ***Government Records*** and ***Historical Sources Inquiry*** questionnaire was completed by:

Name Joseph Unsworth Title Project Manager

Firm Jacques Whitford Company, Inc. Phone Number 401-312-8005

Address 24 Albion Road, Suite 220

Lincoln, RI 02865

Date 10/7/2005

Preparer's Relationship to Site None

Preparer's Relationship to user (e.g., principal, employee, agent, consultant, client) Consultant

User's relationship to the Site (for example, owner, prospective purchaser, lender, etc.)

If the preparer(s) is different from the user, complete the following:

Name of User Renewable Resources Inc.

User's Address 900 North Strafford, Suite 2428

Arlinton, VA 22203

User's Phone Number

Copies of the completed questionnaire have been filed at: Jacques Whitford Company, Inc

Copies of the completed questionnaire have been mailed or delivered to:

Preparer represents that to the best of the preparer's knowledge the above statements and facts are true and correct and to the best of the preparer's actual knowledge no material facts have been suppressed or misstated.

Signature 2/27/2006
Date

Signature Date

Signature Date

Guide to Transaction Screen Questionnaire - *(ASTM Designation: E 1528-00)*

Question 1

It is recommended that the preparer describe the use of the *property* and *adjoining properties.* Certain industrial uses on the *property* may raise concerns regarding the possibility of contamination affecting the *property.* For the purposes of the transaction screen questionnaire, an industrial use is an activity requiring the application of labor and capital for the production or distribution of a product or article, including, without limitation, manufacturing, processing, extraction, refining, warehousing, transportation, and utilities. Manufacturing is defined as a process or operation of producing by hand, machinery, or other means a finished product or article from raw material. Industrial uses may be categorized as light or heavy industrial uses, depending on the scale of the operations and the impact upon surrounding property in terms of smoke, fumes, and noise. Regardless of such categorization, the concern for purposes of the transaction screen process is whether the use involves the processing, storage, manufacture, or transportation of *hazardous substances* or *petroleum products.* The term *adjoining properties* means any real property or properties the border of which is contiguous or partially contiguous with that of the property, or that would be contiguous or partially contiguous with that of the property but for a street, road, or other public thoroughfare separating them. *Adjoining properties* means the *property* and include *properties* across the street or any right of way from the property.

Question 2

See guide for Question 1.

Question 3

It is recommended that the *preparer* describe the uses of the *property* and *adjoining properties.* The facilities mentioned in this question all involve the use of *hazardous substances* or *petroleum products* and therefore require further inquiry concerning the possible release of such substances.

Question 4

See guide for Question 3.

Question 5

Are there any containers on the site that may contain any of these items? Is there any reason to suspect that chemicals or *hazardous substances* in such quantities may be stored on the site? Sheltered areas, cartons, sacks, storage bins, large canisters, sheds, or cellars of existing improvements are examples of containers and areas where chemicals or *hazardous substances* may be stored. If the answer to this question is "yes", list the items and the location(s) where they are stored. If unfamiliar with the contents of any container located on the site, the question must be answered "yes" until the materials are identified. *Hazardous substances* may often be unmarked. The *preparer* should never open any containers that are unmarked because they may contain explosive materials or acids. Consumer products in undamaged containers used for routine office maintenance or business, such as copy toner, should not create a need for further inquiry unless the quantity of such products is in excess of what would be customary for such use.

Question 6

Chemicals are frequently stored in large 55-gal (208-L) drums and dry chemicals are often stored in 20 lb (9 kg) sacks.

Question 7

The origin of *fill dirt* brought onto the *property* should be investiagted to determine whether such dirt originated from a contaminated site. *Fill dirt* is defined as dirt, soil, sand, or other earth, that is obtained off-Site, that is used to fill holes or depressions, create mounds, or otherwise artificially change the grade or elevation of real property. It does not include material that is used in limited quantities for normal landscaping activities. If any structures have been demolished on the *property*, the *preparer* should investigate whether the structures were demolished in place and *fill dirt* compacted over them because such demolition debris may contain asbestos or *hazardous substances.*

Question 8

The presence of *pits, ponds,* or *lagoons,* together with waste treatment or waste disposal may indicate contaminated property. *Pits, ponds,* or *lagoons* are defined as man-made or natural depressions in a ground surface that are likely to hold liquids or sludge containing *hazardous substances* or *petroleum products.* The likelihood of such liquids or sludge being present is determined by evidence of factors associated with the pit, pond, or lagoon, including, but not limited to, discolored water, distressed vegetation, or the presence of an obvious wastewater discharge.

Question 9

Stained soils are frequently associated with contamination and often are an indication of either current or previous leakage associated with piping and liquid storage containers. Soils that are stained show a marked discoloration as compared to other soils in the immediate vicinity.

Question 10

Tanks are often used to store heating fuels, chemicals, and petroleum products; while tanks may be associated with the storage of chemicals, they are most often associated with liquid fuel heating systems (e.g., oil furnaces).

Question 11

Vent or fill pipes often signal the current or previous existence of underground storage tanks. Additionally, in answering this question the owner and occupant should consider any asphalt or concrete patching that would indicate the possibility of a previous underground storage tank removal.

Question 12

Stains (other than water stains) or foul odors may indicate leaks of hazardous substances or contaminants. Floor drains located within a building adjacent to hazardous substance storage areas or connected to an on-site disposal system (e.g., septic system) present a potential source of subsurface discharge of contaminants.

Question 13

Private wells and non-public water systems are not monitored daily for water quality as municipal systems are monitored. If the system is private, it probably has been tested for contamination or evidence that it is free from contamination, and the results of any such tests should be produced by the *owner* or *occupant* of the well. The preparer is not required to test the water system to conduct the *transaction screen.*

Question 14

In most cases, the federal or state government will notify the property owner prior to filing a lien on the *property.* Sections 302, 311, 312, and 313 of the Emergency Planning and Community Right-To-Know Act and other provisions of federal and state environmental laws establish reporting requirements with respect to business storing or using *hazardous substances* in excess of certain quantities. These businesses should be making periodic reports to a federal, state, or local environmetal department, agency, or bureau. The government may periodically inspect such facilities to ensure compliance with environmental laws. In the event of a release of a reportable quantity within a 24-hour period (as defined in CERCLA and regulations promulgated pursuant to CERCLA), the person in charge of the facility is obligated to notify the U.S. EPA of the release. Any notification or response by any governmental entity will be in writing.

Question 15

Consider whether any *environmental professionals* familiar with *hazardous substances* or *petroleum products* have observed or determined that contamination existed on the property. *Hazardous substances* or *petroleum products* from the *property* may have affected soils, air quality, water quality, or otherwise affected structures located on the *property.*

Question 16

Copies of *reasonably ascertainable* prior *environmental site assessments* of the *property* or any portion thereof should be obtained and examined to determine whether further action or inquiry is necessary in connection with any environmental problems raised by a prior *environmental site assessment.*

Question 17

The *user* is not required to make an independent investigation or search of records on file with a court or public agency in answering this question; this question is to be answered by the *owner* or *occupant* based on upon their respective *actual knowledge* and review of *reasonably ascertainable* records in their possession.

Question 18

The *owner* and each *occupant* should be asked where drain traps lead and the purpose of drainage pipes at the facility. Domestic sewage is not a CERCLA issue and the reference to *wastewater* does not include domestic sewage.

Question 19

Past waste disposal practices should be examined because these may have resulted in *hazardous substances* or *petroleum products* being released on the *property.* Does the *property* evidence any mounds or depressions that suggest a disposal site?

Question 20

The PCBs are regulated by the Toxic Substances Control Act 15 USC. Section 2601 *et seq.* and, in the absence of a release, are not regulated by CERCLA. The provisions of CERCLA do apply if there is a release of PCBs. Accordingly, if an affirmative answer is obtained to this question, the further focus should be on whether there have been any instances of insulating oil leakage and, if so, whether these are suspected of being PCB or PCB-contaminated. Transformers containing PCBs may have many different sizes and shapes and are to be registered pursuant to 40 CFR § 761.30. Elevators and auto lifts are often run by hydraulically controlled systems containing PCBs. If inspection or maintenance records for the elevator, capacitor, or other hydraulic equipment indicate no release has occurred or that regular, scheduled maintenance has taken place and the machinery does not appear to be damaged or leaking, no further inquiry is required.

Definitions

Actual Knowledge – the knowledge actually possessed by an individual who is a real person, rather than an entity. Actual knowledge is to be distinguished from constructive knowledge, that is, knowledge imputed to an individual or entity.

Adjoining Properties – any real property or properties the border of which is contiguous or partially contiguous with that of the property, or that would be contiguous or partially contiguous with that of the property but for a street, road, or other public thoroughfare separating them. *Adjoining properties* means the *property* and include *properties* across the street or any right of way from the property.

Asbestos Containing Material (ACM) - any material or product that contains more than 1% abestos.

Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) – the list of sites compiled by EPA that EPA has investigated or is currently investigating for potential hazardous substance contamination for possible inclusion on the National Priorities List.

CORRACTS List – list of hazardous waste treatment, storage or disposal facilities and other RCRIS facilities (due to past interim status or storage of hazardous waste beyond 90 days) who have been notified by the U.S. Environmental Protection Agency to undertake corrective action under RCRA.

Environmental Lien - a charge, security, or encumberance upon title to a *property* to secure the payment of a cost, damage, debt, obligation, or duty arising out of response actions, cleanup, or other remediation of *hazardous substances* or *petroleum products* upon a *property*.

ERNS List – EPA's Emergency Response Notification System list of reported CERCLA hazardous substance releases or spills in quantities greater than the reportable quantity, as maintained at the National Response Center.

Hazardous Substance - A substance defined as a hazardous substance pursuant to CERCLA 42 USC 9601 (14), as interpreted by EPA regulations and the courts: "(A) any substance designated pursuant to section 1321(b)(2)(A) of Title 33, (B) any element, compound, mixture, solution, or substance designated pursuant to section 9602 of this title, (C) any hazardous waste having the characteristics identified under or listed pusuant to section 3001 of the Solid Waste Disposal Act, (D) any toxic pollutant listed under section 1317(a) of Title 33, (E) any hazardous air pollutant listed under section 112 of the Clean Air Act, and (F) any imminently hazardous chemical substance or mixture with respect to which the Administrator (of EPA) has taken action pursuant to section 2602 of Title 15.

LUST Sites – state lists of leaking underground storage tank sites.

National Priorities List (NPL) – list compiled by EPA pursuant to CERCLA 42 USC ξ 9605 (a)(8)(B) of properties with the highest priority for cleanup pursuant to EPA's hazard ranking system.

Occupants - those tenants, subtenants, or other persons or entities using the *property* or a portion of the *property*.

Owner - generally the fee owner of record of the *property*.

Petroleum Exclusion - the exclusion from CERCLA liability provided 42 USC ξ 9601(14), as interpreted by the courts and EPA: "The term (hazardous substance) does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance under Subparagraphs (A) through (F) of this paragraph, and the term does not include natural gas, natural gas liquids, liquified natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas)."

Petroleum Products - those substances included within the meaning of the *petroleum exclusion* to CERCLA.

Phase I Environmental Site Assessment – the practice described in Practice E 1527. The process by which a person or entity seeks to determine if a particular parcel of real property (including improvements) is subject to *recognized environmental conditions*.

Preparer – The person preparing the *environmental transaction screen questionnaire* pursuant to this practice, who may be either the *user* or the person to whom the *user* has delegated the preparation.

Property - the real property that is the subject of the environmental site assessment described in this practice. Real property includes buildings and other fixtures and improvements located on the property and affixed to the land.

RCRA Generators – those persons or entities which generate *hazardous wastes*, as defined and regulated by RCRA.

RCRA Generators List – list kept by EPA of those persons or entities that generate hazardous wastes as defined and regulated by RCRA.

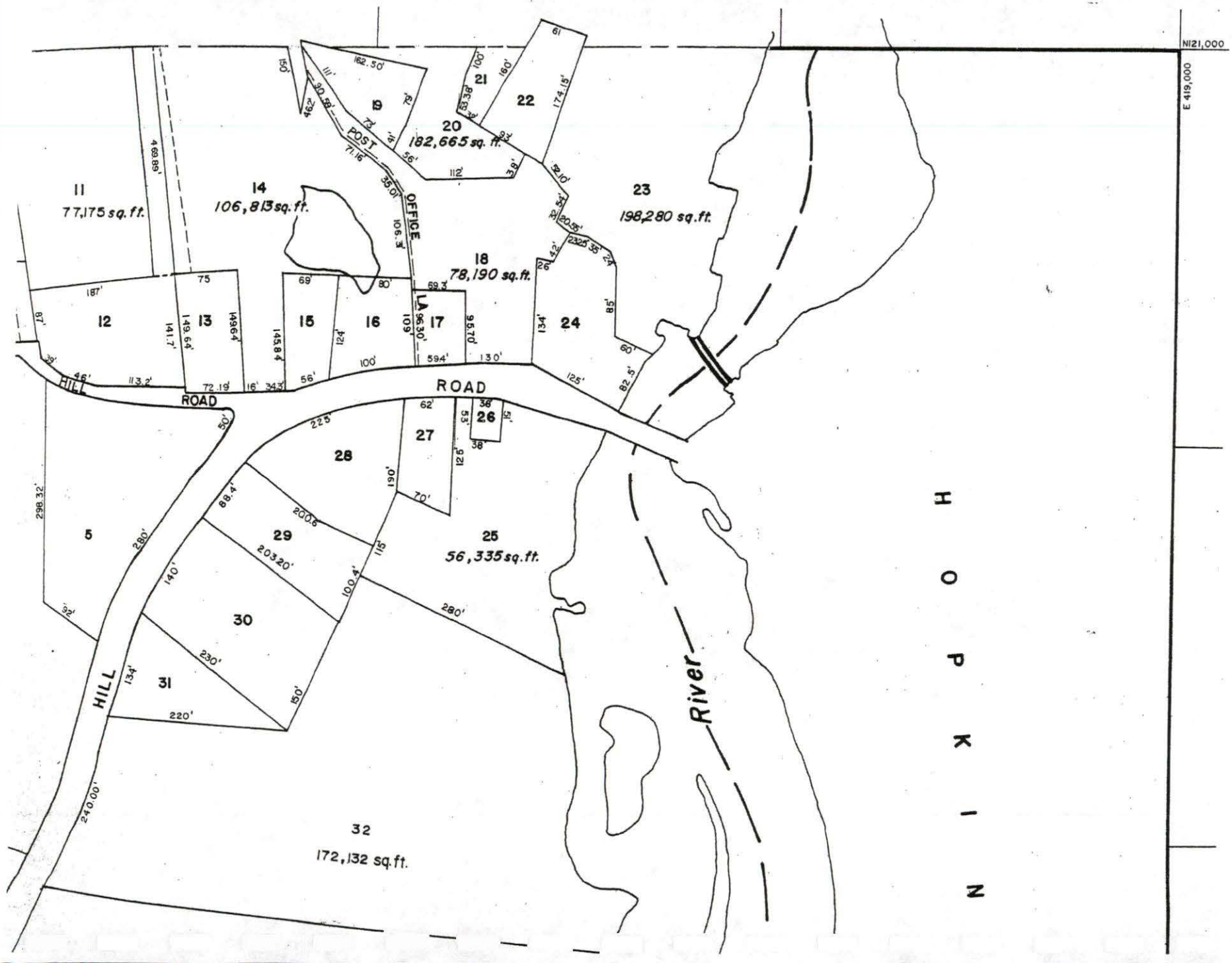
Recognized Environmental Conditions – the presence or likely presence of any *hazardous substances* or *petroleum products* on a *property* under conditions that indicate an existing release, a past release, or a material threat of a release of any *hazardous substances* or *petroleum products* into structures on the *property* or into the ground, ground water, or surface water of the *property*.

Underground Storage Tank (UST) – any tank, including underground piping connected to the tank, that is or has been used to contain *hazardous substances* or *petroleum products* and the volume of which is 10 % or more beneath the surface of the ground.

User – the party seeking to use the transaction screen process of this practice or the *Phase I Environmental Site Assessment* of Practices E 1527 or E 1528 to perform an environmental assessment of the *property*. A *user* may include, without limitation, a purchaser of *property*, a potential tenant of *property*, an owner of *property*, a lender, or a property manager.

APPENDIX E

Miscellaneous Documentation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E 419,000
11
77,175 sq. ft.
14
106,813 sq. ft.
19
20
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21
22
23
198,280 sq. ft.
18
78,190 sq. ft.
12
13
15
16
17
24
POST OFFICE
LA
HILL ROAD
ROAD
5
28
27
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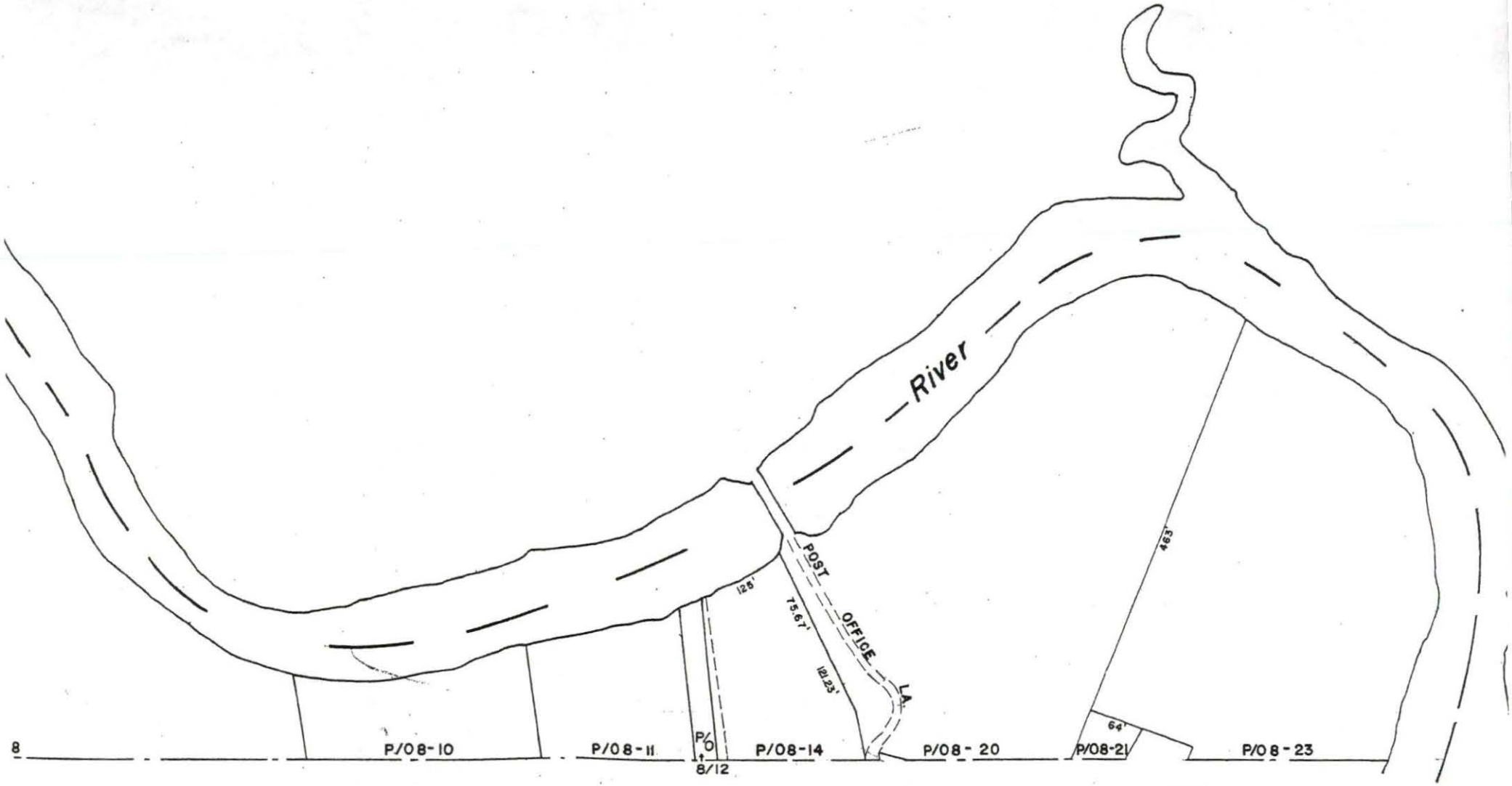
25
56,335 sq. ft.
30
31
HILL
32
172,132 sq. ft.
River
HOPKIN



REVISIONS			
RIPTION	MADE	CH'K'D	AP'V'D

Grid North

NOTE

THE AREAS, BOUNDARIES AND DIMENSIONS SHOWN ON THIS TAX MAP ARE DERIVED FROM AERIAL PHOTOGRAPHS, GROUND SURVEYS AND RECORDED PLANS, MAPS, DEEDS AND WILLS AND ARE TO BE USED FOR PROPERTY ASSESSMENT PURPOSES ONLY AND NOT FOR CONVEYANCE

ASSESSORS PLAT

TOWN OF WESTERLY

WASHINGTON COUNTY, RHODE ISLAND

PREPARED BY

JAMES W. SEWALL COMPANY, OLD TOWN, MAI

SCALE 1"=100'

0 50 100 200 400 600 FE

0 5 10 20 50 100 150 MI

006178 92 OCT -8 PM 3:12 BK 432 PG 053

CONSERVATOR'S DEED

FLEET BANK, N.A., Conservator of the Estate of HELEN E. COTTRELL by the power conferred by the Order of the Probate Court of the Town of Westerly entered on September 2, 1992 and the Order of the Probate Court of the Town of Hopkinton entered on August 20, 1992 and by every other power it thereunto enabling for Fifty Thousand and No/100ths ($50,000.00) Dollars paid, grants to RENEWABLE RESOURCES, INC., a Rhode Island Corporation, the following described parcels of real estate:

That certain real estate situated in the Towns of Westerly and Hopkinton, in the County of Washington, State of Rhode Island, and described as follows:

TRACT ONE - A certain lot or parcel of land, lying and being in said Town of Westerly, bounded and described as follows: Beginning at a stone post, on the westerly bank of the Pawcatuck River, said point being the southeasterly corner of the premises now being described; thence northwesterly a distance of 60 feet, more or less, to a wall marking the northerly and easterly boundary line of land now or formerly of Howard E. Thorp, et ux; thence northeasterly along said wall, a distance of 85.0 feet to an angle in said wall; thence northwesterly, along said wall, a distance of 24.0 feet, to an angle; thence northwesterly, along said wall, a distance of 35 feet, to a point; thence northwesterly, a distance of 23.25 feet, to an iron pipe at an angle, said pipe being about 1.75 feet southwesterly from the southwesterly corner of the southwest pier of the water tower; thence northwesterly a distance of 20.55 feet to an iron pipe at an angle; thence northeasterly, a distance of 32.54 feet, more or less, to a stone post at an angle, said point being the northwest corner of the water tower lot, so-called, as described in a deed from William H. Thorp to the Pawcatuck Woolen Mills, dated October 29, 1903, and recorded in the Land Evidence Records of said Town of Westerly, in Book No. 35, at page 301; thence northwesterly, a distance of 52.10 feet to an iron pipe driven in the ground at an angle, said point being located 37.40 feet easterly of a drill hole in a large boulder; thence northeasterly, a distance of 174.15 feet to an iron pipe; thence northwesterly, a distance of 125 feet, to a point on the westerly line of a parcel of land conveyed by William H. Thorp and Alice E. Thorp to the Pawcatuck Woolen Mills, by deed dated July 15, 1920, and recorded in the Land Evidence Records of said Town of Westerly in Book No. 46, at Page 161, said point being located 100 feet northerly along said boundary line, from the center line of a well, thence northeasterly, a distance of 463 feet, more or less, to the Pawcatuck River, said last mentioned line passing through an oak tree located near the edge of the Pawcatuck River; thence in a prolongation of said last mentioned line, to the boundary line between the said Town of Westerly and the said Town of Hopkinton, at the center of the Pawcatuck River; thence southerly and southwesterly, along the boundary line between the said

RHODE ISLAND REAL ESTATE CONVEYANCE TAX
TAX $ 140.00
DATE 10/8/92
PROPERTY IN WESTERLY
001759

Town of Westerly and the said Town of Hopkinton, to a point on the prolongation easterly of the first described boundary line of the premises now being described; thence westerly to the point and place of beginning. Said premises are shown and delineated on a plat entitled, "Plat Showing Location of Properties belonging to The Pawcatuck Woolen Mills, Potter Hill--Westerly--R.I. Scale 40 feet to an Inch, July 1920. George W. Woodward, Surveyor, Revised March 1930, Rossi & Lewis, Engineers," on file or to be placed on file in the office of the Town Clerk of said Town of Westerly, reference to which plat being hereby had and made, and the same being made a part hereof. Reserving and excepting the same right to pass over and across so much of said premises as are designated as Lot No. 5 on said plat, and by the same parties as is mentioned and are named in certain deeds to Edwin Babcock and Horace Babcock of said Lot No. 5, which said deeds are now on record in the Records of Land Evidence of said Town of Westerly reference thereto being hereby made. Being Lots Nos. 3A, 5 and 11, as shown on said revised plat dated March, 1930, but not including lot No. 11A, as shown on said plat.

Being the same premises described as Parcel No. 1 in that certain deed of Frederick T. Lawrence and Carrie K. Lawrence to Swift River Woolen Co. dated April 15, 1930 and recorded in the Land Evidence Records of said Town of Hopkinton in Book No. 37 at Page 489.

Being the same premises described as Tract One in that certain deed of Swift River Woolen Co. to Helen E. Cottrell dated August 4, 1955 and recorded in the Land Evidence Records of the Town of Westerly in Book 74 at Page 354.

TRACT TWO - A certain lot or parcel of land lying and being in said Town of Hopkinton, bounded and described as follows: Commencing on the easterly bank of the Pawcatuck River, at the northerly side of the abutment to the Potter Hill bridge, so-called, and running in a northeasterly and northerly direction, with the northwesterly and westerly boundary of the Ashaway Road, so-called, 1100 feet, more or less, to land now or formerly of Charles W. Austin; thence in a northwesterly direction with the southeasterly line of said Austin land, 87.5 feet, more or less, to a corner; thence in a northerly direction with the westerly line of said Austin land, 23.5 feet, more or less, to a corner; thence in a westerly direction about 95 feet, along land formerly of said Austin, to the Pawcatuck River; thence in a continuation of said last mentioned line, to the boundary line between said Town of Westerly and Hopkinton; thence upstream southeasterly, southerly and southwesterly, along the boundary line of said Town of Westerly and Hopkinton, to the northerly side of said Potter Hill Bridge, over said Pawcatuck River; thence southeasterly to the point and place of beginning. Said premises are shown and delineated on said plat above referred to, as Lot No. 8, reference to the same being hereby had and made and the same being made a part hereof.

Being the same premises described as Parcel No. 2 in that certain deed of Frederick T. Lawrence and Carrie K. Lawrence to Swift River Woolen Co. dated April 15, 1930 and recorded in the Land Evidence Records of said Town of Westerly in Book No. 53 at Page 427 and also recorded

in the Land Evidence Records of said Town of Hopkinton in Book 37 at Page 489. Being the same premises described as TRACT TWO in that certain deed of Swift River Woolen Co. to Helen E. Cottrell dated August 4, 1955 and recorded in the Land Evidence Records of the Town of Westerly in Book 74 at Page 354.

TRACT THREE - A certain lot or parcel of land, lying and being in the Village of Potter Hill, in said Town of Westerly, which formerly contained an office building and other improvements bounded and described as follows, to wit:- Beginning at a stone post on the westerly bank of the Pawcatuck River, said point being the southeasterly corner of land now or formerly of Frederick T. Lawrence, and the northeasterly corner of the premises herein conveyed; thence run southerly, 13 feet, more or less, along said Pawcatuck River, to a point three (3) feet southerly from the southerly side of the southerly side extended to the former office building, as the stood in 1955; thence run westerly, in a line three (3) feet southerly from and parallel with the southerly side of the former office building, to a point three (3) westerly from the westerly side of the former office building, if extended southerly; thence run northerly, in a line three (3) feet westerly from the westerly side of the former office building, to land now or formerly of said Frederick T. Lawrence; thence run easterly, along land now or formerly of said Frederick T. Lawrence, to the point and place of beginning.

Being the same premises conveyed to Swift River Woolen Co. by deed of Frederick T. Lawrence, dated May 6, 1930 and recorded in the Land Evidence Records of said Town of Westerly in Book No. 53 at Page 443.

Being the same premises described as TRACT THREE in that certain deed of the Swift River Woolen Co. to Helen E. Cottrell dated August 4, 1955 and recorded in the Land Evidence Records of the Town of Westerly in Book 74 at Page 354.

Together with all and singular the factories, store houses, barns and other improvements standing upon each of said tracts and premises aforedescribed, and the dam and water power and water rights and water privileges connected with and belonging to the said premises; subject, however, to the obligations made and contained in a certain agreement between Thomas W. Potter and Edwin Babcock and Horace Babcock, dated January 7, A.D. 1850, and recorded in Book 18, at Page 707, and in a certain deed from Thomas W. Potter to Edwin Babcock and Horace Babcock, of the same date, and recorded in the said agreement and to said deed being hereby made. Subject also to the obligations, if any, that the said Potter Hill Woolen Co., Inc., may be under by virtue of a certain agreement between the Potter Hill Manufacturing Company and the White Rock Company, so-called, dated September 25, 1828, and recorded in the records of Land Evidence in said Town of Westerly, in deed Book 18, at Page 554, reference to said agreement being hereby made. Subject, also, to any changes in the bank of said Pawcatuck River by reason of the action of the water thereof, since the year 1873.

Subject also to a certain pole line agreement granted to the Narragansett Electric Company by the Swift River Woolen Co.

Subject also to a Condemnation Order of the Town of Westerly which has been affirmed by the Rhode Island Washington County Superior Court in Civil Action File No. 80-4 entitled "Helen E. Cottrell, d/b/a Westerly Woolen Company vs. R.I. State Board of Standards and Appeals."

IN WITNESS WHEREOF, FLEET BANK, N.A., Conservator of the Estate of HELEN E. COTTRELL, has caused its corporate name and seal to be affixed hereto by ALLEN J. WELCH, Vice President, Fleet Bank, N.A. this 22nd day of SEPTEMBER, 1992.

FLEET BANK, N.A.
Conservator of the Estate of
HELEN E. COTTRELL

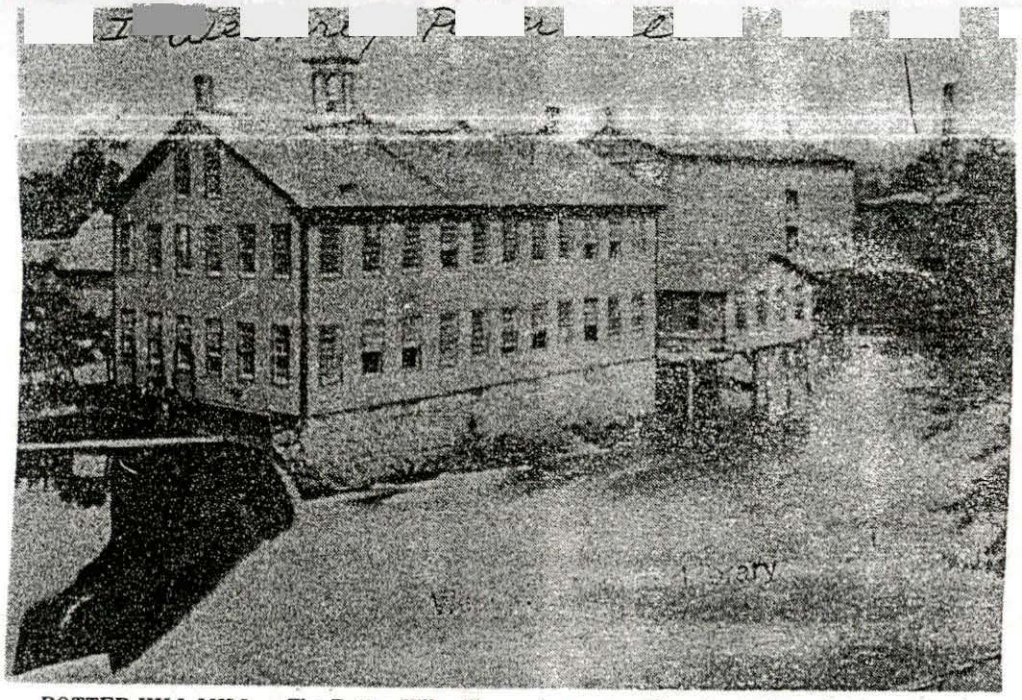
BY: Allen J. Welch
ALLEN J. WELCH
Its Vice President

STATE OF CONNECTICUT
COUNTY OF NEW LONDON

In New London on the 22nd day of September, 1992 before me personally appeared ALLEN J. WELCH, a Vice President of the said FLEET BANK, N.A., Conservator of the Estate of HELEN E. COTTRELL, to me known and known by me to be the party executing the foregoing in his said capacity for and in behalf of the said FLEET BANK, N.A., Conservator of the Estate of HELEN E. COTTRELL, and he then and there acknowledged said instrument, by him executed in his capacity for and in behalf of the said FLEET BANK, N.A., Conservator of the Estate of HELEN E. COTTRELL, to be the free act and deed of the said FLEET BANK, N.A., Conservator of the Estate of HELEN E. COTTRELL and his own free act and deed.

Maureen S. Gaunitt
MAUREEN S. GAUNITT
Notary Public
My Commission Expires: 3/31/93

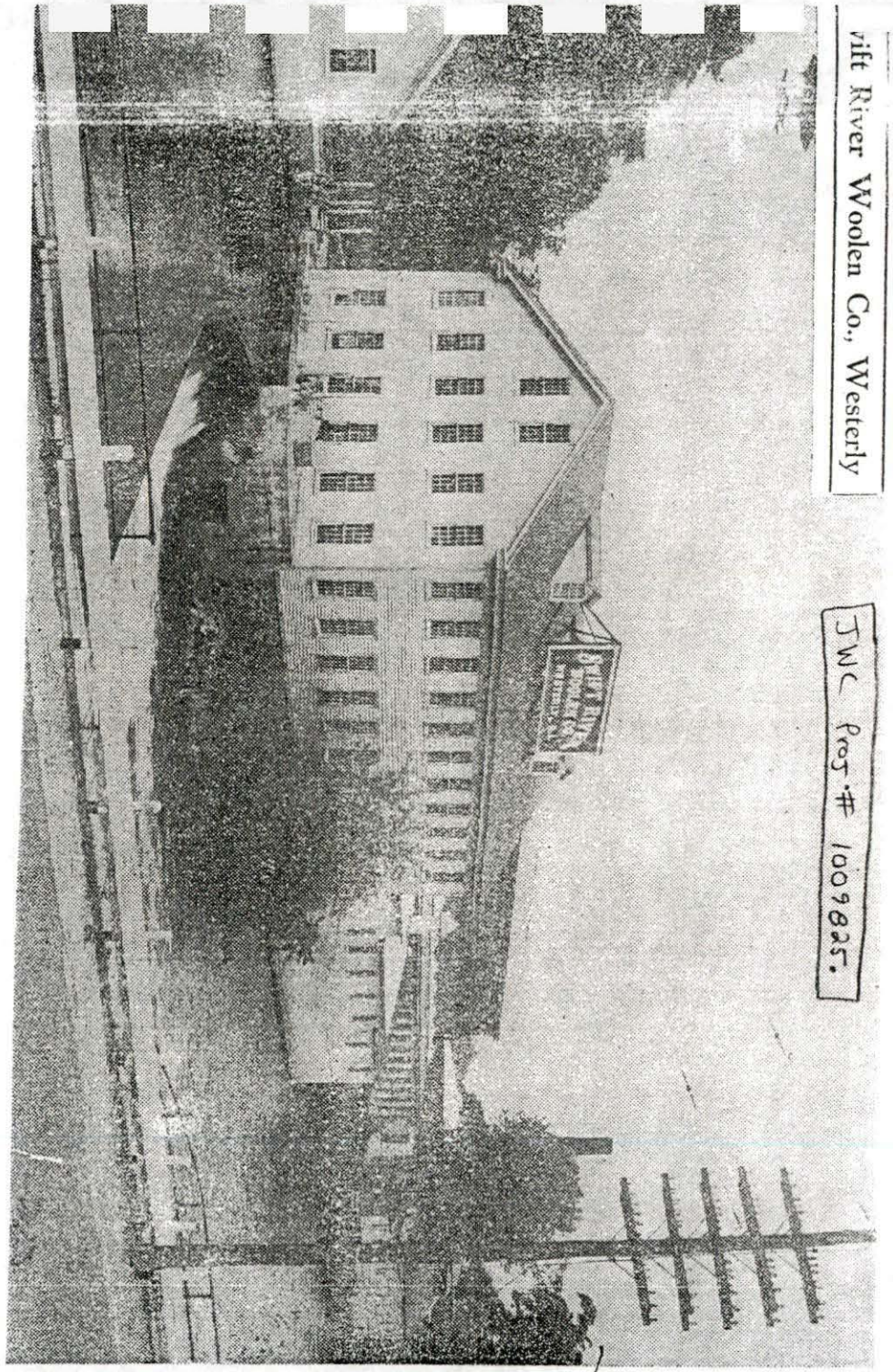
DONNA L. GIORDANO, TOWN CLERK
WESTERLY, R I. RET: Payne &



POTTER HILL MILL — The Potter Hill mill was a flourishing industry when this photo was taken. Located on the Westerly side of the river separating Westerly and Ashaway, the building is still standing but has not been occupied for many years. WS 7-15-74

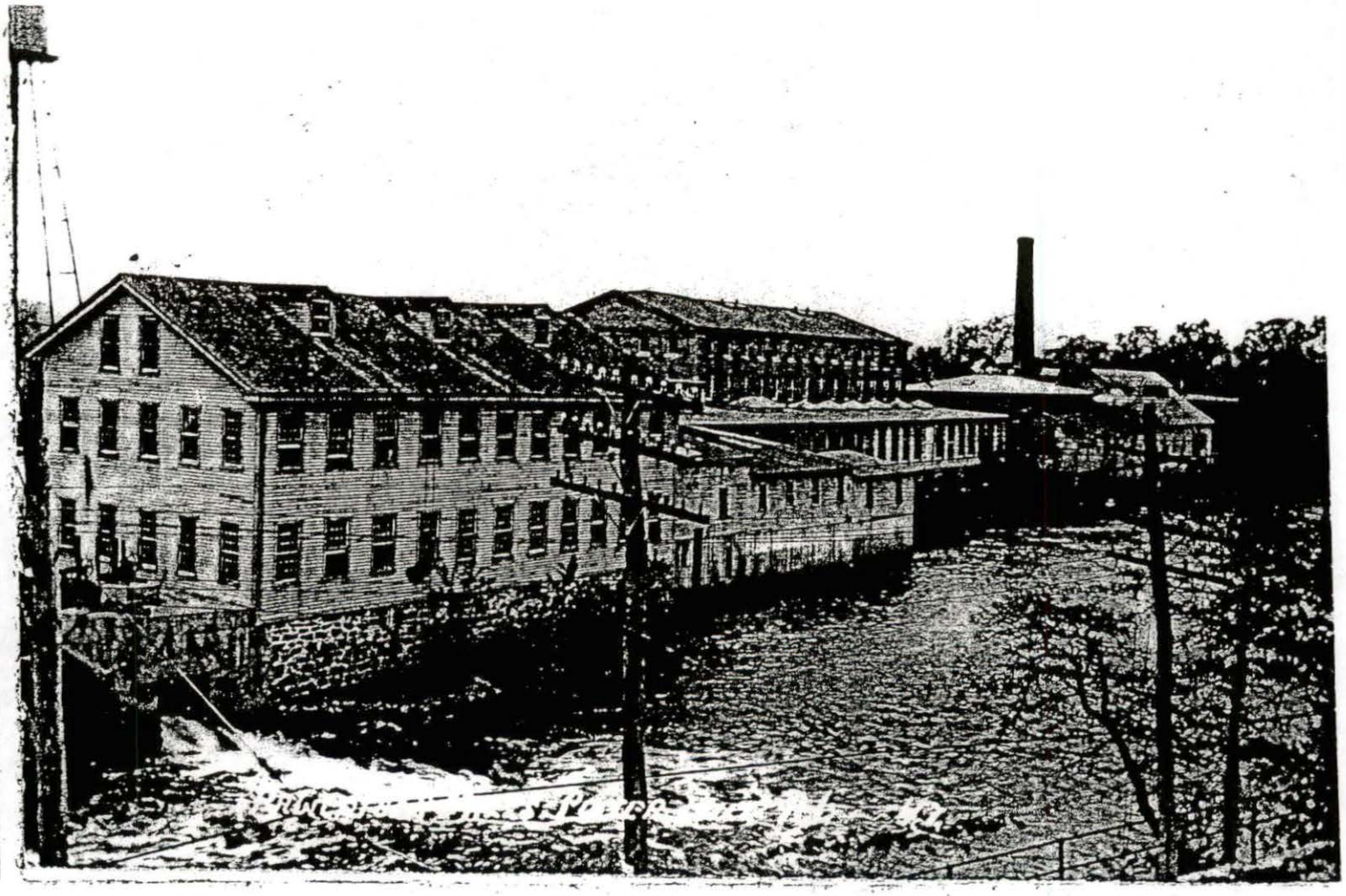


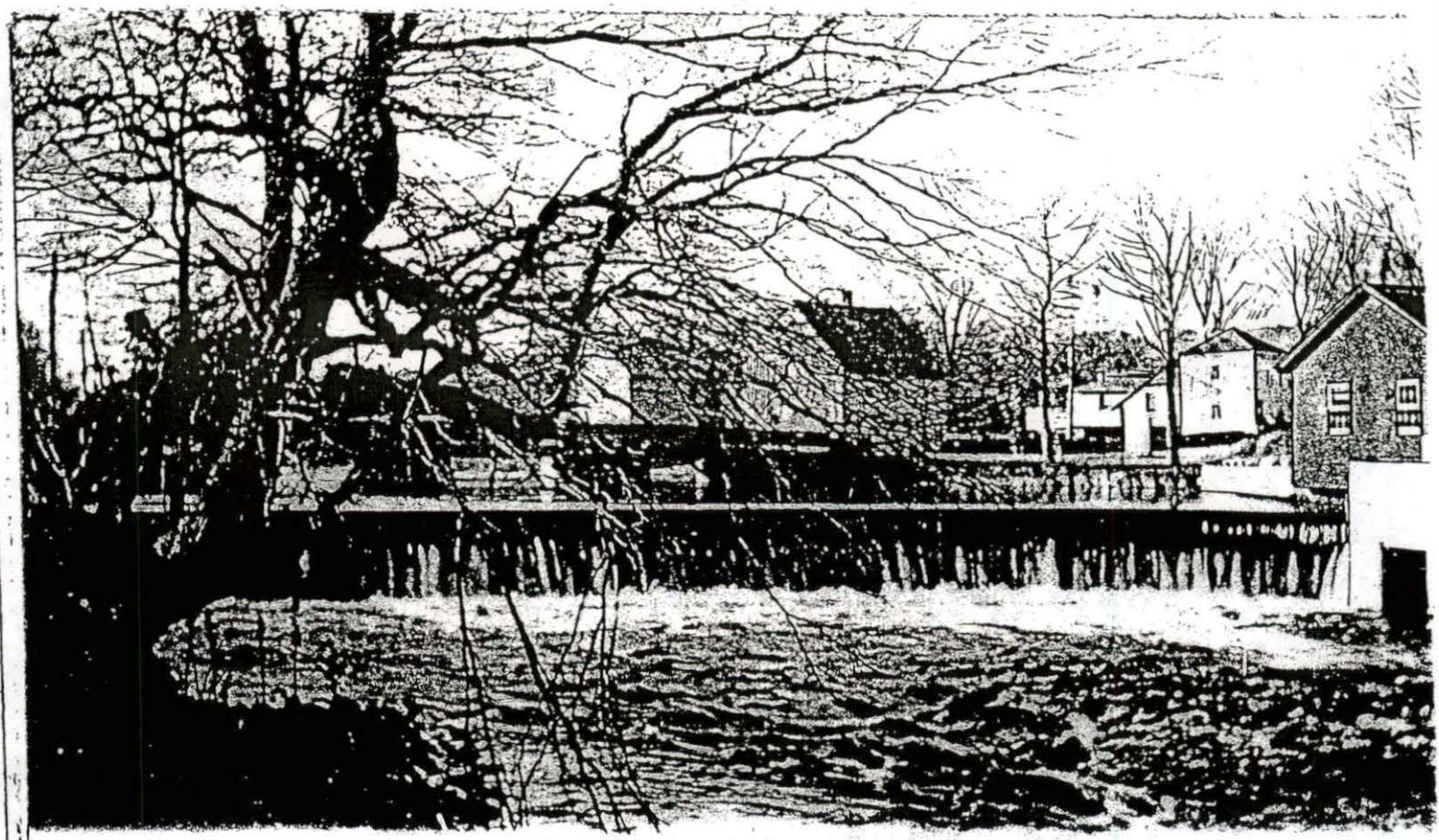
POTTER HILL MITT — This is the way the Potter Hill Mill, located at the town line dividing Westerly and Ashaway in Potter Hill, looked around the turn of the century. The building is still standing but has been closed for many years and is beginning to show its age. WS 3 JUN 75



vift River Woolen Co., Westerly

JWC Proj # 1009825.

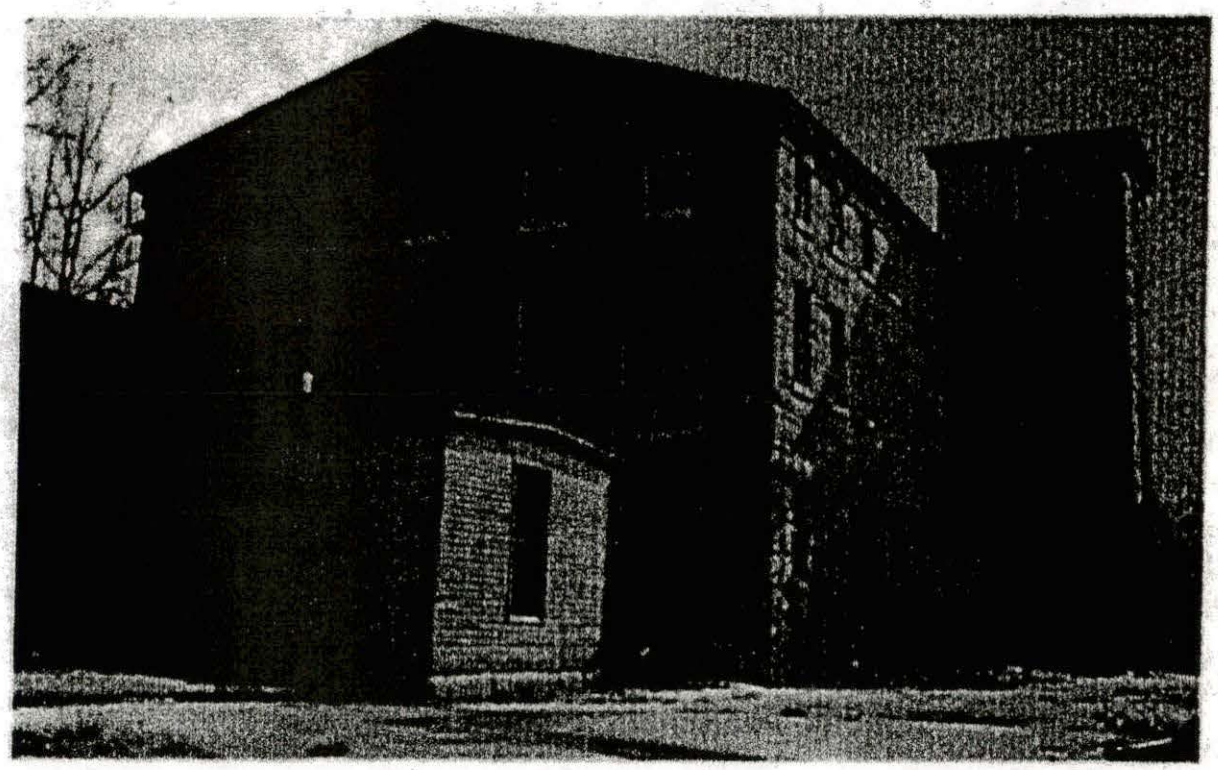




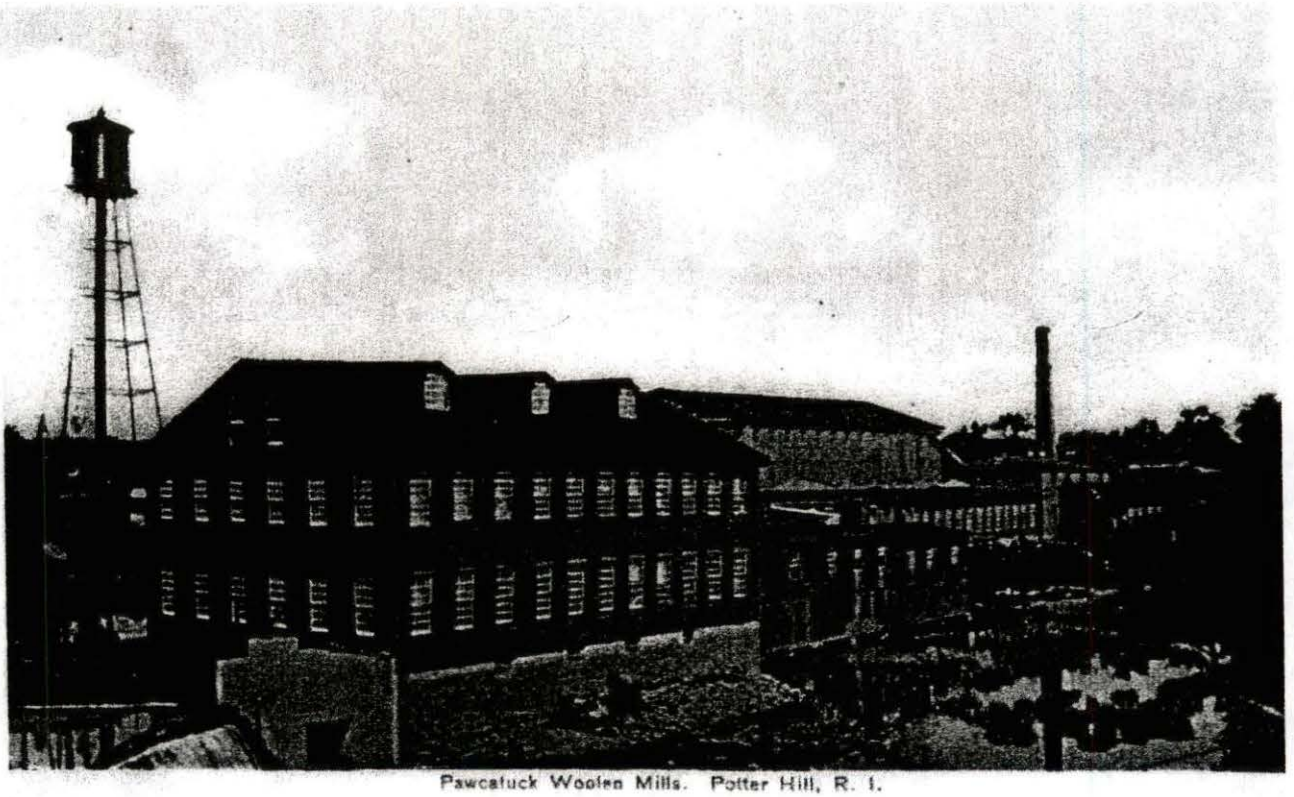
Potter Hill Dam and Bridge, near Westerly, R. I.

Boys-32. Girls-16. 9-24-'01. Lillian Wilson.

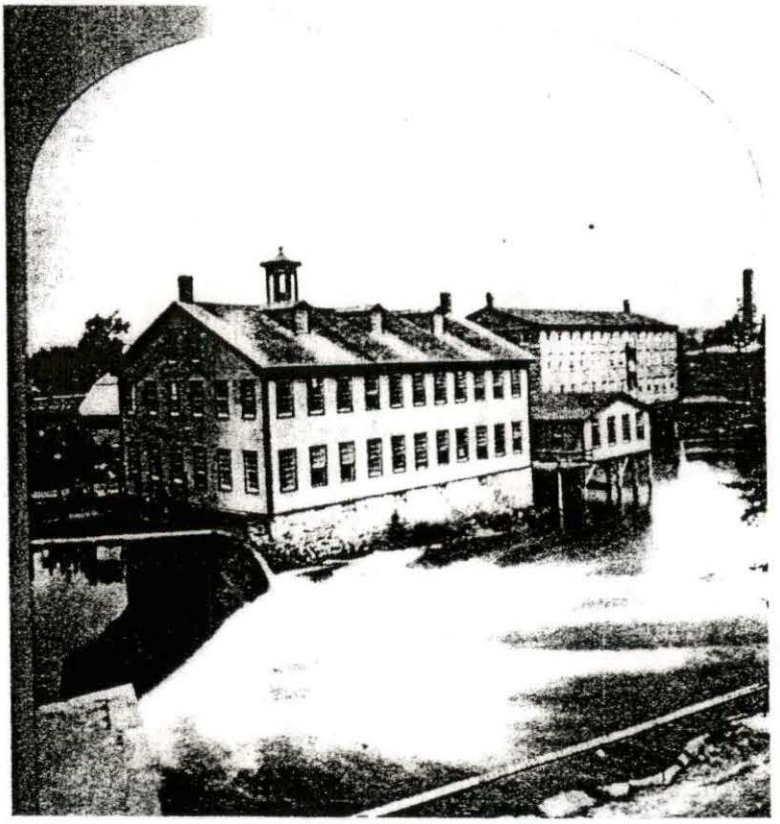
No. [illegible] Made in Germany for Woodmansee, Westerly, R. I.



Stone Mill Building (1847)



Pawcatuck Woolen Mills. Potter Hill, R. I.



Property Location 198 ER RD MAP 23/ g No Stat 400V

Vision ID: 55 Account #18049575 Bldg #: 1 of 1 Sec #: 1 of 1 Card 1 of 1 Print Date: 02/27/2006 10:36

CURRENT OWNER	TOPO.	UTILITIES	STRT./ROAD	LOCATION
RENEWABLE RESOURCES INC	1 Level	2 Public Water	1 Paved	3 Rural
C/O ED CARAPEZZA		6 Septic		7 Waterfront
900 N STAFFORD ST APT 2428				
ARLINGTON, VA 22203				
Additional Owners:				

SUPPLEMENTAL DATA

Other ID: 008-023 DATE RECO

FIRE DIST WFD

STATE CODE 07

SEWER N 55

DEED TYPE

GIS ID: ASSOC PID#

CURRENT ASSESSMENT

Description	Code	Appraised Value	Assessed Value
IND LND	0700	110,400	110,400
		Total 110,400	110,400

1401
WESTERLY, RI

VISION

RECORD OF OWNERSHIP

RECORD OF OWNERSHIP	BK-VOL/PAGE	SALE DATE	q/u	v/i	SALE PRICE	V.C.
RENEWABLE RESOURCES INC	432/ 53	10/08/1992	U	I	50,000	1N
COTTRELL HELEN E	74/ 354	08/15/1955			0	
Swift River Woolen Co.	53/443	05/06/1930				
Frederick T. Lawrence	53/190	3/12/1930				

PREVIOUS ASSESSMENTS (HISTORY)

Yr.	Code	Assessed Value	Yr.	Code	Assessed Value	Yr.	Code	Assessed Value
2005	0700	110,400	2005	0700	110,400	2003	0700	110,400
	Total:	110,400		Total:	110,400		Total:	110,400

EXEMPTIONS

Year	Type	Description	Amount
		Total:	

OTHER ASSESSMENTS

Code	Description	Number	Amount	Comm. Int.

This signature acknowledges a visit by a Data Collector or Assessor

APPRAISED VALUE SUMMARY

Appraised Bldg. Value (Card)	0
Appraised XF (B) Value (Bldg)	0
Appraised OB (L) Value (Bldg)	0
Appraised Land Value (Bldg)	110,400
Special Land Value	0
Total Appraised Parcel Value	110,400
Valuation Method:	C
Adjustment:	0
Net Total Appraised Parcel Value	110,400

ASSESSING NEIGHBORHOOD

NBHD/ SUB	NBHD NAME	STREET INDEX NAME	TRACING	BATCH
0035/A				

NOTES

MILL COMPLEX ON RIVER
BLDGS IN VERY POOR COND
VACANT AND VANDALIZED
BLDGS HAVE NO VALUE
LOCKED GATE

BUILDING PERMIT RECORD

Permit ID	Issue Date	Type	Description	Amount	Insp. Date	% Comp.	Date Comp.	Comments

VISIT/ CHANGE HISTORY

Date	Type	IS	ID	Cd.	Purpose/Result
10/28/1999			WW	04	Measur/Vac/Boarded up
6/1/1994			CV		
8/3/1990			DT	10	Measu/LtrSnt Letter Se
3/1/1990	X		TT	00	Measur+Listed

LAND LINE VALUATION SECTION

B #	Use Code	Use Description	Zone	D	Frontage	Depth	Units		Unit Price	I. Factor	S.A.	Acre Disc	C. Factor	ST. Idx	Adj.	Notes- Adj	Special Pricing	Adj. Unit Price	Land Value
1	400V	INDUSTRL MDL-00	R60				60,000	SF	1.74	1.00	9	1.0000	1.00	0035	0.85			1.48	88,800
1	400V	INDUSTRL MDL-00	R60				3.17	AC	8,000.00	1.00	9	1.0000	1.00	0035	0.85			6,800.00	21,600
						Total Card Land Units:	4.55	AC	Parcel Total Land Area:	198,085 SF								Total Land Value:	110,400

APPENDIX F

Resumes of Environmental Professionals

Joseph T. Unsworth, P.E.

Project Manager

PROFILE

Mr. Unsworth is a licensed professional engineer in Rhode Island. Mr. Unsworth started his career with the Rhode Island Department of Environmental Management (RIDEM). Mr. Unsworth was an Air Pollution Engineer for three years and a Principal Engineer for approximately five years in the Site Remediation program. Mr. Unsworth has been employed in the environmental consulting industry for the past nine years primarily as a Project Manager for the investigation and remediation of various types of property.

At Jacques Whitford, he has applied his regulatory experience, project management skills, and contractor management experience to the investigation of all facets of the environmental and engineering field. Currently Mr. Unsworth is a Project Manager located in the Rhode Island office and manages the daily progress of each project for which he is responsible. This involves project scheduling, work plan and quality assurance plan preparation, budget control, subcontractor interaction, client correspondence, data reduction and analysis, and report preparation. In addition to his direct project involvement, Mr. Unsworth manages the office's health and safety policies, implements the office's internal training program, and is the technical advisor for RIDEM regulations.

EDUCATION

University of Rhode Island, 1988
BS in Chemical Engineering

PROFESSIONAL COURSES AND DESIGNATIONS

- Licensed Professional Engineer (RI), 2002
- OSHA 29 CFR 1910.120, 40 Hour Hazardous Waste Site Worker Protection Training
- First Aid & CPR

CAREER SUMMARY

2002-Present	**Jacques Whitford, Rhode Island** Project Manager
1998-2002	**GZA Geoenvironmental** Project Manager
1997-1998	**Environmental Science Services** Project Manager
1996-1997	**Coneco Environmental** Project manager
1988-1996	**Rhode Island Department of Environmental Management** Principal Engineer



LANDMARK PROJECTS

International Depository Inc, North Kingstown, RI. *Client:* Rhode Island Department of Transportation, 1992

Supervised the removal of over 2,000 drums of various hazardous materials stored in deteriorating conditions at a former hazardous waste storage facility. Also managed the remediation of two areas of soil contamination. Responsibilities included subcontractor management, maintaining site security, overseeing emergency response actions, and ensuring project was completed within budget and in compliance with a USEPA order.
Role: Project Manager

Central Landfill, Johnston, RI
Client: Rhode Island Resource Recovery Corporation, 1999-2002

As Project Manger, responsibilities included the management of all environmental monitoring programs. The project included the quarterly sampling and analysis of over 40 groundwater monitoring wells, 10 surface waster and sediment locations, leachate sampling, ambient air testing, indoor air testing, and surface emission monitoring. The project also required data reduction and reporting to the RIDEM that included statistical analysis of laboratory results.

Former Providence Steel, Providence, RI
Client: Millhaus LLC, 2003-Ongoing

The project included the excavation and onsite treatment of soil impacted with high levels of lead. The treatment included the stabilization of the lead in the soil with a phosphorous based chemical that reduced the leachable lead to below hazardous waste standards. The treatment of the soil resulted in saving the client over $75,000 in disposal cost. In additional to the onsite treatment, other responsibilities included managing the testing of all soils, managing the transportation of disposal of contaminated soil, and all regulatory correspondence with the RIDEM. Ongoing activities include capping of the site with a combination of soil and asphalt and filing of an Environmental Land Use Restriction on the deed of the property.
Role: Project Manager



Vincent L. Jacques, P.E.

Civil/Environmental Engineer

PROFILE

Mr. Jacques is a Professional Engineer with 12 years experience conducting environmental investigations at contaminated sites, due diligence assessments, and hazardous material assessment and abatement projects throughout New England. Mr. Jacques has supervised and completed numerous Level I & II Environmental Site Assessments on industrial, commercial and residential properties for lending institutions, municipalities and private clients. Mr. Jacques has also been involved in various Phase III/remediation projects involving the restoration of impact soil, groundwater, and vapor gas. He also completed numerous asbestos and lead-based paint surveys, abatement plans, operations and maintenance programs, project monitoring, and final clearance testing for various types of properties, each approved by appropriate state agencies. Mr. Jacques also has significant experience in preparing storm water permits, Title V air permits, underground injection control permits, and spill prevention counter control measure plans.

Mr. Jacques is currently the Area Manager for Jacques Whitford's Rhode Island office. In this capacity, Mr. Jacques is responsible for ensuring that the quality of all projects meets Jacques Whitford's stringent quality standards, the appropriate resources are assigned to each project, and ensuring project success through appropriate communication with clients.

EDUCATION

The University of Rhode Island, 1992
B.S in Civil Environmental Engineering

Northeastern University, 1997
Certificate of Professional Achievement, Specialization:
Hazardous Waste Management,
Concentration: Site Investigation and Remediation

PROFESSIONAL COURSES AND DESIGNATIONS

- Professional Engineer, Rhode Island – No. 7047, 1999
- Certified Asbestos Inspector & Project Designer, Rhode Island – AAC-0409IS/AAC-0909PD
- Certified Asbestos Inspector, Project Designer and Project Monitor, Massachusetts – AI 040309/AD 40576/AM 040310
- Certified Asbestos Inspector & Project Designer, New Hampshire –224-I
- Certified Asbestos Inspector, Maine – AI-0224
- Environmental Lead Inspector Training – Initial 40 hour course
- Princeton Gamma-Tech, Inc. X-ray Fluorescence Analyzer Training
- Certified Environmental Inspector/Specialist, Environmental Assessment Association



- OSHA 29 CFR 1910.120, 40 Hour Hazardous Waste Site Worker Protection Training
- OSHA 29 CFR 1910.120, Confined Space Entry
- OSHA 29 CFR 1910.120, 8 Hour Supervisor Training
- OSHA 29 CFR 1910.120, 8 Hour Refresher Training
- First Aid and CPR Trained

CAREER SUMMARY

2002-present	**Jacques Whitford Company, Inc. – Lincoln, Rhode Island** Area Manager
1994-2002	**Kenyon Environmental, Inc. – Pawtucket, RI** President
1991-1994	**Kenyon Environmental, Inc. – East Providence, RI** Vice President
1988-1991	**Narragansett Bay Commission, Providence, RI** Environmental Engineer

MEMBERSHIPS/ASSOCIATIONS

- Voting Member, ASTM, Committee E50, Environmental Assessment
- Member, Chi Epsilon – Civil Engineering Honor Society
- Member, Tau Beta Pi – Engineering Honor Society
- Member, Golden Key – National Honor Society
- PADI Certified for Scuba Diving
- Member, The University Club, Providence, Rhode Island
- St. James Church, Finance Committee Member
- Pack 1 Manville, Cub Scout Leader and Committee Member



APPENDIX B

Limited Phase II ESA

REPORT

Limited Phase II Environmental Site Assessment – 198 Potter Hill Road, Westerly, RI

Prepared for:

Renewable Resources Inc.

PROJECT NO. 1009825.01

PROJECT NO. 1009825.01

REPORT TO

Renewable Resources Inc.
C/O Dr. Edward Carapezza
900 North Strafford, Suite 2428
Arlington, VA 22203

ON

Limited Phase II Environmental Site Assessment – 198 Potter Hill Road, Westerly, RI

April 26, 2006

Jacques Whitford
24 Albion Road, Suite 220
Lincoln, Rhode Island,
02865

Phone: 401-312-8005
Fax: 401-312-8010

www.jacqueswhitford.com

Joseph T. Unsworth, P.E — Date
Project Manager

Vincent L. Jacques, P.E — Date
Senior Reviewer

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APPENDIX C Photographs
APPENDIX D Analytical Data Report

LIMITED PHASE II ENVIRONMENTAL SITE ASSESSMENT

1.0 INTRODUCTION

Jacques Whitford Company, Inc. (Jacques Whitford) has conducted a Limited Phase II Environmental Site Assessment (ESA) on the property located at 198 Potter Hill Road in Westerly, RI, hereinafter referred to as the "Site."

This report has been prepared for the exclusive use and reliance by Renewable Resources Inc. (Client) by the authority of Mr. Edward Carapezza, PhD. Jacques Whitford completed a Phase I ESA on the Site for the Client, which was documented in a report dated March 14, 2006. The main purpose of this Limited Phase II ESA is to determine if a release has occurred at areas of concern (AOCs) that were identified during the Phase I ESA.

Mr. Joseph T. Unsworth, P.E. of Jacques Whitford was on-Site on Wednesday, April 3, 2006 to observe the completion of six test pits and collect soil samples. This report summarizes the findings and results from the investigation. **Appendix A** contains figures of the Site location (**Figure 1**) and test pit locations (**Figure 2**). **Appendix B** includes test pit logs and **Appendix C** photographs of the test pits. **Appendix D** contains the laboratory analytical data report for soil samples.

2.0 SITE DESCRIPTION

2.1 Site and Vicinity General Characteristics

According to records on file at the Westerly Tax Assessor's office, the subject property consists of one land parcel identified on Westerly Tax Assessor's Plat Map Plat Map 8, as Lot 23. The Lot 23 contains approximately 4.55 acres. Lots 23 is located in an area zoned "RR-60", defined as Rural Residential with a minimal lot size of 60,000 square feet. Lot 23 is not bound by any roads. Access to the subject property is from Potter Hill Road via a driveway that runs across the southeastern part of Lot 24 and onto the southern part of the subject property. Properties abutting the subject property are residential and agricultural properties to the west, the Pawcatuck River to the east and north, and residential properties further east and north.

The subject property has been vacant for over 40 years and no utilities appear to be active at the subject property. Electricity and telephone service are available for the subject property. Municipal water is available in the area of the subject property. There were no records at the Westerly Water Department for the subject property. The subject property formerly relied on an onsite well for water, which was stored in a storage tank tower on the site. There are no municipal sewers in the area of the subject property. The field property card from the Westerly Tax Assessor indicates that the subject property utilizes a septic system, however, the current site owner indicated that he believed that all wastewater was formerly discharge directly to the adjacent Pawcatuck River. The subject property buildings are not currently heated. The boilers remaining in the former boiler building appear to have been fueled by coal.

2.2 Substances of Concern (SOCs)

Coal may have been used for fuel on the subject property. Metals and polynuclear aromatic hydrocarbons are typical SOCs associated with coal. An area of dumping was observed in the north western part of the subject property. Miscellaneous debris was observed including several rusted 55 gallon drums. None of the drums contained any liquid and were rusted. Various materials could have been buried in this are including chemical containing volatile organic compounds (VOCs), metals, and coal/coal ash.

2.3 Conceptual Site Model

A Conceptual Site Model includes identifying Areas of Concern (AOC), SOCs from each AOC, potential release mechanisms from each AOC, potential media impacted by each AOC, and potential migration pathways from each AOC. During the Phase I ESA, Jacques Whitford identified several potential AOCs, which are summarized in the following bulleted paragraphs:

AOC #1 – Northwestern Debris Area: A mound of buried debris was observed in the northwestern portion of the Site. Drums were observed near the debris pile. The unlabelled drums all were rusted and did not contain any liquids. Some drums were intact and some were not. No odors or other evidence of a release was observed from any of the drums.

AOC #2 – Potential Former Coal Storage: The Site likely stored coal for use as fuel in the boilers that still exist on the Site. Jacques Whitford reviewed aerial photographs dating back to 1939 to assess exterior areas that could have been used for coal storage. Based on a review of the aerial photographs, the only area that appears to been able to be used for coal storage is west of the building near the former boiler building.

Table 1 provides a description of each AOC, the associated SOCs, potential release mechanisms, potential impacted media, and potential migration pathways. The Scope of Work in Section 3.0 provides the methods to assess each of the AOCs.

Table 1 – Summary of Conceptual Site Model

Area of Concern	Substances of Concern	Potential Release Mechanism	Potentially Impacted Media	Potential Migration Pathways
Northwestern Debris Area	VOCs/Metals/PAHs	Miscellaneous materials buried including drums that could have rusted and leaked contents.	Soils and groundwater	SOCs can be adsorbed onto subsurface soils and/or released to groundwater
Potential Former Coal Storage	Metals/PAHs	Coal stored on unpaved areas could result in coal being mingled with soils.	Soil beneath former coal piles. Coal typically does not result in groundwater contamination.	SOCs can be adsorbed onto subsurface soils but are typically do not impact groundwater.

3.0 SCOPE OF WORK

In order to assess whether a release has occurred from the AOCs, the following subsurface investigation was completed.

3.1 Test pits

The objective of the investigation was to assess potential impacts from the AOCs. On Monday, April 3, 2006, a Case 580K rubber tired backhoe, contracted by the Client, was utilized to complete six test pits (TP-1 through TP-6) at the Site. Refer to Figure 2 for test pit locations. Test pits TP-1 through TP-3 were completed in the buried debris pile on the northwest area of the Site. Test pits TP-4 through TP-6 were completed west of the Site building near the former boiler building.

Soil samples were collected from each of the test pits for lithologic classification and profiling of potential impacts. The test pits were advanced to approximately 6 feet below ground surface (bgs). Test pit logs are presented in Appendix A. All collected soil samples were assessed for evidence of impacts by visual and olfactory examination. Debris and possible ash were observed in some of the test pits, however no olfactory evidence of impacts were observed. Soil samples were also field-screened for the presence of volatile organic compounds (VOCs) using a HNu Model 101 photoionization detector (PID) equipped with a 10.6 eV bulb and an organic vapor detection range of 0.1 to 10,000 parts-per-million (ppm). No VOCs were detected in any of the soil samples collected.

Two soil samples were collected for laboratory analysis. One soil samples was collected from TP-3 and one from TP-5. TP-3 contained a large amount of debris including possible burnt wood material. TP-3 contained more debris and more various materials than the other test pits in the buried debris area. A soil samples was also collected from TP-5. TP-5 contained what appeared to be cloth material and/or coal ash. None of the other test pits completed west of the building appeared to contain these materials. The soil samples collected were submitted to Spectrum Analytical, Inc. (Spectrum Analytical) laboratory in Agawam, Massachusetts, for analysis of Priority Pollutant 13 Metals by USEPA Method 200.7/7471A and PAHs by USEPA Method 8270.

3.2 Field Observations

Site soils encountered in the test pits in the buried debris area consisted primarily of topsoils underlain by debris and fine to coarse sand with trace silt, classified as "SW-Fill" (ASTM – Unified Soil Classification). The debris consisted of glass, metal, brick, wood, and fabrics. Soils encountered in the test pits near the buildings consisted primarily of topsoils underlain by fine to coarse sand with some gravel and trace silt, and possible ash in two of the test pits, classified as "SW-Fill" (ASTM – Unified Soil Classification).

4.0 RESULTS

The objective of this limited Phase II ESA was to assess whether potential former coal storage and an observed debris pile have impacted soils at the Site. Soil samples were submitted to laboratory for analysis. The results of the analysis are summarized on **Table 2**. There were no VOCs or SVOCs detected in any of the soil samples at concentrations greater than the applicable RIDEM criteria. Arsenic and beryllium were detected in one soil sample obtained near the former boiler building at concentrations greater than RIDEM's Residential Direct Exposure Criteria (RDEC).

Table 2 – Summary of Soil Analytical Results

Parameter	RIDEM Standard		TP-3/S1	TP-5/S1
	RDEC	GA Leach		
PAHs				
Benzo(a)anthracene	0.9	NE	ND	0.24
Benzo(a)pyrene	0.4	240	ND	0.232
Benzo(b)fluoranthene	0.9	NE	ND	0.299
Benzo(g,h,i)perylene	0.8	NE	ND	0.203
Chrysene	0.4	NE	ND	0.357
Fluoranthene	20	NE	ND	0.566
Phenanthrene	40	NE	ND	0.322
Pyrene	13	NE	ND	0.424
PP 13 Metals				
Antimony	10	NA	ND	ND
Arsenic	7	NA	4.90	**10.4**
Beryllium	0.4	NA	0.375	**0.405**
Cadmium	39	NA	0.618	0.503
Chromium	390	NA	46.7	280
Copper	3,100	NA	73.6	23.6
Lead	150	NA	134	101
Mercury	23	NA	0.621	ND
Nickel	1,000	NA	6.06	9.39
Selenium	390	NA	ND	ND
Silver	200	NA	ND	ND
Thallium	5.5	NA	ND	ND
Zinc	6,000	NA	81.8	127

Notes: * RIDEM Standards from *"Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases"*
I/CDEC – Industrial/Commercial Direct Exposure Criteria, GA Leach – GA Leachability Criteria
All results are in mg/kg
NE – None Established
ND – Not Detected
NA – Not applicable due to the fact that samples were analyzed for total metals and not TCLP metals

5.0 CONCLUSIONS & RECOMMENDATIONS

Jacques Whitford performed a Limited Phase II ESA at the Site to determine if a release has occurred at AOCs that were identified during the Phase I ESA. Based on the results from this investigation, one of the AOCs appears to have impacted subsurface soil Site. The area west of the building near the former boiler building appears to have been used for coal storage or possible ash disposal. Two metals were detected in the soil sample form this area at concentrations greater than RIDEM's Residential Direct Exposure Criteria (RDEC).

Due to the detection of arsenic and beryllium in soils on the Site at concentrations greater than criteria contained in RIDEM's *Rules and Regulations for the Investigation and Remediation of Hazardous Materials Releases* (Remediation Regulations), any owner or operator of the Site is required to notify the RIDEM of a release. Due to the fact that the Client is the owner of the Site, notification is required within 15 days of obtaining knowledge of the release. The RIDEM will

require that a Site Investigation Report (SIR) be completed for the Site that assesses that nature and extent of contamination at the Site. The SIR must include three remedial alternatives for addressing the contamination detected. One of the remedial alternatives must be proposed as the preferred remedial alternative. This Limited Phase II ESA and the Phase I ESA completed will be used in the SIR. Addition soil samples near the area of test pit TP-5 may be required to assess the extent of the observed ash. Preferred remedial alternatives to control risks associated with direct exposure typically include capping with asphalt or clean soil or excavation and proper disposal. The appropriate preferred remedial alternative will be recommended when the extent of the contamination is more accurately assessed.

Once the SIR is approved, a Remedial Action Work Plan will be required along with a fee of $1,000. The RAWP provides the details of how the approved preferred remedial alternative will be implemented. Once the preferred remedial alternative is completed and all remedial objectives attained, the RIDEM will issue a Letter of Compliance for the Site.

6.0 LIMITATIONS

Information obtained from the Client, public agencies, limited site reconnaissance, limited sampling, and laboratory chemical analysis was used to characterize the subject property. Although the services provided are extensive, findings and conclusions are limited to and by the qualitative and quantitative information obtained. Further subsurface investigation methods are available that could further define the subject property soil and groundwater conditions. If information becomes available concerning the subject property that was not included in this report, it should be made available to Jacques Whitford so that conclusions and/or recommendations can be re-examined and modified, where applicable.

No attempt was made to determine the compliance of present or former owners or operators of the subject property with Federal, State, or Municipal environmental or land use laws or regulations. Because geological formations are inherently heterogeneous in nature, the professional services and opinions provided by Jacques Whitford under this agreement are not guaranteed to be a representation of complete subject property conditions.

Events occurring on the subject property after April 3, 2006, the date of test pitting, are beyond the scope of this report. Jacques Whitford makes no expressed or implied representations or warranties regarding any changes in condition of the premises after this date.

Predefined PID field screening is not as sensitive as laboratory analysis and conclusions drawn from such screening are limited to those compounds potentially detectable with a 10.6 electron volt lamp. No representation regarding the potential results of additional field screening, laboratory analysis, or regarding the potential results or analysis for materials not analyzed for is expressed or implied.

Jacques Whitford has retained a copy of this report. No additions or deletions are permitted without the written consent of Jacques Whitford and the Client. Use of this report in whole or in part by parties other than those authorized by the Jacques Whitford and the Client is prohibited.

APPENDIX A

Figures



SOURCE: USGS TOPOGRAPHIC MAP 1984

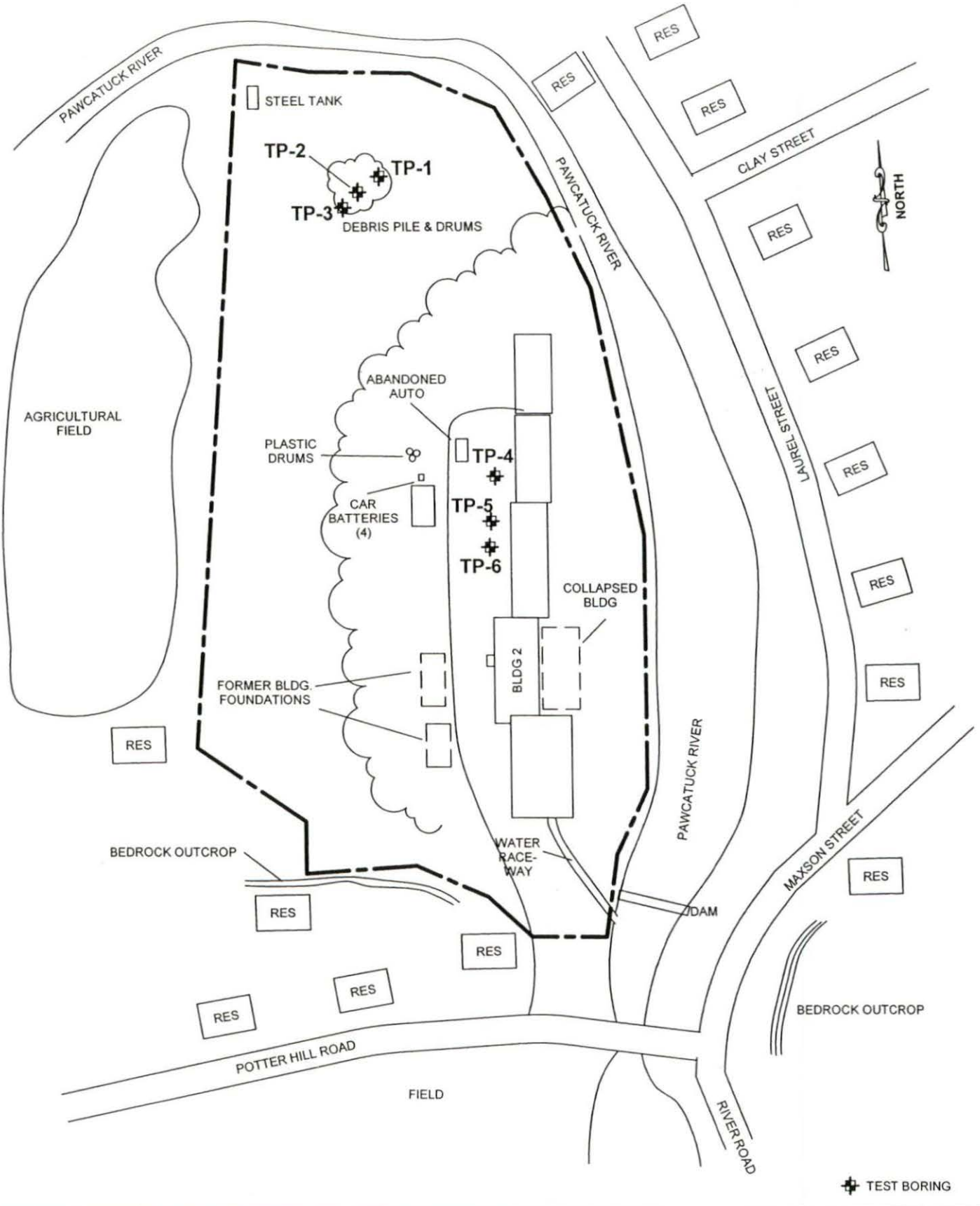
Jacques Whitford Company, Inc.

JACQUES WHITFORD LOCATION: LINCOLN, RI		BASEMAP SOURCE: ASHAWAY QUAD	
DATE PREPARED: 2-14-06	PREPARED BY: MJB	APPROXIMATE SCALE: 1:24,000	
PROJECT NAME/FILE NAME: MILL BLDG./LOCUS		PROJECT NUMBER/PHASE: 1009825.	

DRAWING TITLE: SITE LOCATION MAP
POTTER HILL ROAD
WESTERLY, RI

PREPARED FOR: RENEWABLE RESOURCES

FIGURE NO. 1



Jacques Whitford Company, Inc.

JACQUES WHITFORD LOCATION: 24 ALBION ROAD, SUITE 220, LINCOLN, RI				
DATE PREPARED: 3-8-06	DESIGNED BY: JTU	DRAWN BY: WL	CHECKED BY: VLJ	REVIEWED BY: JTU
REVISION DATE:	REVISION NO:	DRAWN BY:	CHECKED BY:	REVIEWED BY:
PROJECT NAME/FILE NAME: 198 POTTER HILL		PROJECT NUMBER/PHASE: 1009825	SCALE: NTS	

DRAWING TITLE:

SITE PLAN

198 POTTER HILL ROAD
WESTERLY, RI

PREPARED FOR: Renewable Resources Inc.

FIGURE NO. 2

APPENDIX B

Tets Pit Logs

JWC TEST PIT EXCAVATION LOG

PROJECT: 198 Potter Hill Road

LOCATION: Westerly, RI

TEST PIT NO.: TP-1

DATE: 4/3/2006

FILE NO.: 1009825.01

JWC REP.: JTU

WEATHER: Sunny, 40-45 F, wind < 5

EXCAVATION EQUIPMENT

CONTRACTOR:

OPERATOR: Randy

MAKE: Case MODEL: 580 K

CAPACITY: 1/2 yd3 REACH: 15 ft

TIME STARTED: 0807

TIME COMPLETED: 0815

GROUND ELEV.:

SAMPLE DEPTH	STRATA CHANGE	SOIL DESCRIPTION	EXCAV. EFFORT	HNU INSTRUMENT READING	REMARKS
FEET					
1	Topsoil	f SAND , little organics, brown	E		
2 S-1		f-c SAND and DEBRIS (metal, glass), little silt, dry, brown	E	0.0	
3					
4		f-m SAND, little silt, moist, brown	E		
5					
6					
7		Test Pit Terminated			
8					
9					
10					
11					
12					
13					
14					

REMARKS

JWC TEST PIT EXCAVATION LOG

PROJECT: 198 Potter Hill Road

LOCATION: Westerly, RI

TEST PIT NO.: TP-2

DATE: 4/3/2006

FILE NO.: 1009825.01

JWC REP.: JTU

EXCAVATION EQUIPMENT

CONTRACTOR:

OPERATOR: Randy

MAKE: Case MODEL: 580 K

CAPACITY: 1/2 yd3 REACH: 15 ft

TIME STARTED: 0807

TIME COMPLETED: 0820

GROUND ELEV.:

WEATHER: Sunny, 40-45 F, wind < 5

SAMPLE DEPTH	STRATA CHANGE	SOIL DESCRIPTION	EXCAV. EFFORT	HNU INSTRUMENT READING	REMARKS
FEET					
1	Topsoil	f SAND , little organics, brown	E		
2		f-c+ SAND and DEBRIS (metal, glass, brick), little silt, moist, brown	E	0.0	
3 S-1					
4			E		
5		f-m SAND, little silt, moist, brown	E		
6					
7		Test Pit Terminated			
8					
9					
10					
11					
12					
13					
14					

REMARKS

JWC TEST PIT EXCAVATION LOG

PROJECT: 198 Potter Hill Road

LOCATION: Westerly, RI

TEST PIT NO.: TP-3

DATE: 4/3/2006

FILE NO.: 1009825.01

JWC REP.: JTU

WEATHER: Sunny, 40-45 F, wind < 5

EXCAVATION EQUIPMENT

CONTRACTOR:

OPERATOR: Randy

MAKE: Case MODEL: 580 K

CAPACITY: 1/2 yd3 REACH: 15 ft

TIME STARTED: 0825

TIME COMPLETED: 0835

GROUND ELEV.:

SAMPLE DEPTH (FEET)	STRATA CHANGE	SOIL DESCRIPTION	EXCAV. EFFORT	HNU INSTRUMENT READING	REMARKS
1	Topsoil	f SAND , little organics, brown	E		
2 S-1		f-c SAND and DEBRIS (metal, glass, fabrics, wood), little silt, dry, brown	E	0.0	
3					
4			E		
5		f-m SAND, little silt, moist, brown			
6			E		
7		Test Pit Terminated			
8					
9					
10					
11					
12					
13					
14					

REMARKS

JWC TEST PIT EXCAVATION LOG

PROJECT: 198 Potter Hill Road

LOCATION: Westerly, RI

TEST PIT NO.: TP-4

DATE: 4/3/2006

FILE NO.: 1009825.01

JWC REP.: JTU

EXCAVATION EQUIPMENT

CONTRACTOR:

OPERATOR: Randy

MAKE: Case MODEL: 580 K

CAPACITY: 1/2 yd3 REACH: 15 ft

TIME STARTED: 0845

TIME COMPLETED: 0855

GROUND ELEV.:

WEATHER: Sunny, 40-45 F, wind < 5

SAMPLE DEPTH	STRATA CHANGE	SOIL DESCRIPTION	EXCAV. EFFORT	HNU INSTRUMENT READING	REMARKS
FEET					
1	Topsoil	f SAND , little organics, brown	E		
2 S-1		f-c SAND , dry, black (ash)		0.0	
3		f-c+ SAND, littel gravel, trace silt, dry, tan	E		
4			E		
5					
6					
7		Test Pit Terminated			
8					
9					
10					
11					
12					
13					
14					

REMARKS

JWC TEST PIT EXCAVATION LOG

PROJECT: 198 Potter Hill Road

LOCATION: Westerly, RI

TEST PIT NO.: TP-5

DATE: 4/3/2006

FILE NO.: 1009825.01

JWC REP.: JTU

WEATHER: Sunny, 40-45 F, wind < 5

EXCAVATION EQUIPMENT

CONTRACTOR:

OPERATOR: Randy

MAKE: Case MODEL: 580 K

CAPACITY: 1/2 yd3 REACH: 15 ft

TIME STARTED: 0900

TIME COMPLETED: 0910

GROUND ELEV.:

SAMPLE DEPTH	STRATA CHANGE	SOIL DESCRIPTION	EXCAV. EFFORT	HNU INSTRUMENT READING	REMARKS
FEET					
1	Topsoil	f SAND , little organics, brown	E		
2 S-1		f-c SAND , littel ash, dry, tan/black		0.0	
3		f-M SAND, possible ash, trace silt, dry, brown/black	E		
4			E		
5		f-M SAND, little gravel, trace silt, moist, brown			
6			E		
7		Test Pit Terminated			
8					
9					
10					
11					
12					
13					
14					

REMARKS

JWC TEST PIT EXCAVATION LOG

PROJECT: 198 Potter Hill Road

LOCATION: Westerly, RI

TEST PIT NO.: TP-6

DATE: 4/3/2006

FILE NO.: 1009825.01

JWC REP.: JTU

EXCAVATION EQUIPMENT

CONTRACTOR:

OPERATOR: Randy

MAKE: Case MODEL: 580 K

CAPACITY: 1/2 yd3 REACH: 15 ft

TIME STARTED: 0915

TIME COMPLETED: 0925

GROUND ELEV.:

WEATHER: Sunny, 40-45 F, wind < 5

SAMPLE DEPTH	STRATA CHANGE	SOIL DESCRIPTION	EXCAV. EFFORT	HNU INSTRUMENT READING	REMARKS
FEET					
1	Topsoil	f SAND , little organics, brown	E		
2 S-1		f-m SAND, trace gravel, trace silt, dry, tan	E	0.0	
3					
4			E		
5		Test Pit Terminated			
6					
7					
8					
9					
10					
11					
12					
13					
14					

REMARKS

APPENDIX C

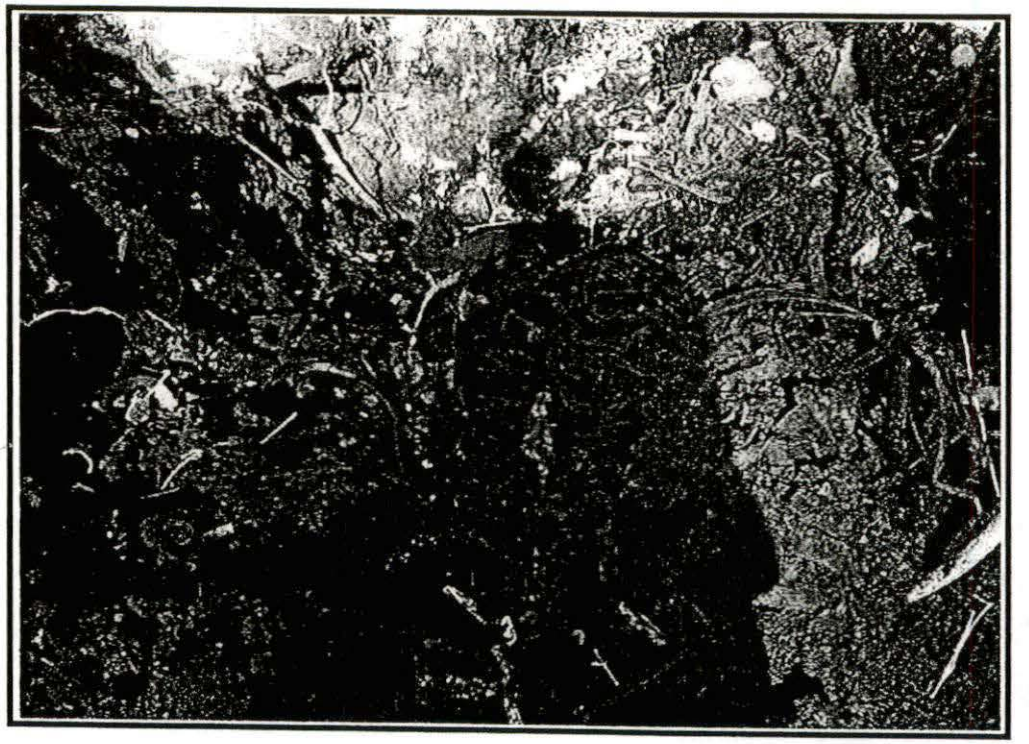
Phtotographs



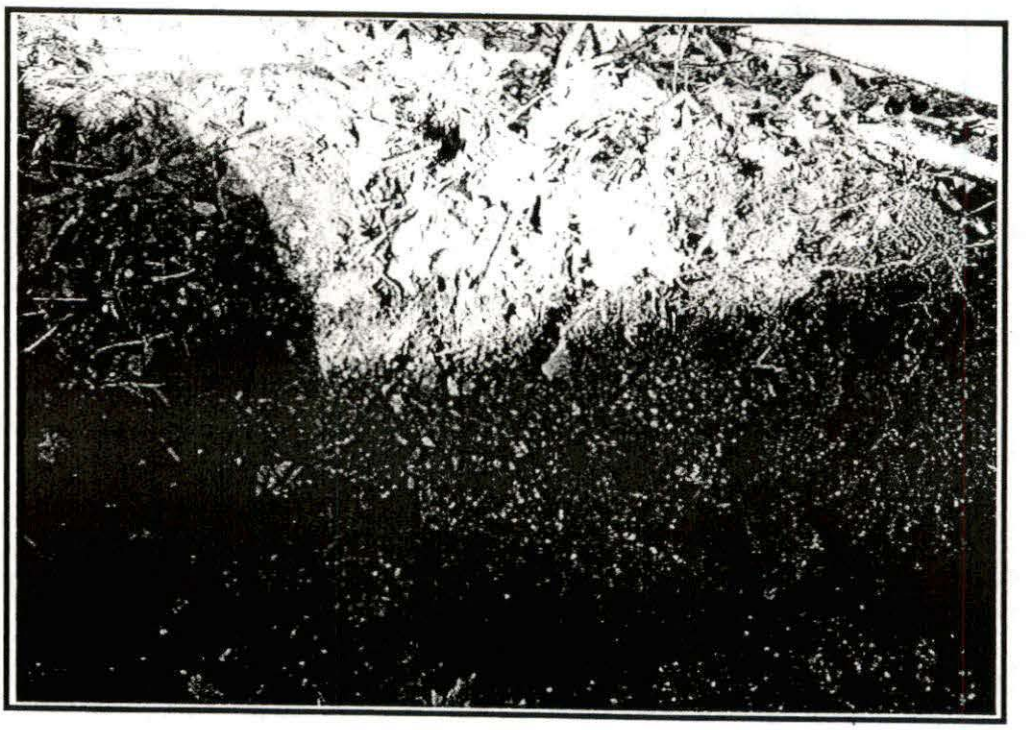
Test Pit TP-1



Test Pit TP-2



Test Pit TP-3



Test Pit TP-5

APPENDIX D

Analytical Data Report

Report Date:
11-Apr-06 09:18

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

Jacques Whitford Company, Inc.
24 Albion Rd, Suite 220
Lincoln, RI 02865
Attn: Joe Unsworth

Project: 198 Potter Hill Rd - Westerly, RI
Project 1009825.01

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SA42943-01	TP3/S1	Soil	03-Apr-06 00:00	04-Apr-06 14:30
SA42943-02	TP5/S1	Soil	03-Apr-06 00:00	04-Apr-06 14:30

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. All applicable NELAC requirements have been met.
Please note that this report contains 9 pages of analytical data including Chain of Custody document(s).
This report may not be reproduced, except in full, without written approval from Spectrum Analytical, Inc.

Massachusetts Certification # M-MA138/MA1110
Connecticut # PH-0777
Florida # E87600/E87936
Maine # MA138
New Hampshire # 2538/2972
New York # 11393/11840
Rhode Island # 98
USDA # S-51435
Vermont # VT-11393

Authorized by:

Hanibal C. Tayeh, Ph.D.
President/Laboratory Director

Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Spectrum is currently accredited for the specific method indicated. Please refer to our "Quality" webpage at www.spectrum-analytical.com for a full listing of our current certifications.

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
TP3/S1 SA42943-01	1009825.01	Soil	03-Apr-06 00:00	04-Apr-06

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3550B											
83-32-9	Acenaphthene	BRL		µg/kg dry	187	1	SW846 8270C	06-Apr-06	07-Apr-06	6040277	M.B
208-96-8	Acenaphthylene	BRL		µg/kg dry	187	1	"	"	"	"	"
120-12-7	Anthracene	BRL		µg/kg dry	187	1	"	"	"	"	"
56-55-3	Benzo (a) anthracene	BRL		µg/kg dry	187	1	"	"	"	"	"
50-32-8	Benzo (a) pyrene	BRL		µg/kg dry	187	1	"	"	"	"	"
205-99-2	Benzo (b) fluoranthene	BRL		µg/kg dry	187	1	"	"	"	"	"
191-24-2	Benzo (g,h,i) perylene	BRL		µg/kg dry	187	1	"	"	"	"	"
207-08-9	Benzo (k) fluoranthene	BRL		µg/kg dry	187	1	"	"	"	"	"
218-01-9	Chrysene	BRL		µg/kg dry	187	1	"	"	"	"	"
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/kg dry	187	1	"	"	"	"	"
206-44-0	Fluoranthene	BRL		µg/kg dry	187	1	"	"	"	"	"
86-73-7	Fluorene	BRL		µg/kg dry	187	1	"	"	"	"	"
193-39-5	Indeno (1,2,3-cd) pyrene	BRL		µg/kg dry	187	1	"	"	"	"	"
90-12-0	1-Methylnaphthalene	BRL		µg/kg dry	187	1	"	"	"	"	"
91-57-6	2-Methylnaphthalene	BRL		µg/kg dry	187	1	"	"	"	"	"
91-20-3	Naphthalene	BRL		µg/kg dry	187	1	"	"	"	"	"
85-01-8	Phenanthrene	BRL		µg/kg dry	187	1	"	"	"	"	"
129-00-0	Pyrene	BRL		µg/kg dry	187	1	"	"	"	"	"
Surrogate recoveries:											
321-60-8	*2-Fluorobiphenyl*	*71.6*		*30-130 %*			"	"	"	"	"
1718-51-0	*Terphenyl-dl4*	*67.8*		*30-130 %*			"	"	"	"	"
Total Metals by EPA 6000/7000 Series Methods											
7439-97-6	Mercury	0.621		mg/kg dry	0.0700	1	SW846 7471A	06-Apr-06	07-Apr-06	6040307	YP
Total Metals by EPA 200 Series Methods											
7440-22-4	Silver	BRL		mg/kg dry	1.32	1	EPA 200.7	06-Apr-06	07-Apr-06	6040306	LR
7440-38-2	Arsenic	4.90		mg/kg dry	1.97	1	"	"	"	"	"
7440-41-7	Beryllium	0.375		mg/kg dry	0.263	1	"	"	"	"	"
7440-43-9	Cadmium	0.618		mg/kg dry	0.329	1	"	"	"	"	"
7440-47-3	Chromium	46.7		mg/kg dry	0.658	1	"	"	"	"	"
7440-50-8	Copper	73.6		mg/kg dry	0.658	1	"	"	"	"	"
7440-02-0	Nickel	6.06		mg/kg dry	0.658	1	"	"	"	"	"
7439-92-1	Lead	134		mg/kg dry	0.986	1	"	"	"	"	"
7440-36-0	Antimony	BRL		mg/kg dry	1.97	1	"	"	"	"	"
7782-49-2	Selenium	BRL		mg/kg dry	1.97	1	"	"	"	"	"
7440-28-0	Thallium	BRL		mg/kg dry	1.97	1	"	"	"	"	"
7440-66-6	Zinc	81.8		mg/kg dry	0.658	1	"	"	"	"	"
General Chemistry Parameters											
	% Solids	69.9		%		1	SM2540 G Mod.	05-Apr-06	05-Apr-06	6040254	BD

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
TP5/S1 SA42943-02	1009825.01	Soil	03-Apr-06 00:00	04-Apr-06

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3550B											
83-32-9	Acenaphthene	BRL		µg/kg dry	193	1	SW846 8270C	06-Apr-06	07-Apr-06	6040277	M.B
208-96-8	Acenaphthylene	BRL		µg/kg dry	193	1	"	"	"	"	"
120-12-7	Anthracene	BRL		µg/kg dry	193	1	"	"	"	"	"
56-55-3	Benzo (a) anthracene	240		µg/kg dry	193	1	"	"	"	"	"
50-32-8	Benzo (a) pyrene	232		µg/kg dry	193	1	"	"	"	"	"
205-99-2	Benzo (b) fluoranthene	299		µg/kg dry	193	1	"	"	"	"	"
191-24-2	Benzo (g,h,i) perylene	203		µg/kg dry	193	1	"	"	"	"	"
207-08-9	Benzo (k) fluoranthene	BRL		µg/kg dry	193	1	"	"	"	"	"
218-01-9	Chrysene	357		µg/kg dry	193	1	"	"	"	"	"
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/kg dry	193	1	"	"	"	"	"
206-44-0	Fluoranthene	566		µg/kg dry	193	1	"	"	"	"	"
86-73-7	Fluorene	BRL		µg/kg dry	193	1	"	"	"	"	"
193-39-5	Indeno (1,2,3-cd) pyrene	BRL		µg/kg dry	193	1	"	"	"	"	"
90-12-0	1-Methylnaphthalene	BRL		µg/kg dry	193	1	"	"	"	"	"
91-57-6	2-Methylnaphthalene	BRL		µg/kg dry	193	1	"	"	"	"	"
91-20-3	Naphthalene	BRL		µg/kg dry	193	1	"	"	"	"	"
85-01-8	Phenanthrene	322		µg/kg dry	193	1	"	"	"	"	"
129-00-0	Pyrene	424		µg/kg dry	193	1	"	"	"	"	"
Surrogate recoveries:											
321-60-8	*2-Fluorobiphenyl*	*66.2*		*30-130 %*			"	"	"	"	"
1718-51-0	*Terphenyl-dl4*	*62.1*		*30-130 %*			"	"	"	"	"
Total Metals by EPA 6000/7000 Series Methods											
7439-97-6	Mercury	BRL		mg/kg dry	0.0577	1	SW846 7471A	06-Apr-06	07-Apr-06	6040307	YP
Total Metals by EPA 200 Series Methods											
7440-22-4	Silver	BRL		mg/kg dry	1.16	1	EPA 200.7	06-Apr-06	07-Apr-06	6040306	LR
7440-38-2	Arsenic	10.4		mg/kg dry	1.73	1	"	"	"	"	"
7440-41-7	Beryllium	0.405		mg/kg dry	0.231	1	"	"	"	"	"
7440-43-9	Cadmium	0.503		mg/kg dry	0.289	1	"	"	"	"	"
7440-47-3	Chromium	280		mg/kg dry	0.578	1	"	"	"	"	"
7440-50-8	Copper	23.6		mg/kg dry	0.578	1	"	"	"	"	"
7440-02-0	Nickel	9.39		mg/kg dry	0.578	1	"	"	"	"	"
7439-92-1	Lead	101		mg/kg dry	0.867	1	"	"	"	"	"
7440-36-0	Antimony	BRL		mg/kg dry	1.73	1	"	"	"	"	"
7782-49-2	Selenium	BRL		mg/kg dry	1.73	1	"	"	"	"	"
7440-28-0	Thallium	BRL		mg/kg dry	1.73	1	"	"	"	"	"
7440-66-6	Zinc	127		mg/kg dry	0.578	1	"	"	"	"	"
General Chemistry Parameters											
	% Solids	83.6		%		1	SM2540 G Mod.	05-Apr-06	05-Apr-06	6040254	BD

Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6040277 - SW846 3550B										
Blank (6040277-BLK1)										
Prepared & Analyzed: 06-Apr-06										
Acenaphthene	BRL		µg/kg wet	66.0						
Acenaphthylene	BRL		µg/kg wet	66.0						
Anthracene	BRL		µg/kg wet	66.0						
Benzo (a) anthracene	BRL		µg/kg wet	66.0						
Benzo (a) pyrene	BRL		µg/kg wet	66.0						
Benzo (b) fluoranthene	BRL		µg/kg wet	66.0						
Benzo (g,h,i) perylene	BRL		µg/kg wet	66.0						
Benzo (k) fluoranthene	BRL		µg/kg wet	66.0						
Chrysene	BRL		µg/kg wet	66.0						
Dibenzo (a,h) anthracene	BRL		µg/kg wet	66.0						
Fluoranthene	BRL		µg/kg wet	66.0						
Fluorene	BRL		µg/kg wet	66.0						
Indeno (1,2,3-cd) pyrene	BRL		µg/kg wet	66.0						
1-Methylnaphthalene	BRL		µg/kg wet	66.0						
2-Methylnaphthalene	BRL		µg/kg wet	66.0						
Naphthalene	BRL		µg/kg wet	66.0						
Phenanthrene	BRL		µg/kg wet	66.0						
Pyrene	BRL		µg/kg wet	66.0						
Surrogate: 2-Fluorobiphenyl	*4130*		µg/kg wet		*6670*		*61.9*	*30-130*		
Surrogate: Terphenyl-dl4	*3960*		µg/kg wet		*6670*		*59.4*	*30-130*		
LCS (6040277-BS1)										
Prepared & Analyzed: 06-Apr-06										
Acenaphthene	3910		µg/kg wet	66.0	6670		58.6	40-140		
Acenaphthylene	4340		µg/kg wet	66.0	6670		65.1	40-140		
Anthracene	4070		µg/kg wet	66.0	6670		61.0	40-140		
Benzo (a) anthracene	4160		µg/kg wet	66.0	6670		62.4	40-140		
Benzo (a) pyrene	3720		µg/kg wet	66.0	6670		55.8	40-140		
Benzo (b) fluoranthene	3300		µg/kg wet	66.0	6670		49.5	40-140		
Benzo (g,h,i) perylene	3960		µg/kg wet	66.0	6670		59.4	40-140		
Benzo (k) fluoranthene	3720		µg/kg wet	66.0	6670		55.8	40-140		
Chrysene	4030		µg/kg wet	66.0	6670		60.4	40-140		
Dibenzo (a,h) anthracene	3900		µg/kg wet	66.0	6670		58.5	40-140		
Fluoranthene	4030		µg/kg wet	66.0	6670		60.4	40-140		
Fluorene	4060		µg/kg wet	66.0	6670		60.9	40-140		
Indeno (1,2,3-cd) pyrene	4150		µg/kg wet	66.0	6670		62.2	40-140		
1-Methylnaphthalene	3850		µg/kg wet	66.0	6670		57.7	40-140		
2-Methylnaphthalene	3240		µg/kg wet	66.0	6670		48.6	40-140		
Naphthalene	2940		µg/kg wet	66.0	6670		44.1	40-140		
Phenanthrene	3800		µg/kg wet	66.0	6670		57.0	40-140		
Pyrene	3740		µg/kg wet	66.0	6670		56.1	40-140		
Surrogate: 2-Fluorobiphenyl	*4300*		µg/kg wet		*6670*		*64.5*	*30-130*		
Surrogate: Terphenyl-dl4	*4280*		µg/kg wet		*6670*		*64.2*	*30-130*		
Duplicate (6040277-DUP1)	Source: SA42835-04									
Prepared & Analyzed: 06-Apr-06										
Acenaphthene	BRL		µg/kg dry	136		BRL				50
Acenaphthylene	BRL		µg/kg dry	136		BRL				50
Anthracene	BRL		µg/kg dry	136		BRL				50
Benzo (a) anthracene	BRL		µg/kg dry	136		BRL				50
Benzo (a) pyrene	BRL		µg/kg dry	136		BRL				50
Benzo (b) fluoranthene	BRL		µg/kg dry	136		BRL				50
Benzo (g,h,i) perylene	BRL		µg/kg dry	136		BRL				50
Benzo (k) fluoranthene	BRL		µg/kg dry	136		BRL				50
Chrysene	BRL		µg/kg dry	136		BRL				50
Dibenzo (a,h) anthracene	BRL		µg/kg dry	136		BRL				50

Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6040277 - SW846 3550B										
Duplicate (6040277-DUP1)	Source: SA42835-04									
Prepared & Analyzed: 06-Apr-06										
Fluoranthene	BRL		µg/kg dry	136		BRL				50
Fluorene	BRL		µg/kg dry	136		BRL				50
Indeno (1,2,3-cd) pyrene	BRL		µg/kg dry	136		BRL				50
1-Methylnaphthalene	BRL		µg/kg dry	136		BRL				50
2-Methylnaphthalene	BRL		µg/kg dry	136		BRL				50
Naphthalene	BRL		µg/kg dry	136		BRL				50
Phenanthrene	BRL		µg/kg dry	136		BRL				50
Pyrene	BRL		µg/kg dry	136		BRL				50
Surrogate: 2-Fluorobiphenyl	*4580*		µg/kg dry		*6880*		*66.6*	*30-130*		
Surrogate: Terphenyl-dl4	*3830*		µg/kg dry		*6880*		*55.7*	*30-130*		
Matrix Spike (6040277-MS1)	Source: SA42835-04									
Prepared & Analyzed: 06-Apr-06										
Acenaphthene	4340		µg/kg dry	68.3	6900	BRL	62.9	40-140		
Pyrene	4030		µg/kg dry	68.3	6900	BRL	58.4	40-140		
Surrogate: 2-Fluorobiphenyl	*5030*		µg/kg dry		*6900*		*72.9*	*30-130*		
Surrogate: Terphenyl-dl4	*4980*		µg/kg dry		*6900*		*72.2*	*30-130*		
Matrix Spike Dup (6040277-MSD1)	Source: SA42835-04									
Prepared & Analyzed: 06-Apr-06										
Acenaphthene	4500		µg/kg dry	68.5	6910	BRL	65.1	40-140	3.44	30
Pyrene	4070		µg/kg dry	68.5	6910	BRL	58.9	40-140	0.853	30
Surrogate: 2-Fluorobiphenyl	*5060*		µg/kg dry		*6910*		*73.2*	*30-130*		
Surrogate: Terphenyl-dl4	*4950*		µg/kg dry		*6910*		*71.6*	*30-130*		

Total Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6040307 - EPA200/SW7000 Series										
Blank (6040307-BLK1)										
Prepared: 06-Apr-06 Analyzed: 07-Apr-06										
Mercury	BRL		mg/kg wet	0.0491						
Duplicate (6040307-DUP1)	Source: SA42943-01									
Prepared: 06-Apr-06 Analyzed: 07-Apr-06										
Mercury	0.447		mg/kg dry	0.0693		0.621			32.6	35
Matrix Spike (6040307-MS1)	Source: SA42943-02									
Prepared: 06-Apr-06 Analyzed: 07-Apr-06										
Mercury	0.498		mg/kg dry	0.0580	0.492	0.0422	92.6	75-125		
Matrix Spike (6040307-MS2)	Source: SA42979-08									
Prepared: 06-Apr-06 Analyzed: 07-Apr-06										
Mercury	0.468		mg/kg dry	0.0517	0.439	0.0342	98.8	75-125		
Post Spike (6040307-PS1)	Source: SA42943-02									
Prepared: 06-Apr-06 Analyzed: 07-Apr-06										
Mercury	0.514		mg/kg dry	0.0561	0.476	0.0422	99.1	75-125		
Reference (6040307-SRM1)										
Prepared: 06-Apr-06 Analyzed: 07-Apr-06										
Mercury	1.44	QC-3	mg/kg wet	0.0491	0.907		159	57.3-142.6		

Total Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6040306 - EPA 200 Series										
Blank (6040306-BLK1)										
Prepared: 06-Apr-06 Analyzed: 07-Apr-06										
Antimony	BRL		mg/kg wet	1.50						
Zinc	BRL		mg/kg wet	5.00						
Selenium	BRL		mg/kg wet	1.50						
Nickel	BRL		mg/kg wet	0.500						
Thallium	BRL		mg/kg wet	1.50						
Silver	BRL		mg/kg wet	1.00						
Copper	BRL		mg/kg wet	0.500						
Chromium	BRL		mg/kg wet	0.500						
Cadmium	BRL		mg/kg wet	0.250						
Beryllium	BRL		mg/kg wet	0.200						
Arsenic	BRL		mg/kg wet	1.50						
Lead	BRL		mg/kg wet	0.750						
LCS (6040306-BS1)										
Prepared: 06-Apr-06 Analyzed: 07-Apr-06										
Zinc	133		mg/kg wet	0.500	125		106	85-115		
Thallium	127		mg/kg wet	1.50	125		102	85-115		
Selenium	132		mg/kg wet	1.50	125		106	85-115		
Silver	132		mg/kg wet	1.00	125		106	85-115		
Antimony	120		mg/kg wet	1.50	125		96.0	85-115		
Nickel	131		mg/kg wet	0.500	125		105	85-115		
Arsenic	122		mg/kg wet	1.50	125		97.6	85-115		
Chromium	126		mg/kg wet	0.500	125		101	85-115		
Copper	124		mg/kg wet	0.500	125		99.2	85-115		
Beryllium	120		mg/kg wet	0.200	125		96.0	85-115		
Lead	132		mg/kg wet	0.750	125		106	85-115		
Cadmium	132		mg/kg wet	0.250	125		106	85-115		
Duplicate (6040306-DUP1)	Source: SA42943-01									
Prepared: 06-Apr-06 Analyzed: 07-Apr-06										
Antimony	BRL		mg/kg dry	2.08		1.08			10.4	35
Selenium	BRL		mg/kg dry	2.08		0.888				35
Thallium	BRL		mg/kg dry	2.08		BRL				35
Zinc	85.7		mg/kg dry	0.695		81.8			4.66	35
Silver	BRL		mg/kg dry	1.39		BRL				35
Nickel	6.34		mg/kg dry	0.695		6.06			4.52	35
Chromium	49.3		mg/kg dry	0.695		46.7			5.42	35
Copper	77.5		mg/kg dry	0.695		73.6			5.16	35
Lead	140		mg/kg dry	1.04		134			4.38	35
Cadmium	0.646		mg/kg dry	0.347		0.618			4.43	35
Beryllium	0.403		mg/kg dry	0.278		0.375			7.20	35
Arsenic	5.05		mg/kg dry	2.08		4.90			3.02	35
Matrix Spike (6040306-MS1)	Source: SA42943-02									
Prepared: 06-Apr-06 Analyzed: 07-Apr-06										
Antimony	140		mg/kg dry	1.77	147	0.734	94.7	70-130		
Nickel	160		mg/kg dry	0.589	147	9.39	102	70-130		
Selenium	162		mg/kg dry	1.77	147	1.43	109	70-130		
Thallium	141		mg/kg dry	1.77	147	BRL	95.9	70-130		
Zinc	340	QM-07	mg/kg dry	0.589	147	127	145	70-130		
Silver	160		mg/kg dry	1.18	147	BRL	109	70-130		
Beryllium	139		mg/kg dry	0.236	147	0.405	94.3	70-130		
Arsenic	162		mg/kg dry	1.77	147	10.4	103	70-130		
Lead	255		mg/kg dry	0.884	147	101	105	70-130		
Cadmium	153		mg/kg dry	0.295	147	0.503	104	70-130		
Chromium	410		mg/kg dry	0.589	147	280	88.4	70-130		

Total Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6040306 - EPA 200 Series										
Matrix Spike (6040306-MS1)	Source: SA42943-02									
Prepared: 06-Apr-06 Analyzed: 07-Apr-06										
Copper	185		mg/kg dry	0.589	147	23.6	110	70-130		
Matrix Spike (6040306-MS2)	Source: SA42979-08									
Prepared: 06-Apr-06 Analyzed: 07-Apr-06										
Silver	126		mg/kg dry	0.921	115	BRL	110	70-130		
Antimony	109		mg/kg dry	1.38	115	0.580	94.3	70-130		
Selenium	125		mg/kg dry	1.33	115	BRL	109	70-130		
Nickel	122		mg/kg dry	0.460	115	2.01	104	70-130		
Zinc	145		mg/kg dry	0.460	115	18.6	110	70-130		
Thallium	117		mg/kg dry	1.38	115	BRL	102	70-130		
Cadmium	121		mg/kg dry	0.230	115	0.106	105	70-130		
Beryllium	111		mg/kg dry	0.184	115	0.142	96.4	70-130		
Arsenic	117		mg/kg dry	1.38	115	1.30	101	70-130		
Lead	145		mg/kg dry	0.690	115	18.4	110	70-130		
Copper	131		mg/kg dry	0.460	115	5.80	109	70-130		
Chromium	123		mg/kg dry	0.460	115	3.36	104	70-130		
Post Spike (6040306-PS1)	Source: SA42943-02									
Prepared: 06-Apr-06 Analyzed: 07-Apr-06										
Thallium	133		mg/kg dry	1.65	138	BRL	96.4	85-115		
Silver	149		mg/kg dry	1.10	138	BRL	108	85-115		
Selenium	151		mg/kg dry	1.65	138	1.43	108	85-115		
Nickel	149		mg/kg dry	0.550	138	9.39	101	85-115		
Antimony	127		mg/kg dry	1.65	138	0.734	91.5	85-115		
Lead	245		mg/kg dry	0.825	138	101	104	85-115		
Copper	173		mg/kg dry	0.550	138	23.6	108	85-115		
Beryllium	127		mg/kg dry	0.220	138	0.405	91.7	85-115		
Arsenic	149		mg/kg dry	1.65	138	10.4	100	85-115		
Cadmium	141		mg/kg dry	0.275	138	0.503	102	85-115		
Reference (6040306-SRM1)										
Prepared: 06-Apr-06 Analyzed: 07-Apr-06										
Silver	107		mg/kg wet	1.00	76.7		140	31.5-169.3		
Nickel	93.8		mg/kg wet	0.500	90.2		104	81.7-118.3		
Antimony	91.6	QC-3	mg/kg wet	1.50	35.6		257	24.2-176.1		
Selenium	94.0		mg/kg wet	1.50	88.7		106	76.3-124.3		
Zinc	225		mg/kg wet	0.500	211		107	88.6-111.4		
Thallium	78.6		mg/kg wet	1.50	79.2		99.2	79.1-121.5		
Arsenic	106		mg/kg wet	1.50	109		97.2	59.9-140.6		
Beryllium	64.4		mg/kg wet	0.200	65.1		98.9	86.2-113.8		
Cadmium	127		mg/kg wet	0.250	126		101	86.5-113.1		
Chromium	162		mg/kg wet	0.500	150		108	76.3-123.7		
Copper	69.6		mg/kg wet	0.500	64.6		108	83.7-117.1		
Lead	77.0		mg/kg wet	0.750	75.2		102	85.3-115.3		

General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6040254 - General Preparation										
Duplicate (6040254-DUP1)	Source: SA42908-01									
Prepared & Analyzed: 05-Apr-06										
% Solids	69.6		%			70.1			0.716	20

This laboratory report is not valid without an authorized signature on the cover page.

* Reportable Detection Limit BRL = Below Reporting Limit

Notes and Definitions

QC-3	The spike recovery is outside acceptable limits for the LCS. The batch was accepted based upon the MS and/or MSD meeting the LCS limits criteria.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
BRL	Below Reporting Limit - Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
NR	Not Reported
RPD	Relative Percent Difference

A plus sign (+) in the Method Reference column indicates the method is not accredited by NELAC.

Laboratory Control Sample (LCS): A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix.

Matrix Spike: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

Surrogate: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and

Validated by:
Hanibal C. Tayeh, Ph.D.
Nicole Brown

SA 42943 (m)

SPECTRUM ANALYTICAL, INC.
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CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
- ☐ Standard TAT - 7 to 10 business days
- ☒ Rush TAT - Date Needed: 4/11/06
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: Jacques Whitford Co
24 Albion Rd. Suite 220
Lincoln, RI 02865

Project Mgr.: Joe Unsworth

Invoice To: Same

P.O. No.: 1009625.01 RQN:

Project No.: 1009625.01
Site Name: 198 Potter Hill Rd
Location: Westerly State: RI
Sampler(s): JTU

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid
7=CH_3OH 8=$NaHSO_4$ 9=____ 10=____

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW=Surface Water SO=Soil SL=Sludge A=Air
X1=____ X2=____ X3=____

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Preservative	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic		PP13 Metals	PAHs-8270						
SA42943-01	TP3/S1	4/3/06		G	SO			1				X	X						
↓ 02	TP5/S1	4/3/06		G	SO			1				X	X						

Containers: Analyses:

QA Reporting Notes: (check if needed)
- ☐ Provide MA DEP MCP CAM Report
- ☐ Provide CT DPH RCP Report

QA/QC Reporting Level
☐ Standard ☐ No QC
☐ Other____

State specific reporting standards:

☐ Fax results when available to (____)
☒ E-mail to junswort@jacqueswhitford.com
EDD Format

Condition upon receipt: ☐ Iced ☐ Ambient ☐ °C 40.7°F 5

Relinquished by:	Received by:	Date:	Time:
[signature]	Bergeron	4/4/06	11:30 AM
Bergeron	MC	4/4/06	1430

Ref.

11 Almgren Drive • Agawam, Massachusetts 01001 • 413-789-9018 • Fax 413-789-4076 • www.spectrum-analytical.com

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* Reportable Detection Limit BRL = Below Reporting Limit

APPENDIX C

Release Notification Form

Jacques Whitford

Engineering, Scientific, Planning and Management Consultants

24 Albion Road
Suite 220
Lincoln RI
United States 02865

Bus 401 312 8005
Fax 401 312 8010

www.jacqueswhitford.com

September 27, 2006

Rhode Island Department of Environmental Management
Office of Waste Management
Attn.: Ms. Kelly Owens
235 Promenade Street
Providence, RI 02908-5767

RE: Former Pawcatuck Woolen Mill
198 Potter Hill Road
Westerly, RI
Jacques Whitford Company Job No. 1009825

Dear Ms. Owens,

Jacques Whitford is submitting the attached Hazardous Material Release Notification Form on behalf of our client, Renewable Resources Inc., owner of the above referenced property. Jacques Whitford has completed a Phase I Environmental Site Assessment (ESA), Phase II ESA, and additional soil sampling.

Arsenic and beryllium have been detected in soil samples at concentrations greater than the Residential Direct Exposure Criteria (RDEC). Beryllium was detected in one of two soil samples at a concentration of 0.405 parts per million (ppm) which is slightly greater than the RDEC of 0.40 ppm. Arsenic was detected in one of the soil samples collected as part of the Phase II ESA above the RDEC. Both the arsenic and beryllium exceedances were detected in a soil sample collected from a small mound located adjacent to the former boiler building. The soil in this area appears to contain coal ash and/or coal slag.

In order to assess the extent of the soil impacts near the observed mound of coal ash/slag, an additional seventeen soil samples were collected and analyzed for arsenic. Arsenic was detected in nine of the seventeen soil samples at concentrations greater than RDEC. The exceedances ranged from 7.71 ppm to 58.9 ppm.

Jacques Whitford will be collecting additional soil samples in the area of the coal ash/slag to fully delineate the extent of the impacts. Additionally, two monitoring wells will be installed adjacent to the impacted area to assess impacts to the groundwater. Groundwater samples will be collected and analyzed for RCRA 8 metals. Once the additional soil samples and groundwater samples are collected and analyzed, a Site Investigation Report (SIR) will be submitted within three weeks to the RIDEM in accordance with Section 7.0 of the *Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases*. The Phase I and II ESAs completed by Jacques Whitford will be submitted as part of the SIR.

Also, the owner of the property is currently in the process of hiring a contractor to remove debris associated with a collapsed building and buried debris that was observed in test pits completed in the northwest corner of the property. Jacques Whitford collected samples of shingles and building paper from the debris of the

Jacques Whitford
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100% Post Consumer Content

collapsed building and had the samples analyzed for asbestos. No asbestos was detected in any of the materials. Soil samples were collected from the area of buried debris and analyzed for metals and polynuclear aromatic hydrocarbons (PAHs). No metals or PAHs were detected in the soil samples at concentrations greater than the applicable RDEC. Therefore, the building debris and buried debris will be disposed of as solid waste.

Since the debris associated with the collapsed building is located adjacent to the Pawcatuck River, we are currently ascertaining whether any approvals are required from the wetlands permitting program at the RIDEM. If an approval from the wetlands program is required, a request for approval will be submitted to the RIDEM. The removal of the debris will be completed within two weeks of receiving the wetland program approval.

Should you have any questions or require additional information, please do not hesitate to contact the undersigned at (401) 312-8005.

Sincerely,
JACQUES WHITFORD



Joseph T. Unsworth P.E.
Project Manager

Enclosure: Hazardous Material Release Notification Form

CC: James Ashton, RIDEM
Dennis Esposito, Adler, Pollack & Sheehan

Appendix C

DIVISION OF SITE REMEDIATION
HAZARDOUS MATERIAL RELEASE NOTIFICATION FORM

THIS FORM IS NOT TO BE USED TO REPORT AN IMMINENT HAZARD

1. Notifier Information

Name: **Renewable Resources Inc.**
Address: **900 North Strafford, Suite 2428, Arlington, VA 22203**

Phone: **703-405-2336**

Status: X Owner ___ Operator ___ Secured Creditor ___ Voluntary

2. Property Information

Name of Site: **Pawcatuck Woolen Mill**
Site Address: **198 Potter Hill Road, Westerly, RI**

Plat/Lot Numbers: **Plat 8, Lot 23**

Site Contact Person: **Dr. Edward Carapezza**

Site Contact Phone: **703-405-2336**

Site Land Usage Type: ___ Residential X Industrial/Commercial **(currently vacant)**

Location of Release: **Surface soils**

(attach site sketch as necessary)

3. Release Information

Date of Discovery: **September 20, 2006**
Source : **former coal storage and usage**
Release Media: **soils**

Hazardous Materials and Concentrations: **Arsenic ND-58.9 ppm, Beryllium ND-0.405 ppm**

(attach certificates of analysis as necessary)

Extent of Contamination: **Surface soils in limited area**

4. Resource Information

		proposed future use
Site Land Usage:	X Industrial/Commercial	___ Residential
Adjacent Land Usage:	X Industrial/Commercial	X Residential
Site Groundwater Class:	X GA/GAA	___ GB

Adjacent Groundwater Class: X GA/GAA ___ GB
(if different than site groundwater classification within 500 feet)

Nearest Surface Water or Wetland:

X Less Than 500 Feet X Greater Than 500 Feet

Potential for adverse impact No Yes/No

5. Potentially Responsible Parties

Name: **Renewable Resources Inc.**
Address: **900 North Strafford, Suite 2428, Arlington, VA 22203**

Status: X Owner ___ Operator ___ Other:_____

Name: _____

Address: _____

Status: ___ Owner ___ Operator ___ Other:_____

6. Measures Taken or Proposed to be Taken in Response to Release

excavate and dispose of arsenic impacted soils

7. Other Significant Remarks About Release (Will a background determination be made?)

Signature: _____ Date 9/21/06

Title: President

APPENDIX D

Laboratory Certificates of Analysis

Report Date:
20-Sep-06 10:16

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
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Laboratory Report

Jacques Whitford Company, Inc.
24 Albion Rd, Suite 220
Lincoln, RI 02865
Attn: Joe Unsworth

Project: Potter Hill Mill - Westerly, RI
Project 1009825.02

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SA50766-01	SS-1	Soil	05-Sep-06 00:00	07-Sep-06 15:05
SA50766-02	SS-2	Soil	05-Sep-06 00:00	07-Sep-06 15:05
SA50766-03	SS-3	Soil	05-Sep-06 00:00	07-Sep-06 15:05
SA50766-04	SS-4	Soil	05-Sep-06 00:00	07-Sep-06 15:05
SA50766-05	SS-5	Soil	05-Sep-06 00:00	07-Sep-06 15:05
SA50766-06	SS-6	Soil	05-Sep-06 00:00	07-Sep-06 15:05
SA50766-07	SS-7	Soil	05-Sep-06 00:00	07-Sep-06 15:05
SA50766-08	SS-8	Soil	05-Sep-06 00:00	07-Sep-06 15:05
SA50766-09	SS-9	Soil	05-Sep-06 00:00	07-Sep-06 15:05
SA50766-10	SS-10	Soil	05-Sep-06 00:00	07-Sep-06 15:05
SA50766-11	SS-11	Soil	05-Sep-06 00:00	07-Sep-06 15:05
SA50766-12	SS-12	Soil	05-Sep-06 00:00	07-Sep-06 15:05
SA50766-13	SS-13	Soil	05-Sep-06 00:00	07-Sep-06 15:05
SA50766-14	SS-14	Soil	05-Sep-06 00:00	07-Sep-06 15:05
SA50766-15	SS-15	Soil	05-Sep-06 00:00	07-Sep-06 15:05
SA50766-16	SS-16	Soil	05-Sep-06 00:00	07-Sep-06 15:05
SA50766-17	SS-17	Soil	05-Sep-06 00:00	07-Sep-06 15:05

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.
All applicable NELAC requirements have been met
Please note that this report contains 7 pages of analytical data plus Chain of Custody document(s).
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New Jersey # MA011/MA012
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Rhode Island # 98
USDA # S-51435
Vermont # VT-11393

ACCREDITED IN ACCORDANCE WITH nelac

Authorized by:

Hanibal C. Tayeh, Ph.D.
President/Laboratory Director

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Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-1 SA50766-01	1009825.02	Soil	05-Sep-06 00:00	07-Sep-06

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Total Metals by EPA 200 Series Methods											
7440-38-2	Arsenic	1.71		mg/kg dry	1.57	1	EPA 200.7	11-Sep-06	12-Sep-06	6090571	TGP
General Chemistry Parameters											
	% Solids	92.0		%		1	SM2540 G Mod.	15-Sep-06	15-Sep-06	6090977	YM

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-2 SA50766-02	1009825.02	Soil	05-Sep-06 00:00	07-Sep-06

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Total Metals by EPA 200 Series Methods											
7440-38-2	Arsenic	BRL		mg/kg dry	1.43	1	EPA 200.7	11-Sep-06	12-Sep-06	6090571	TGP
General Chemistry Parameters											
	% Solids	95.6		%		1	SM2540 G Mod.	15-Sep-06	15-Sep-06	6090977	YM

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-3 SA50766-03	1009825.02	Soil	05-Sep-06 00:00	07-Sep-06

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Total Metals by EPA 200 Series Methods											
7440-38-2	Arsenic	18.9		mg/kg dry	1.70	1	EPA 200.7	11-Sep-06	13-Sep-06	6090571	TGP
General Chemistry Parameters											
	% Solids	82.7		%		1	SM2540 G Mod.	15-Sep-06	15-Sep-06	6090977	YM

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-4 SA50766-04	1009825.02	Soil	05-Sep-06 00:00	07-Sep-06

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Total Metals by EPA 200 Series Methods											
7440-38-2	Arsenic	19.4		mg/kg dry	2.24	1	EPA 200.7	11-Sep-06	13-Sep-06	6090571	TGP
General Chemistry Parameters											
	% Solids	65.8		%		1	SM2540 G Mod.	15-Sep-06	15-Sep-06	6090977	YM

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-5 SA50766-05	1009825.02	Soil	05-Sep-06 00:00	07-Sep-06

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Total Metals by EPA 200 Series Methods											
7440-38-2	Arsenic	58.9		mg/kg dry	1.70	1	EPA 200.7	11-Sep-06	13-Sep-06	6090571	TGP
General Chemistry Parameters											
	% Solids	83.2		%		1	SM2540 G Mod.	15-Sep-06	15-Sep-06	6090977	YM

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-6 SA50766-06	1009825.02	Soil	05-Sep-06 00:00	07-Sep-06

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Total Metals by EPA 200 Series Methods											
7440-38-2	Arsenic	22.5		mg/kg dry	1.80	1	EPA 200.7	11-Sep-06	13-Sep-06	6090571	TGP
General Chemistry Parameters											
	% Solids	80.9		%		1	SM2540 G Mod.	15-Sep-06	15-Sep-06	6090977	YM

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-7 SA50766-07	1009825.02	Soil	05-Sep-06 00:00	07-Sep-06

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Total Metals by EPA 200 Series Methods											
7440-38-2	Arsenic	14.7		mg/kg dry	1.76	1	EPA 200.7	11-Sep-06	13-Sep-06	6090571	TGP
General Chemistry Parameters											
	% Solids	80.0		%		1	SM2540 G Mod.	15-Sep-06	15-Sep-06	6090977	YM

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-8 SA50766-08	1009825.02	Soil	05-Sep-06 00:00	07-Sep-06

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Total Metals by EPA 200 Series Methods											
7440-38-2	Arsenic	8.54		mg/kg dry	1.84	1	EPA 200.7	11-Sep-06	13-Sep-06	6090571	TGP
General Chemistry Parameters											
	% Solids	80.5		%		1	SM2540 G Mod.	15-Sep-06	15-Sep-06	6090977	YM

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-9 SA50766-09	1009825.02	Soil	05-Sep-06 00:00	07-Sep-06

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Total Metals by EPA 200 Series Methods											
7440-38-2	Arsenic	BRL		mg/kg dry	2.09	1	EPA 200.7	11-Sep-06	13-Sep-06	6090571	TGP
General Chemistry Parameters											
	% Solids	70.1		%		1	SM2540 G Mod.	15-Sep-06	15-Sep-06	6090977	YM

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-10 SA50766-10	1009825.02	Soil	05-Sep-06 00:00	07-Sep-06

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Total Metals by EPA 200 Series Methods											
7440-38-2	Arsenic	BRL		mg/kg dry	2.17	1	EPA 200.7	11-Sep-06	13-Sep-06	6090571	TGP
General Chemistry Parameters											
	% Solids	69.1		%		1	SM2540 G Mod.	15-Sep-06	15-Sep-06	6090977	YM

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-11 SA50766-11	1009825.02	Soil	05-Sep-06 00:00	07-Sep-06

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Total Metals by EPA 200 Series Methods											
7440-38-2	Arsenic	14.0		mg/kg dry	1.69	1	EPA 200.7	11-Sep-06	13-Sep-06	6090571	TGP
General Chemistry Parameters											
	% Solids	84.4		%		1	SM2540 G Mod.	15-Sep-06	15-Sep-06	6090977	YM

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-12 SA50766-12	1009825.02	Soil	05-Sep-06 00:00	07-Sep-06

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Total Metals by EPA 200 Series Methods											
7440-38-2	Arsenic	4.01		mg/kg dry	1.98	1	EPA 200.7	11-Sep-06	13-Sep-06	6090571	TGP
General Chemistry Parameters											
	% Solids	73.3		%		1	SM2540 G Mod.	15-Sep-06	15-Sep-06	6090977	YM

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-13 SA50766-13	1009825.02	Soil	05-Sep-06 00:00	07-Sep-06

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Total Metals by EPA 200 Series Methods											
7440-38-2	Arsenic	3.22		mg/kg dry	1.92	1	EPA 200.7	11-Sep-06	13-Sep-06	6090571	TGP
General Chemistry Parameters											
	% Solids	75.0		%		1	SM2540 G Mod.	15-Sep-06	16-Sep-06	6090979	YM

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-14 SA50766-14	1009825.02	Soil	05-Sep-06 00:00	07-Sep-06

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Total Metals by EPA 200 Series Methods											
7440-38-2	Arsenic	3.57		mg/kg dry	1.93	1	EPA 200.7	11-Sep-06	13-Sep-06	6090571	TGP
General Chemistry Parameters											
	% Solids	76.5		%		1	SM2540 G Mod.	15-Sep-06	16-Sep-06	6090979	YM

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-15 SA50766-15	1009825.02	Soil	05-Sep-06 00:00	07-Sep-06

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Total Metals by EPA 200 Series Methods											
7440-38-2	Arsenic	7.71		mg/kg dry	1.95	1	EPA 200.7	11-Sep-06	13-Sep-06	6090571	TGP
General Chemistry Parameters											
	% Solids	73.7		%		1	SM2540 G Mod.	15-Sep-06	16-Sep-06	6090979	YM

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-16 SA50766-16	1009825.02	Soil	05-Sep-06 00:00	07-Sep-06

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Total Metals by EPA 200 Series Methods											
7440-38-2	Arsenic	13.1		mg/kg dry	1.82	1	EPA 200.7	11-Sep-06	13-Sep-06	6090571	TGP
General Chemistry Parameters											
	% Solids	81.4		%		1	SM2540 G Mod.	15-Sep-06	16-Sep-06	6090979	YM

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-17 SA50766-17	1009825.02	Soil	05-Sep-06 00:00	07-Sep-06

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Total Metals by EPA 200 Series Methods											
7440-38-2	Arsenic	4.88		mg/kg dry	1.72	1	EPA 200.7	11-Sep-06	13-Sep-06	6090571	TGP
General Chemistry Parameters											
	% Solids	79.9		%		1	SM2540 G Mod.	15-Sep-06	16-Sep-06	6090979	YM

Total Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6090571 - EPA 200 Series										
Blank (6090571-BLK1)										
Prepared: 11-Sep-06 Analyzed: 12-Sep-06										
Arsenic	BRL		mg/kg wet	1.40						
LCS (6090571-BS1)										
Prepared: 11-Sep-06 Analyzed: 13-Sep-06										
Arsenic	123		mg/kg wet	1.50	125		98.4	85-115		
Duplicate (6090571-DUP1) Source: SA50766-01										
Prepared: 11-Sep-06 Analyzed: 12-Sep-06										
Arsenic	BRL		mg/kg dry	1.62		1.71			12.4	35
Matrix Spike (6090571-MS1) Source: SA50766-08										
Prepared: 11-Sep-06 Analyzed: 13-Sep-06										
Arsenic	149		mg/kg dry	1.80	150	8.54	93.6	70-130		
Post Spike (6090571-PS1) Source: SA50766-08										
Prepared: 11-Sep-06 Analyzed: 13-Sep-06										
Arsenic	160		mg/kg dry	1.83	152	8.54	99.6	85-115		
Reference (6090571-SRM1)										
Prepared: 11-Sep-06 Analyzed: 13-Sep-06										
Arsenic	129		mg/kg wet	1.50	131		98.5	79.8-120.2		

General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6090977 - General Preparation										
Duplicate (6090977-DUP1) Source: SA50727-02										
Prepared & Analyzed: 15-Sep-06										
% Solids	88.0		%			87.6			0.456	20
Batch 6090979 - General Preparation										
Duplicate (6090979-DUP1) Source: SA50766-13										
Prepared: 15-Sep-06 Analyzed: 16-Sep-06										
% Solids	75.4		%			75.0			0.532	20
Duplicate (6090979-DUP2) Source: SA50766-14										
Prepared: 15-Sep-06 Analyzed: 16-Sep-06										
% Solids	77.4		%			76.5			1.17	20

Notes and Definitions

BRL	Below Reporting Limit - Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
NR	Not Reported
RPD	Relative Percent Difference

A plus sign (+) in the Method Reference column indicates the method is not accredited by NELAC

Laboratory Control Sample (LCS): A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix

Matrix Spike: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure The method blank is used to document contamination resulting from the analytical process

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction Sample RDLs are highly matrix-dependent.

Surrogate: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

Validated by:
Hanibal C. Tayeh, Ph.D.
June O'Connor

MA 507660

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CHAIN OF CUSTODY RECORD

Page 1 of 2

Special Handling:
- ☒ Standard TAT - 7 to 10 business days
- ☐ Rush TAT - Date Needed: _____
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: Jacques Whitford
24 Albion Rd, Suite 220
Lincoln, RI 02865

Project Mgr.: Joe Unsworth

Invoice To: Same
WH601 3050

P.O. No.: 1009825.02 RQN: _____

Project No.: 1009825.02
Site Name: Potter Hill Mill
Location: Westerly State: RI
Sampler(s): JTU

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid
7=CH_3OH 8= $NaHSO_4$ 9=_____ 10=_____

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1=_____ X2=_____ X3=_____

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Preservative	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analyses: Arsenic-Total	QA Reporting Notes: (check if needed)
507660-01	SS-1	9/5/06		G	SO	-		1			X	☐ Provide MA DEP MCP CAM Report ☐ Provide CT DPH RCP Report **QA/QC Reporting Level** ☐ Standard ☐ No QC ☐ Other _____ State specific reporting standards:
-02	SS-2	9/5/06		G	SO	-		1			X	
-03	SS-3	9/5/06		G	SO	-		1			X	
-04	SS-4	9/5/06		G	SO	-		1			X	
-05	SS-5	9/5/06		G	SO	-		1			X	
-06	SS-6	9/5/06		G	SO	-		1			X	
-07	SS-7	9/5/06		G	SO	-		1			X	
-08	SS-8	9/5/06		G	SO	-		1			X	
-09	SS-9	9/5/06		G	SO	-		1			X	
-10	SS-10	9/5/06		G	SO	-		1			X	

☐ Fax results when available to (_____) _____
☒ E-mail to junswort@jacqueswhitford.com
EDD Format _____
Condition upon receipt: ☐ Iced ☐ Ambient ☒ °C 2.8

Relinquished by:	Received by:	Date:	Time:
		9-7-06	13:15
		9/7/06	15:05

Gun 4 REF

S0766

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CHAIN OF CUSTODY RECORD

Page 2 of 2

Special Handling:
- ☑ Standard TAT - 7 to 10 business days
- ☐ Rush TAT - Date Needed: _____
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: Jacques Whitford
24 Albion Rd, Suite 220
Lincoln, RI

Project Mgr.: Joe Unsworth

Invoice To: Same

P.O. No.: 1009825.02 RQN: _____

Project No.: 1009825.02
Site Name: Potter Hill M.H.
Location: Westerly State: RI
Sampler(s): JTU

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid
7=CH_3OH 8= $NaHSO_4$ 9=_____ 10=_____

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1=_____ X2=_____ X3=_____

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Preservative	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analyses: Arsenic-Total	QA Reporting Notes: (check if needed)
S0766-11	SS-11	9/05/06		G	SO			1			X	☐ Provide MA DEP MCP CAM Report
-12	SS-12	9/05/06		G	SO			1			X	☐ Provide CT DPH RCP Report
-13	SS-13	9/03/06		G	SO			1			X	**QA/QC Reporting Level**
-14	SS-14	9/05/06		G	SO			1			X	☐ Standard ☐ No QC
-15	SS-15	9/05/06		G	SO			1			X	☐ Other _____
-16	SS-16	9/05/06		G	SO			1			X	State specific reporting standards:
-17	SS-17	9/05/06		G	SO			1			X	

☐ Fax results when available to (_____) _____
☑ E-mail to junsworth@jacqueswhitford.com
EDD Format _____

Condition upon receipt: ☐ Iced ☐ Ambient ☑ °C (2.8)

Relinquished by:	Received by:	Date:	Time:
		9-7-06	1315
		9/7/06	15:15

Gun 4 REF

Report Date:
27-Oct-06 15:13

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
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Laboratory Report

Jacques Whitford Company, Inc.
24 Albion Rd, Suite 220
Lincoln, RI 02865
Attn: Joe Unsworth

Project: Potter Hill Mill - Westerly, RI
Project 1009825.04/100

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SA53093-01	SS-18	Soil	23-Oct-06 00:00	24-Oct-06 15:25
SA53093-02	SS-19	Soil	23-Oct-06 00:00	24-Oct-06 15:25
SA53093-03	SS-20	Soil	23-Oct-06 00:00	24-Oct-06 15:25

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.
All applicable NELAC requirements have been met.
Please note that this report contains 10 pages of analytical data plus Chain of Custody document(s).
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Maine # MA138
New Hampshire # 2538/2972
New Jersey # MA011/MA012
New York # 11393/11840
Rhode Island # 98
USDA # S-51435
Vermont # VT-11393

ACCREDITED IN ACCORDANCE WITH nelac

Authorized by:

Hanibal C. Tayeh, Ph.D.
President/Laboratory Director

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Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-18 SA53093-01	1009825.04/100	Soil	23-Oct-06 00:00	24-Oct-06

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3550B											
83-32-9	Acenaphthene	BRL		µg/kg dry	172	1	SW846 8270C	26-Oct-06	27-Oct-06	6101942	M.B
208-96-8	Acenaphthylene	BRL		µg/kg dry	172	1	"	"	"	"	"
120-12-7	Anthracene	BRL		µg/kg dry	172	1	"	"	"	"	"
56-55-3	Benzo (a) anthracene	BRL		µg/kg dry	172	1	"	"	"	"	"
50-32-8	Benzo (a) pyrene	186		µg/kg dry	172	1	"	"	"	"	"
205-99-2	Benzo (b) fluoranthene	249		µg/kg dry	172	1	"	"	"	"	"
191-24-2	Benzo (g,h,i) perylene	BRL		µg/kg dry	172	1	"	"	"	"	"
207-08-9	Benzo (k) fluoranthene	254		µg/kg dry	172	1	"	"	"	"	"
218-01-9	Chrysene	230		µg/kg dry	172	1	"	"	"	"	"
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/kg dry	172	1	"	"	"	"	"
206-44-0	Fluoranthene	397		µg/kg dry	172	1	"	"	"	"	"
86-73-7	Fluorene	BRL		µg/kg dry	172	1	"	"	"	"	"
193-39-5	Indeno (1,2,3-cd) pyrene	BRL		µg/kg dry	172	1	"	"	"	"	"
90-12-0	1-Methylnaphthalene	BRL		µg/kg dry	172	1	"	"	"	"	"
91-57-6	2-Methylnaphthalene	BRL		µg/kg dry	172	1	"	"	"	"	"
91-20-3	Naphthalene	BRL		µg/kg dry	172	1	"	"	"	"	"
85-01-8	Phenanthrene	325		µg/kg dry	172	1	"	"	"	"	"
129-00-0	Pyrene	334		µg/kg dry	172	1	"	"	"	"	"
Surrogate recoveries:											
321-60-8	*2-Fluorobiphenyl*	*80.0*		*30-130 %*			"	"	"	"	"
1718-51-0	*Terphenyl-dl4*	*92.1*		*30-130 %*			"	"	"	"	"
Total Metals by EPA 6000/7000 Series Methods											
7439-97-6	Mercury	BRL		mg/kg dry	0.0341	1	SW846 7471A	26-Oct-06	27-Oct-06	6101865	Win
Total Metals by EPA 200 Series Methods											
7440-22-4	Silver	2.37		mg/kg dry	1.10	1	EPA 200.7	26-Oct-06	26-Oct-06	6101864	TGP
7440-38-2	Arsenic	10.3		mg/kg dry	1.66	1	"	"	"	"	"
7440-39-3	Barium	60.5		mg/kg dry	0.552	1	"	"	"	"	"
7440-43-9	Cadmium	0.441		mg/kg dry	0.276	1	"	"	"	"	"
7440-47-3	Chromium	12.9		mg/kg dry	0.552	1	"	"	"	"	"
7439-92-1	Lead	39.6		mg/kg dry	0.828	1	"	"	"	"	"
7782-49-2	Selenium	2.42		mg/kg dry	1.66	1	"	"	"	"	"
General Chemistry Parameters											
	% Solids	87.6		%		1	SM2540 G Mod.	25-Oct-06	25-Oct-06	6101910	BD

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-19 SA53093-02	1009825.04/100	Soil	23-Oct-06 00:00	24-Oct-06

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3550B											
83-32-9	Acenaphthene	BRL		µg/kg dry	177	1	SW846 8270C	26-Oct-06	27-Oct-06	6101942	M.B
208-96-8	Acenaphthylene	BRL		µg/kg dry	177	1	"	"	"	"	"
120-12-7	Anthracene	BRL		µg/kg dry	177	1	"	"	"	"	"
56-55-3	Benzo (a) anthracene	BRL		µg/kg dry	177	1	"	"	"	"	"
50-32-8	Benzo (a) pyrene	BRL		µg/kg dry	177	1	"	"	"	"	"
205-99-2	Benzo (b) fluoranthene	BRL		µg/kg dry	177	1	"	"	"	"	"
191-24-2	Benzo (g,h,i) perylene	BRL		µg/kg dry	177	1	"	"	"	"	"
207-08-9	Benzo (k) fluoranthene	179		µg/kg dry	177	1	"	"	"	"	"
218-01-9	Chrysene	231		µg/kg dry	177	1	"	"	"	"	"
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/kg dry	177	1	"	"	"	"	"
206-44-0	Fluoranthene	387		µg/kg dry	177	1	"	"	"	"	"
86-73-7	Fluorene	BRL		µg/kg dry	177	1	"	"	"	"	"
193-39-5	Indeno (1,2,3-cd) pyrene	BRL		µg/kg dry	177	1	"	"	"	"	"
90-12-0	1-Methylnaphthalene	BRL		µg/kg dry	177	1	"	"	"	"	"
91-57-6	2-Methylnaphthalene	BRL		µg/kg dry	177	1	"	"	"	"	"
91-20-3	Naphthalene	BRL		µg/kg dry	177	1	"	"	"	"	"
85-01-8	Phenanthrene	262		µg/kg dry	177	1	"	"	"	"	"
129-00-0	Pyrene	312		µg/kg dry	177	1	"	"	"	"	"
Surrogate recoveries:											
321-60-8	*2-Fluorobiphenyl*	*79.6*		*30-130 %*			"	"	"	"	"
1718-51-0	*Terphenyl-dl4*	*83.6*		*30-130 %*			"	"	"	"	"
Total Metals by EPA 6000/7000 Series Methods											
7439-97-6	Mercury	0.0507		mg/kg dry	0.0351	1	SW846 7471A	26-Oct-06	27-Oct-06	6101865	Win
Total Metals by EPA 200 Series Methods											
7440-22-4	Silver	BRL		mg/kg dry	1.18	1	EPA 200.7	26-Oct-06	26-Oct-06	6101864	TGP
7440-38-2	Arsenic	25.8		mg/kg dry	1.76	1	"	"	"	"	"
7440-39-3	Barium	68.1		mg/kg dry	0.588	1	"	"	"	"	"
7440-43-9	Cadmium	BRL		mg/kg dry	0.294	1	"	"	"	"	"
7440-47-3	Chromium	8.71		mg/kg dry	0.588	1	"	"	"	"	"
7439-92-1	Lead	28.1		mg/kg dry	0.882	1	"	"	"	"	"
7782-49-2	Selenium	3.91		mg/kg dry	1.76	1	"	"	"	"	"
General Chemistry Parameters											
	% Solids	84.9		%		1	SM2540 G Mod.	25-Oct-06	25-Oct-06	6101910	BD

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-20 SA53093-03	1009825.04/100	Soil	23-Oct-06 00:00	24-Oct-06

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3550B											
83-32-9	Acenaphthene	BRL		µg/kg dry	180	1	SW846 8270C	26-Oct-06	27-Oct-06	6101942	M.B
208-96-8	Acenaphthylene	BRL		µg/kg dry	180	1	"	"	"	"	"
120-12-7	Anthracene	BRL		µg/kg dry	180	1	"	"	"	"	"
56-55-3	Benzo (a) anthracene	224		µg/kg dry	180	1	"	"	"	"	"
50-32-8	Benzo (a) pyrene	215		µg/kg dry	180	1	"	"	"	"	"
205-99-2	Benzo (b) fluoranthene	228		µg/kg dry	180	1	"	"	"	"	"
191-24-2	Benzo (g,h,i) perylene	BRL		µg/kg dry	180	1	"	"	"	"	"
207-08-9	Benzo (k) fluoranthene	218		µg/kg dry	180	1	"	"	"	"	"
218-01-9	Chrysene	266		µg/kg dry	180	1	"	"	"	"	"
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/kg dry	180	1	"	"	"	"	"
206-44-0	Fluoranthene	413		µg/kg dry	180	1	"	"	"	"	"
86-73-7	Fluorene	BRL		µg/kg dry	180	1	"	"	"	"	"
193-39-5	Indeno (1,2,3-cd) pyrene	BRL		µg/kg dry	180	1	"	"	"	"	"
90-12-0	1-Methylnaphthalene	BRL		µg/kg dry	180	1	"	"	"	"	"
91-57-6	2-Methylnaphthalene	BRL		µg/kg dry	180	1	"	"	"	"	"
91-20-3	Naphthalene	BRL		µg/kg dry	180	1	"	"	"	"	"
85-01-8	Phenanthrene	319		µg/kg dry	180	1	"	"	"	"	"
129-00-0	Pyrene	424		µg/kg dry	180	1	"	"	"	"	"
Surrogate recoveries:											
321-60-8	*2-Fluorobiphenyl*	*76.0*		*30-130 %*			"	"	"	"	"
1718-51-0	*Terphenyl-dl4*	*86.3*		*30-130 %*			"	"	"	"	"
Total Metals by EPA 6000/7000 Series Methods											
7439-97-6	Mercury	0.152		mg/kg dry	0.0357	1	SW846 7471A	26-Oct-06	27-Oct-06	6101865	Win
Total Metals by EPA 200 Series Methods											
7440-22-4	Silver	BRL		mg/kg dry	1.16	1	EPA 200.7	26-Oct-06	26-Oct-06	6101864	TGP
7440-38-2	Arsenic	21.8		mg/kg dry	1.74	1	"	"	"	"	"
7440-39-3	Barium	116		mg/kg dry	0.581	1	"	"	"	"	"
7440-43-9	Cadmium	0.325		mg/kg dry	0.291	1	"	"	"	"	"
7440-47-3	Chromium	18.6		mg/kg dry	0.581	1	"	"	"	"	"
7439-92-1	Lead	156		mg/kg dry	0.872	1	"	"	"	"	"
7782-49-2	Selenium	3.00		mg/kg dry	1.74	1	"	"	"	"	"
General Chemistry Parameters											
	% Solids	83.4		%		1	SM2540 G Mod.	25-Oct-06	25-Oct-06	6101910	BD

Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6101942 - SW846 3550B										
Blank (6101942-BLK1)										
Prepared & Analyzed: 26-Oct-06										
Acenaphthene	BRL		µg/kg wet	66.0						
Acenaphthylene	BRL		µg/kg wet	66.0						
Anthracene	BRL		µg/kg wet	66.0						
Benzo (a) anthracene	BRL		µg/kg wet	66.0						
Benzo (a) pyrene	BRL		µg/kg wet	66.0						
Benzo (b) fluoranthene	BRL		µg/kg wet	66.0						
Benzo (g,h,i) perylene	BRL		µg/kg wet	66.0						
Benzo (k) fluoranthene	BRL		µg/kg wet	66.0						
Chrysene	BRL		µg/kg wet	66.0						
Dibenzo (a,h) anthracene	BRL		µg/kg wet	66.0						
Fluoranthene	BRL		µg/kg wet	66.0						
Fluorene	BRL		µg/kg wet	66.0						
Indeno (1,2,3-cd) pyrene	BRL		µg/kg wet	66.0						
1-Methylnaphthalene	BRL		µg/kg wet	66.0						
2-Methylnaphthalene	BRL		µg/kg wet	66.0						
Naphthalene	BRL		µg/kg wet	66.0						
Phenanthrene	BRL		µg/kg wet	66.0						
Pyrene	BRL		µg/kg wet	66.0						
Surrogate: 2-Fluorobiphenyl	*7680*		µg/kg wet		*13300*		*57.7*	*30-130*		
Surrogate: Terphenyl-dl4	*7770*		µg/kg wet		*13300*		*58.4*	*30-130*		
LCS (6101942-BS1)										
Prepared & Analyzed: 26-Oct-06										
Acenaphthene	4980		µg/kg wet	66.0	6670		74.7	40-140		
Acenaphthylene	5150		µg/kg wet	66.0	6670		77.2	40-140		
Anthracene	4750		µg/kg wet	66.0	6670		71.2	40-140		
Benzo (a) anthracene	5070		µg/kg wet	66.0	6670		76.0	40-140		
Benzo (a) pyrene	5100		µg/kg wet	66.0	6670		76.5	40-140		
Benzo (b) fluoranthene	5190		µg/kg wet	66.0	6670		77.8	40-140		
Benzo (g,h,i) perylene	5180		µg/kg wet	66.0	6670		77.7	40-140		
Benzo (k) fluoranthene	5390		µg/kg wet	66.0	6670		80.8	40-140		
Chrysene	4830		µg/kg wet	66.0	6670		72.4	40-140		
Dibenzo (a,h) anthracene	5570		µg/kg wet	66.0	6670		83.5	40-140		
Fluoranthene	5440		µg/kg wet	66.0	6670		81.6	40-140		
Fluorene	5340		µg/kg wet	66.0	6670		80.1	40-140		
Indeno (1,2,3-cd) pyrene	4680		µg/kg wet	66.0	6670		70.2	40-140		
1-Methylnaphthalene	4530		µg/kg wet	66.0	6670		67.9	40-140		
2-Methylnaphthalene	4440		µg/kg wet	66.0	6670		66.6	40-140		
Naphthalene	4630		µg/kg wet	66.0	6670		69.4	40-140		
Phenanthrene	5360		µg/kg wet	66.0	6670		80.4	40-140		
Pyrene	4260		µg/kg wet	66.0	6670		63.9	40-140		
Naphthalene-d8	40.0		µg/kg wet		40.0		66	50-200		
Acenaphthene-d10	40.0		µg/kg wet		40.0		69.3	50-200		
Phenanthrene-d10	40.0		µg/kg wet		40.0		70	50-200		
Chrysene-d12	40.0		µg/kg wet		40.0		79.3	50-200		
Perylene-d12	40.0		µg/kg wet		40.0		75.9	50-200		
Surrogate: 2-Fluorobiphenyl	*7690*		µg/kg wet		*6670*		*115*	*30-130*		
Surrogate: Terphenyl-dl4	*7210*		µg/kg wet		*6670*		*108*	*30-130*		
Duplicate (6101942-DUP1)	**Source: SA53146-02**									
Prepared & Analyzed: 26-Oct-06										
Acenaphthene	BRL		µg/kg dry	99.7		BRL				50
Acenaphthylene	BRL		µg/kg dry	99.7		BRL				50
Anthracene	BRL		µg/kg dry	99.7		BRL				50

Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6101942 - SW846 3550B										
Duplicate (6101942-DUP1)	**Source: SA53146-02**									
Prepared & Analyzed: 26-Oct-06										
Benzo (a) anthracene	BRL		µg/kg dry	99.7		BRL				50
Benzo (a) pyrene	BRL		µg/kg dry	99.7		BRL				50
Benzo (b) fluoranthene	BRL		µg/kg dry	99.7		BRL				50
Benzo (g,h,i) perylene	BRL		µg/kg dry	99.7		BRL				50
Benzo (k) fluoranthene	BRL		µg/kg dry	99.7		BRL				50
Chrysene	BRL		µg/kg dry	99.7		BRL				50
Dibenzo (a,h) anthracene	BRL		µg/kg dry	99.7		BRL				50
Fluoranthene	BRL		µg/kg dry	99.7		BRL				50
Fluorene	BRL		µg/kg dry	99.7		BRL				50
Indeno (1,2,3-cd) pyrene	BRL		µg/kg dry	99.7		BRL				50
1-Methylnaphthalene	BRL		µg/kg dry	99.7		BRL				50
2-Methylnaphthalene	BRL		µg/kg dry	99.7		BRL				50
Naphthalene	BRL		µg/kg dry	99.7		BRL				50
Phenanthrene	BRL		µg/kg dry	99.7		BRL				50
Pyrene	BRL		µg/kg dry	99.7		BRL				50
Surrogate: 2-Fluorobiphenyl	*2910*		µg/kg dry		*5030*		*57.9*	*30-130*		
Surrogate: Terphenyl-dl4	*2800*		µg/kg dry		*5030*		*55.7*	*30-130*		
Matrix Spike (6101942-MS1)	**Source: SA53146-02**									
Prepared & Analyzed: 26-Oct-06										
Acenaphthene	3120		µg/kg dry	50.5	5100	BRL	61.2	40-140		
Pyrene	3130		µg/kg dry	50.5	5100	BRL	61.4	40-140		
Naphthalene-d8	40.0		µg/kg dry		40.0		123	50-200		
Acenaphthene-d10	40.0		µg/kg dry		40.0		126	50-200		
Phenanthrene-d10	40.0		µg/kg dry		40.0		116	50-200		
Chrysene-d12	40.0		µg/kg dry		40.0		109	50-200		
Perylene-d12	40.0		µg/kg dry		40.0		97.6	50-200		
Surrogate: 2-Fluorobiphenyl	*4140*		µg/kg dry		*5100*		*81.2*	*30-130*		
Surrogate: Terphenyl-dl4	*4400*		µg/kg dry		*5100*		*86.3*	*30-130*		
Matrix Spike Dup (6101942-MSD1)	**Source: SA53146-02**									
Prepared & Analyzed: 26-Oct-06										
Acenaphthene	3410		µg/kg dry	50.7	5120	BRL	66.6	40-140	8.45	30
Pyrene	3220		µg/kg dry	50.7	5120	BRL	62.9	40-140	2.41	30
Surrogate: 2-Fluorobiphenyl	*4240*		µg/kg dry		*5120*		*82.8*	*30-130*		
Surrogate: Terphenyl-dl4	*4270*		µg/kg dry		*5120*		*83.4*	*30-130*		

Total Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6101865 - EPA200/SW7000 Series										
Blank (6101865-BLK1)										
Prepared: 26-Oct-06 Analyzed: 27-Oct-06										
Mercury	BRL		mg/kg wet	0.0291						
Duplicate (6101865-DUP1) **Source: SA53093-01**										
Prepared: 26-Oct-06 Analyzed: 27-Oct-06										
Mercury	0.0233	J,QR1	mg/kg dry	0.0342		0.0118			65.5	35
Matrix Spike (6101865-MS1) **Source: SA53093-02**										
Prepared: 26-Oct-06 Analyzed: 27-Oct-06										
Mercury	0.503		mg/kg dry	0.0348	0.484	0.0507	93.5	75-125		
Post Spike (6101865-PS1) **Source: SA53093-02**										
Prepared: 26-Oct-06 Analyzed: 27-Oct-06										
Mercury	0.507		mg/kg dry	0.0349	0.485	0.0507	94.1	75-125		
Reference (6101865-SRM1)										
Prepared: 26-Oct-06 Analyzed: 27-Oct-06										
Mercury	1.06		mg/kg wet	0.0300	1.09		97.2	68.2-132.1		

Total Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6101864 - EPA 200 Series										
Blank (6101864-BLK1)										
Prepared & Analyzed: 26-Oct-06										
Silver	BRL		mg/kg wet	0.942						
Selenium	BRL		mg/kg wet	1.41						
Lead	BRL		mg/kg wet	0.707						
Cadmium	BRL		mg/kg wet	0.236						
Chromium	BRL		mg/kg wet	0.471						
Arsenic	BRL		mg/kg wet	1.41						
Barium	BRL		mg/kg wet	0.471						
LCS (6101864-BS1)										
Prepared & Analyzed: 26-Oct-06										
Selenium	125		mg/kg wet	1.50	125		100	85-115		
Silver	138		mg/kg wet	1.00	125		110	85-115		
Lead	116		mg/kg wet	0.750	125		92.8	85-115		
Cadmium	122		mg/kg wet	0.250	125		97.6	85-115		
Arsenic	120		mg/kg wet	1.50	125		96.0	85-115		
Chromium	117		mg/kg wet	0.500	125		93.6	85-115		
Barium	137		mg/kg wet	0.500	125		110	85-115		
Duplicate (6101864-DUP1)	**Source: SA53093-01**									
Prepared & Analyzed: 26-Oct-06										
Selenium	2.43		mg/kg dry	1.71		2.42			0.412	35
Silver	2.46		mg/kg dry	1.14		2.37			3.73	35
Lead	35.6		mg/kg dry	0.855		39.6			10.6	35
Arsenic	9.46		mg/kg dry	1.71		10.3			8.50	35
Cadmium	0.359		mg/kg dry	0.285		0.441			20.5	35
Chromium	22.5	QR5	mg/kg dry	0.570		12.9			54.2	35
Barium	56.1		mg/kg dry	0.570		60.5			7.55	35
Matrix Spike (6101864-MS1)	**Source: SA53093-02**									
Prepared & Analyzed: 26-Oct-06										
Silver	168		mg/kg dry	1.16	145	BRL	116	70-130		
Selenium	153		mg/kg dry	1.74	145	3.91	103	70-130		
Arsenic	167		mg/kg dry	1.74	145	25.8	97.4	70-130		
Cadmium	143		mg/kg dry	0.291	145	0.282	98.4	70-130		
Chromium	150		mg/kg dry	0.581	145	8.71	97.4	70-130		
Lead	163		mg/kg dry	0.872	145	28.1	93.0	70-130		
Barium	244		mg/kg dry	0.581	145	68.1	121	70-130		
Post Spike (6101864-PS1)	**Source: SA53093-02**									
Prepared & Analyzed: 26-Oct-06										
Silver	161		mg/kg dry	1.17	146	BRL	110	85-115		
Selenium	153		mg/kg dry	1.75	146	3.91	102	85-115		
Arsenic	167		mg/kg dry	1.75	146	25.8	96.7	85-115		
Cadmium	142		mg/kg dry	0.292	146	0.282	97.1	85-115		
Chromium	150		mg/kg dry	0.584	146	8.71	96.8	85-115		
Lead	159		mg/kg dry	0.876	146	28.1	89.7	85-115		
Barium	233		mg/kg dry	0.584	146	68.1	113	85-115		
Reference (6101864-SRM1)										
Prepared & Analyzed: 26-Oct-06										
Silver	73.4		mg/kg wet	1.00	62.6		117	61.2-139		
Selenium	95.0		mg/kg wet	1.50	88.0		108	75.7-124.3		
Cadmium	60.0		mg/kg wet	0.250	59.5		101	81.5-118.8		
Arsenic	133		mg/kg wet	1.50	131		102	79.8-120.2		
Chromium	36.1		mg/kg wet	0.500	37.0		97.6	78.6-121.4		

Total Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6101864 - EPA 200 Series										
Reference (6101864-SRM1)										
Prepared & Analyzed: 26-Oct-06										
Lead	82.2		mg/kg wet	0.750	84.4		97.4	80.7-119.3		
Barium	265		mg/kg wet	0.500	240		110	82-118.1		

General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6101910 - General Preparation										
Duplicate (6101910-DUP1) **Source: SA52864-01**										
Prepared & Analyzed: 25-Oct-06										
% Solids	88.3		%			90.1			2.02	20

Notes and Definitions

QR1	Analyses are not controlled on RPD values from sample concentrations less than 10 times the reporting limit. QC batch accepted based on LCS and/or LCSD QC results.
QR5	RPD out of acceptance range.
BRL	Below Reporting Limit - Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
NR	Not Reported
RPD	Relative Percent Difference

A plus sign (+) in the Method Reference column indicates the method is not accredited by NELAC.

Laboratory Control Sample (LCS): A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix.

Matrix Spike: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

Surrogate: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

Validated by:
Hanibal C. Tayeh, Ph.D.
Nicole Brown

SA53093-01

SPECTRUM ANALYTICAL, INC.
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HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
- ☐ Standard TAT - 7 to 10 business days
- ☒ Rush TAT - Date Needed: 10/27/06
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: Jacques Whitford Co
24 Albion Rd / Suite 220
Lincoln, RI 02865

Project Mgr.: Joe Unsworth

Invoice To: Same

P.O. No.: 100925.03 / 100 RQN:

Project No.: 100925.03 / 100
Site Name: Potter Hill Mill
Location: Westerly State: RI
Sampler(s): Joe Unsworth

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid
7=CH_3OH 8=$NaHSO_4$ 9=_____ 10=_____

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW=Surface Water SO=Soil SL=Sludge A=Air
X1=_____ X2=_____ X3=_____

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Preservative	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analyses: RCRA8 Metals	OAHs 8270
SA53093-01	SS-18	10/23/06		G	SO	1		1			X	X
02	SS-19	10/23/06		G	SO	1		1			X	X
03	SS-20	10/23/06		G	SO	1		1			X	X

QA Reporting Notes: (check if needed)
- ☐ Provide MA DEP MCP CAM Report
- ☐ Provide CT DPH RCP Report

QA/QC Reporting Level
- ☒ Standard ☐ No QC
- ☐ Other

State specific reporting standards:

- ☐ Fax results when available to (____) _____
- ☒ E-mail to junsworth@jacqueswhitford
- EDD Format _____

Condition upon receipt: ☐ Iced ☐ Ambient ☐ °C 41.9 +0.2

Relinquished by:	Received by:	Date:	Time:
Bergeron	Bergeron	10/24/06	11:11 A.M.
		10-24-06	1525

Ref.

Report Date:
03-Nov-06 15:35

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

Jacques Whitford Company, Inc.
24 Albion Rd, Suite 220
Lincoln, RI 02865
Attn: Joe Unsworth

Project: Potter Hill Mill - Westerly, RI
Project 1009825.04/Phase 100

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SA53403-01	SS-21	Soil	23-Oct-06 00:00	31-Oct-06 15:10
SA53403-02	SS-22	Soil	23-Oct-06 00:00	31-Oct-06 15:10
SA53403-03	SS-23	Soil	23-Oct-06 00:00	31-Oct-06 15:10

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.
All applicable NELAC requirements have been met.
Please note that this report contains 6 pages of analytical data plus Chain of Custody document(s).
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Massachusetts Certification # M-MA138/MA1110
Connecticut # PH-0777
Florida # E87600/E87936
Maine # MA138
New Hampshire # 2538/2972
New Jersey # MA011/MA012
New York # 11393/11840
Rhode Island # 98
USDA # S-51435
Vermont # VT-11393

ACCREDITED IN ACCORDANCE WITH nelac

Authorized by:

Hanibal C. Tayeh, Ph.D.
President/Laboratory Director

Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Spectrum is currently accredited for the specific method indicated. Please refer to our "Quality" webpage at www.spectrum-analytical.com for a full listing of our current certifications.

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-21 SA53403-01	1009825.04/Phase 100	Soil	23-Oct-06 00:00	31-Oct-06

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Total Metals by EPA 6000/7000 Series Methods											
7439-97-6	Mercury	0.154		mg/kg dry	0.0336	1	SW846 7471A	01-Nov-06	03-Nov-06	6102383	YP
Total Metals by EPA 200 Series Methods											
7440-22-4	Silver	3.08		mg/kg dry	1.07	1	EPA 200.7	01-Nov-06	02-Nov-06	6102382	LR
7440-38-2	Arsenic	13.5		mg/kg dry	1.60	1	"	"	"	"	"
7440-39-3	Barium	88.8		mg/kg dry	0.533	1	"	"	"	"	"
7440-43-9	Cadmium	0.341		mg/kg dry	0.266	1	"	"	"	"	"
7440-47-3	Chromium	9.73		mg/kg dry	0.533	1	"	"	"	"	"
7439-92-1	Lead	45.2		mg/kg dry	0.799	1	"	"	"	"	"
7782-49-2	Selenium	BRL		mg/kg dry	1.60	1	"	"	"	"	"
General Chemistry Parameters											
	% Solids	89.2		%		1	SM2540 G Mod.	02-Nov-06	02-Nov-06	6110149	YM

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-22 SA53403-02	1009825.04/Phase 100	Soil	23-Oct-06 00:00	31-Oct-06

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Total Metals by EPA 6000/7000 Series Methods											
7439-97-6	Mercury	0.0512		mg/kg dry	0.0345	1	SW846 7471A	01-Nov-06	03-Nov-06	6102383	YP
Total Metals by EPA 200 Series Methods											
7440-22-4	Silver	BRL		mg/kg dry	1.13	1	EPA 200.7	01-Nov-06	02-Nov-06	6102382	LR
7440-38-2	Arsenic	20.5		mg/kg dry	1.69	1	"	"	"	"	"
7440-39-3	Barium	83.8		mg/kg dry	0.563	1	"	"	"	"	"
7440-43-9	Cadmium	0.417		mg/kg dry	0.282	1	"	"	"	"	"
7440-47-3	Chromium	11.7		mg/kg dry	0.563	1	"	"	"	"	"
7439-92-1	Lead	69.8		mg/kg dry	0.845	1	"	"	"	"	"
7782-49-2	Selenium	2.08		mg/kg dry	1.69	1	"	"	"	"	"
General Chemistry Parameters											
	% Solids	86.3		%		1	SM2540 G Mod.	02-Nov-06	02-Nov-06	6110149	YM

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-23 SA53403-03	1009825.04/Phase 100	Soil	23-Oct-06 00:00	31-Oct-06

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Total Metals by EPA 6000/7000 Series Methods											
7439-97-6	Mercury	0.0516		mg/kg dry	0.0349	1	SW846 7471A	01-Nov-06	03-Nov-06	6102383	YP
Total Metals by EPA 200 Series Methods											
7440-22-4	Silver	1.16		mg/kg dry	1.11	1	EPA 200.7	01-Nov-06	02-Nov-06	6102382	LR
7440-38-2	Arsenic	6.05		mg/kg dry	1.67	1	"	"	"	"	"
7440-39-3	Barium	83.9		mg/kg dry	0.556	1	"	"	"	"	"
7440-43-9	Cadmium	0.428		mg/kg dry	0.278	1	"	"	"	"	"
7440-47-3	Chromium	128		mg/kg dry	0.556	1	"	"	"	"	"
7439-92-1	Lead	150		mg/kg dry	0.834	1	"	"	"	"	"
7782-49-2	Selenium	BRL		mg/kg dry	1.67	1	"	"	"	"	"
General Chemistry Parameters											
	% Solids	85.2		%		1	SM2540 G Mod.	02-Nov-06	02-Nov-06	6110149	YM

Total Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6102383 - EPA200/SW7000 Series										
Blank (6102383-BLK1)										
Prepared: 01-Nov-06 Analyzed: 03-Nov-06										
Mercury	BRL		mg/kg wet	0.0295						
Duplicate (6102383-DUP1) **Source: SA53384-03**										
Prepared: 01-Nov-06 Analyzed: 03-Nov-06										
Mercury	BRL		mg/kg dry	0.0307		BRL				35
Matrix Spike (6102383-MS1) **Source: SA53384-16**										
Prepared: 01-Nov-06 Analyzed: 03-Nov-06										
Mercury	0.428		mg/kg dry	0.0321	0.446	0.0120	93.3	75-125		
Matrix Spike (6102383-MS2) **Source: SA53403-01**										
Prepared: 01-Nov-06 Analyzed: 03-Nov-06										
Mercury	0.577		mg/kg dry	0.0336	0.467	0.154	90.6	75-125		
Post Spike (6102383-PS1) **Source: SA53384-16**										
Prepared: 01-Nov-06 Analyzed: 03-Nov-06										
Mercury	0.448		mg/kg dry	0.0316	0.439	0.0120	99.3	75-125		
Reference (6102383-SRM1)										
Prepared: 01-Nov-06 Analyzed: 03-Nov-06										
Mercury	1.06		mg/kg wet	0.0300	1.07		99.1	68.2-132.1		

Total Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6102382 - EPA 200 Series										
Blank (6102382-BLK1)										
Prepared: 01-Nov-06 Analyzed: 02-Nov-06										
Silver	BRL		mg/kg wet	0.920						
Selenium	BRL		mg/kg wet	1.38						
Chromium	BRL		mg/kg wet	0.460						
Lead	BRL		mg/kg wet	0.690						
Cadmium	BRL		mg/kg wet	0.230						
Arsenic	BRL		mg/kg wet	1.38						
Barium	BRL		mg/kg wet	0.460						
LCS (6102382-BS1)										
Prepared: 01-Nov-06 Analyzed: 02-Nov-06										
Silver	131		mg/kg wet	1.00	125		105	85-115		
Selenium	127		mg/kg wet	1.50	125		102	85-115		
Chromium	129		mg/kg wet	0.500	125		103	85-115		
Lead	121		mg/kg wet	0.750	125		96.8	85-115		
Arsenic	125		mg/kg wet	1.50	125		100	85-115		
Cadmium	128		mg/kg wet	0.250	125		102	85-115		
Barium	131		mg/kg wet	0.500	125		105	85-115		
Duplicate (6102382-DUP1) **Source: SA53384-03**										
Prepared: 01-Nov-06 Analyzed: 02-Nov-06										
Selenium	BRL		mg/kg dry	1.45		BRL				35
Silver	1.32		mg/kg dry	0.969		1.72			26.3	35
Chromium	4.75		mg/kg dry	0.485		4.44			6.75	35
Lead	4.54		mg/kg dry	0.727		4.98			9.24	35
Cadmium	0.160	J	mg/kg dry	0.242		0.150			6.45	35
Arsenic	3.89		mg/kg dry	1.45		4.54			15.4	35
Barium	11.3		mg/kg dry	0.485		14.0			21.3	35
Matrix Spike (6102382-MS1) **Source: SA53384-16**										
Prepared: 01-Nov-06 Analyzed: 02-Nov-06										
Selenium	121		mg/kg dry	1.55	129	BRL	93.8	70-130		
Silver	126		mg/kg dry	1.03	129	1.56	96.5	70-130		
Arsenic	126		mg/kg dry	1.55	129	4.53	94.2	70-130		
Cadmium	121		mg/kg dry	0.258	129	0.315	93.6	70-130		
Lead	127		mg/kg dry	0.773	129	10.9	90.0	70-130		
Chromium	144		mg/kg dry	0.516	129	15.1	99.9	70-130		
Barium	144		mg/kg dry	0.516	129	13.2	101	70-130		
Matrix Spike (6102382-MS2) **Source: SA53403-01**										
Prepared: 01-Nov-06 Analyzed: 02-Nov-06										
Selenium	129		mg/kg dry	1.62	135	BRL	95.6	70-130		
Silver	129		mg/kg dry	1.08	135	3.08	93.3	70-130		
Lead	171		mg/kg dry	0.809	135	45.2	93.2	70-130		
Chromium	146		mg/kg dry	0.539	135	9.73	101	70-130		
Cadmium	126		mg/kg dry	0.270	135	0.341	93.1	70-130		
Arsenic	139		mg/kg dry	1.62	135	13.5	93.0	70-130		
Barium	219		mg/kg dry	0.539	135	88.8	96.4	70-130		
Post Spike (6102382-PS1) **Source: SA53384-16**										
Prepared: 01-Nov-06 Analyzed: 02-Nov-06										
Chromium	129		mg/kg dry	0.526	132	15.1	86.3	85-115		
Barium	133		mg/kg dry	0.526	132	13.2	90.8	85-115		
Reference (6102382-SRM1)										
Prepared: 01-Nov-06 Analyzed: 02-Nov-06										
Silver	67.8		mg/kg wet	1.00	62.5		108	61.2-139		

Total Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6102382 - EPA 200 Series										
Reference (6102382-SRM1)										
Prepared: 01-Nov-06 Analyzed: 02-Nov-06										
Selenium	84.6		mg/kg wet	1.50	87.9		96.2	75.7-124.3		
Arsenic	123		mg/kg wet	1.50	131		93.9	79.8-120.2		
Cadmium	58.2		mg/kg wet	0.250	59.5		97.8	81.5-118.8		
Chromium	34.4		mg/kg wet	0.500	37.0		93.0	78.6-121.4		
Lead	77.2		mg/kg wet	0.750	84.4		91.5	80.7-119.3		
Barium	231		mg/kg wet	0.500	240		96.2	82-118.1		

General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6110149 - General Preparation										
Duplicate (6110149-DUP1) **Source: SA53440-04**										
Prepared & Analyzed: 02-Nov-06										
% Solids	95.4		%			94.9			0.525	20

This laboratory report is not valid without an authorized signature on the cover page.

* Reportable Detection Limit BRL = Below Reporting Limit

Notes and Definitions

BRL Below Reporting Limit - Analyte NOT DETECTED at or above the reporting limit

dry Sample results reported on a dry weight basis

NR Not Reported

RPD Relative Percent Difference

A plus sign (+) in the Method Reference column indicates the method is not accredited by NELAC.

Laboratory Control Sample (LCS): A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix.

Matrix Spike: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

Surrogate: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

Validated by:
Hanibal C. Tayeh, Ph.D.
Nicole Brown

SAS3403 / BM

SPECTRUM ANALYTICAL, INC.
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CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
- ☐ Standard TAT - 7 to 10 business days
- ☒ Rush TAT - Date Needed: 11/3/06
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: Jacques Whitford Co Inc
24 Albion Rd
Suite 220
Lincoln, RI 02865
Project Mgr.: Joe Unsworth

Invoice To: WH6015569 (W)
SAME
P.O. No.: 1009825.04 ~~RQN~~ Phase 100

Project No.: 1009825.04 / Phase 100
Site Name: Potter Hill Mill
Location: Westerly State: RI
Sampler(s): Joe Unsworth

1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid
7=CH_3OH 8= $NaHSO_4$ 9=_____ 10=_____

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1=_____ X2=_____ X3=_____

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Preservative	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic		RCRA 8 Metals							
S3403-01	SS-21	10/23/06		G	SO		X	1				X							
02	SS-22	10/23/06		G	SO		X	1				X							
03	SS-23	10/23/06		G	SO		X	1				X							

Containers: / Analyses:

QA Reporting Notes: (check if needed)
- ☐ Provide MA DEP MCP CAM Report
- ☐ Provide CT DPH RCP Report

QA/QC Reporting Level
☒ Standard ☐ No QC
☐ Other_____

State specific reporting standards:

☐ Fax results when available to (____) _____
☒ E-mail to Junswort@JacquesWhitford.com
EDD Format _____

Condition upon receipt: ☐ Iced ☐ Ambient ☒ °C 5.1

Relinquished by:	Received by:	Date:	Time:
[signature]	Bergeron	10/31/06	11:58 AM
Bergeron	[signature]	10/31/06	15 10

Ref.

CERTIFICATE OF ANALYSIS

Client Name: Jacques Whitford Co. Inc.
Client Project ID: Potter Hill Mill
Client Sample ID: SS-24
Date Sampled: 11/20/06 00:00
Percent Solids: 90

ESS Laboratory Work Order: 0611342
ESS Laboratory Sample ID: 0611342-01
Sample Matrix: Soil

3050B/6000/7000 Total Metals

Analyte	Results	Units	MRL	Method	DF	Analyst	Analyzed	I/V	F/V
Arsenic	ND	mg/kg dry	5.9	6010B	1	SVD	11/20/06	1.89	100

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: Jacques Whitford Co. Inc.
Client Project ID: Potter Hill Mill
Client Sample ID: SS-25
Date Sampled: 11/20/06 00:00
Percent Solids: 85

ESS Laboratory Work Order: 0611342
ESS Laboratory Sample ID: 0611342-02
Sample Matrix: Soil

3050B/6000/7000 Total Metals

Analyte	Results	Units	MRL	Method	DF	Analyst	Analyzed	I/V	F/V
Arsenic	**16.6**	mg/kg dry	6.0	6010B	1	SVD	11/20/06	1.97	100

CERTIFICATE OF ANALYSIS

Client Name: Jacques Whitford Co. Inc.
Client Project ID: Potter Hill Mill
Client Sample ID: SS-26
Date Sampled: 11/20/06 00:00
Percent Solids: 84

ESS Laboratory Work Order: 0611342
ESS Laboratory Sample ID: 0611342-03
Sample Matrix: Soil

3050B/6000/7000 Total Metals

Analyte	Results	Units	MRL	Method	DF	Analyst	Analyzed	I/V	F/V
Arsenic	ND	mg/kg dry	6.2	6010B	1	SVD	11/20/06	1.91	100

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

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Page 1 of 1

Turn Time 2 days ___ Standard Other ___
If faster than 5 days, prior approval by laboratory is required # ___

State where samples were collected from:
MA (RI) CT NH NJ NY ME Other ___

Is this project for any of the following:
MA-MCP* Navy USACE Other ___

Reporting Limits: RIDEM Residential

ESS LAB PROJECT ID: 061342

Electronic Deliverable: X Yes ___ No Format pdf

Co. Name	Project #	Project Name (20 Char. or less)
Jacques Whitford Co.	1098825.02/100	Potter Hill Mill

Contact Person	Address
Joe Unsworth	24 Albion Rd.

City	State	Zip	PO#
Lincoln	RI	02865	1098825.02/100

Telephone #	Fax #	Email Address
401-312-8005	401-312-8010	junsworth@jacqueswhitford

ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Number of Containers	Type of Containers	8260 624 524.2	8021 MTBE/BTEX 8015 GRO VPH	8100 TPH 8015 DRO 8082 PCB EPH No Targets	8081 Pesticides 608 Pesticides PCB	8270 625 PAH only	RCRA5 RCRA8 PP13 TAL23	TCLP8 MCP MCPw/Hg NBC7	Total Arsenic
1	11/20/06			X	S	SS-24	1	G								X
2	11/20/06			X	S	SS-25	1	G								X
3	11/20/06			X	S	SS-26	1	G								X

Container Type: P-Poly G-Glass S-Sterile V-VOA

Matrix: S-Soil SD-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present: √ Yes ___ No
Seals Intact: ___ Yes ___ No NA: ___
Cooler Temp: 5.3

Internal Use Only
[ ] Pickup
[ ] Technicians ___

Comments:

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
Michael Ryan	11/20/06 11:36AM	J. Davis	11-20-06 11:36				
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time

*MADEP requires that all additional calibrated analytes found during analysis be disclosed.

Please fax all changes to Chain of Custody in writing.

1 (White) Lab Copy 2 (Yellow) Client Receipt

Report Date:
12-Mar-08 17:19

☐ Final Report
☐ Re-Issued Report
☑ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

Jacques Whitford Company, Inc.
24 Albion Rd, Suite 220
Lincoln, RI 02865
Attn: Joe Unsworth

Project: Potter Hill Mill - Westerly, RI
Project 1009825.04/100

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SA70868-01	Sed 1	Soil	08-Nov-07 00:00	09-Nov-07 15:55
SA70868-02	Sed 2	Soil	08-Nov-07 00:00	09-Nov-07 15:55
SA70868-03	Sed 3	Soil	08-Nov-07 00:00	09-Nov-07 15:55
SA70868-04	Sed 4	Soil	08-Nov-07 00:00	09-Nov-07 15:55
SA70868-05	Sed 5	Soil	08-Nov-07 00:00	09-Nov-07 15:55
SA70868-06	Sed 6	Soil	08-Nov-07 00:00	09-Nov-07 15:55
SA70868-07	Sed 7	Soil	08-Nov-07 00:00	09-Nov-07 15:55
SA70868-08	Sed 8	Soil	08-Nov-07 00:00	09-Nov-07 15:55
SA70868-09	SS-27	Soil	08-Nov-07 00:00	09-Nov-07 15:55
SA70868-10	SS-28	Soil	08-Nov-07 00:00	09-Nov-07 15:55
SA70868-11	SS-29	Soil	08-Nov-07 00:00	09-Nov-07 15:55
SA70868-12	SS-30	Soil	08-Nov-07 00:00	09-Nov-07 15:55
SA70868-13	SS-31	Soil	08-Nov-07 00:00	09-Nov-07 15:55
SA70868-14	SS-32	Soil	08-Nov-07 00:00	09-Nov-07 15:55
SA70868-15	SS-33	Soil	08-Nov-07 00:00	09-Nov-07 15:55

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.
All applicable NELAC requirements have been met
Please note that this report contains 81 pages of analytical data plus Chain of Custody document(s).
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Maine # MA138
New Hampshire # 2538
New Jersey # MA011/MA012
New York # 11393/11840
Rhode Island # 98
USDA # S-51435
Vermont # VT-11393

Authorized by:

Hanibal C. Tayeh, Ph.D.
President/Laboratory Director

Technical Reviewer's Initial:

Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Spectrum is currently accredited for the specific method or analyte indicated. Please refer to our "Quality" web page at www.spectrum-analytical.com for a full listing of our current certifications and fields of accreditation. States in which Spectrum Analytical, Inc. holds NELAC certification are New York, New Hampshire, New Jersey and Florida. All analytical work for Volatile Organic and Air analysis are transferred to and conducted at our 830 Silver Street location (NY-11840, FL-E87936 and NJ-MA012).

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 1 SA70868-01	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds												
	VOC Extraction	Field extracted		N/A			1	VOC Soil Extraction	12-Nov-07	12-Nov-07	7111029	DG
Volatile Organic Compounds						Initial weight: 16.12 g						
Prepared by method SW846 5030 Soil (high level)												
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon	BRL	U	µg/kg dry	89.5	36.7	50	SW 846 8260B	15-Nov-07	16-Nov-07	7111331	adu
67-64-1	Acetone	BRL	U	µg/kg dry	895	784	50	"	"	"	"	"
107-13-1	Acrylonitrile	BRL	U	µg/kg dry	89.5	72.5	50	"	"	"	"	"
71-43-2	Benzene	BRL	U	µg/kg dry	89.5	9.8	50	"	"	"	"	"
108-86-1	Bromobenzene	BRL	U	µg/kg dry	89.5	14.3	50	"	"	"	"	"
74-97-5	Bromochloromethane	BRL	U	µg/kg dry	89.5	8.1	50	"	"	"	"	"
75-27-4	Bromodichloromethane	BRL	U	µg/kg dry	89.5	5.4	50	"	"	"	"	"
75-25-2	Bromoform	BRL	U	µg/kg dry	89.5	16.1	50	"	"	"	"	"
74-83-9	Bromomethane	BRL	U	µg/kg dry	179	17.9	50	"	"	"	"	"
78-93-3	2-Butanone (MEK)	BRL	U	µg/kg dry	895	63.5	50	"	"	"	"	"
104-51-8	n-Butylbenzene	BRL	U	µg/kg dry	89.5	8.1	50	"	"	"	"	"
135-98-8	sec-Butylbenzene	BRL	U	µg/kg dry	89.5	10.7	50	"	"	"	"	"
98-06-6	tert-Butylbenzene	BRL	U	µg/kg dry	89.5	8.1	50	"	"	"	"	"
75-15-0	Carbon disulfide	BRL	U	µg/kg dry	447	8.1	50	"	"	"	"	"
56-23-5	Carbon tetrachloride	BRL	U	µg/kg dry	89.5	8.9	50	"	"	"	"	"
108-90-7	Chlorobenzene	BRL	U	µg/kg dry	89.5	11.6	50	"	"	"	"	"
75-00-3	Chloroethane	BRL	U	µg/kg dry	179	19.7	50	"	"	"	"	"
67-66-3	Chloroform	BRL	U	µg/kg dry	89.5	7.2	50	"	"	"	"	"
74-87-3	Chloromethane	BRL	U	µg/kg dry	179	8.1	50	"	"	"	"	"
95-49-8	2-Chlorotoluene	BRL	U	µg/kg dry	89.5	8.9	50	"	"	"	"	"
106-43-4	4-Chlorotoluene	BRL	U	µg/kg dry	89.5	10.7	50	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloropropane	BRL	U	µg/kg dry	179	20.6	50	"	"	"	"	"
124-48-1	Dibromochloromethane	BRL	U	µg/kg dry	89.5	13.4	50	"	"	"	"	"
106-93-4	1,2-Dibromoethane (EDB)	BRL	U	µg/kg dry	89.5	6.3	50	"	"	"	"	"
74-95-3	Dibromomethane	BRL	U	µg/kg dry	89.5	8.9	50	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL	U	µg/kg dry	89.5	20.6	50	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL	U	µg/kg dry	89.5	8.9	50	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL	U	µg/kg dry	89.5	12.5	50	"	"	"	"	"
75-71-8	Dichlorodifluoromethane (Freon12)	BRL	U	µg/kg dry	179	11.6	50	"	"	"	"	"
75-34-3	1,1-Dichloroethane	BRL	U	µg/kg dry	89.5	6.3	50	"	"	"	"	"
107-06-2	1,2-Dichloroethane	BRL	U	µg/kg dry	89.5	8.1	50	"	"	"	"	"
75-35-4	1,1-Dichloroethene	BRL	U	µg/kg dry	89.5	7.2	50	"	"	"	"	"
156-59-2	cis-1,2-Dichloroethene	BRL	U	µg/kg dry	89.5	6.3	50	"	"	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL	U	µg/kg dry	89.5	8.9	50	"	"	"	"	"
78-87-5	1,2-Dichloropropane	BRL	U	µg/kg dry	89.5	8.1	50	"	"	"	"	"
142-28-9	1,3-Dichloropropane	BRL	U	µg/kg dry	89.5	8.1	50	"	"	"	"	"
594-20-7	2,2-Dichloropropane	BRL	U	µg/kg dry	89.5	66.2	50	"	"	"	"	"
563-58-6	1,1-Dichloropropene	BRL	U	µg/kg dry	89.5	11.6	50	"	"	"	"	"
10061-01-5	cis-1,3-Dichloropropene	BRL	U	µg/kg dry	89.5	10.7	50	"	"	"	"	"
10061-02-6	trans-1,3-Dichloropropene	BRL	U	µg/kg dry	89.5	8.1	50	"	"	"	"	"
100-41-4	Ethylbenzene	BRL	U	µg/kg dry	89.5	10.7	50	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL	U	µg/kg dry	89.5	14.3	50	"	"	"	"	"
591-78-6	2-Hexanone (MBK)	BRL	U	µg/kg dry	895	11.6	50	"	"	"	"	"
98-82-8	Isopropylbenzene	BRL	U	µg/kg dry	89.5	11.6	50	"	"	"	"	"
99-87-6	4-Isopropyltoluene	BRL	U	µg/kg dry	89.5	10.7	50	"	"	"	"	"
1634-04-4	Methyl tert-butyl ether	BRL	U	µg/kg dry	89.5	8.9	50	"	"	"	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	U	µg/kg dry	895	9.8	50	"	"	"	"	"
75-09-2	Methylene chloride	BRL	U	µg/kg dry	895	42.9	50	"	"	"	"	"
91-20-3	Naphthalene	BRL	U	µg/kg dry	89.5	16.1	50	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 1 SA70868-01	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds												
Volatile Organic Compounds							Initial weight: 16.12 g					
Prepared by method SW846 5030 Soil (high level)												
103-65-1	n-Propylbenzene	BRL	U	µg/kg dry	89.5	12.5	50	SW 846 8260B	15-Nov-07	16-Nov-07	7111331	adu
100-42-5	Styrene	BRL	U	µg/kg dry	89.5	82.3	50	"	"	"	"	"
630-20-6	1,1,1,2-Tetrachloroethane	BRL	U	µg/kg dry	89.5	15.2	50	"	"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	BRL	U	µg/kg dry	89.5	14.3	50	"	"	"	"	"
127-18-4	Tetrachloroethene	BRL	U	µg/kg dry	89.5	5.4	50	"	"	"	"	"
108-88-3	Toluene	BRL	U	µg/kg dry	89.5	14.3	50	"	"	"	"	"
87-61-6	1,2,3-Trichlorobenzene	BRL	U	µg/kg dry	89.5	11.6	50	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL	U	µg/kg dry	89.5	7.2	50	"	"	"	"	"
71-55-6	1,1,1-Trichloroethane	BRL	U	µg/kg dry	89.5	10.7	50	"	"	"	"	"
79-00-5	1,1,2-Trichloroethane	BRL	U	µg/kg dry	89.5	6.3	50	"	"	"	"	"
79-01-6	Trichloroethene	BRL	U	µg/kg dry	89.5	9.8	50	"	"	"	"	"
75-69-4	Trichlorofluoromethane (Freon 11)	BRL	U	µg/kg dry	89.5	14.3	50	"	"	"	"	"
96-18-4	1,2,3-Trichloropropane	BRL	U	µg/kg dry	89.5	8.9	50	"	"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	BRL	U	µg/kg dry	89.5	10.7	50	"	"	"	"	"
108-67-8	1,3,5-Trimethylbenzene	BRL	U	µg/kg dry	89.5	10.7	50	"	"	"	"	"
75-01-4	Vinyl chloride	BRL	U	µg/kg dry	89.5	10.7	50	"	"	"	"	"
1330-20-7	m,p-Xylene	BRL	U	µg/kg dry	179	20.6	50	"	"	"	"	"
95-47-6	o-Xylene	BRL	U	µg/kg dry	89.5	16.1	50	"	"	"	"	"
109-99-9	Tetrahydrofuran	BRL	U	µg/kg dry	895	36.7	50	"	"	"	"	"
60-29-7	Ethyl ether	BRL	U	µg/kg dry	89.5	16.1	50	"	"	"	"	"
994-05-8	Tert-amyl methyl ether	BRL	U	µg/kg dry	89.5	9.8	50	"	"	"	"	"
637-92-3	Ethyl tert-butyl ether	BRL	U	µg/kg dry	89.5	4.5	50	"	"	"	"	"
108-20-3	Di-isopropyl ether	BRL	U	µg/kg dry	89.5	8.9	50	"	"	"	"	"
75-65-0	Tert-Butanol / butyl alcohol	BRL	U	µg/kg dry	895	663	50	"	"	"	"	"
123-91-1	1,4-Dioxane	BRL	U	µg/kg dry	1790	436	50	"	"	"	"	"
110-57-6	trans-1,4-Dichloro-2-butene	BRL	U	µg/kg dry	447	224	50	"	"	"	"	"
64-17-5	Ethanol	BRL	U	µg/kg dry	44700	7970	50	"	"	"	"	"
Surrogate recoveries:												
460-00-4	*4-Bromofluorobenzene*	*101*		*70-130 %*				"	"	"	"	"
2037-26-5	*Toluene-d8*	*103*		*70-130 %*				"	"	"	"	"
17060-07-0	*1,2-Dichloroethane-d4*	*108*		*70-130 %*				"	"	"	"	"
1868-53-7	*Dibromofluoromethane*	*95*		*70-130 %*				"	"	"	"	"
Semivolatile Organic Compounds by GCMS												
Semivolatile Organic Compounds by SW846 8270C												
Prepared by method SW846 3550B												
83-32-9	Acenaphthene	1,850		µg/kg dry	1210	29.3	5	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
208-96-8	Acenaphthylene	222	J	µg/kg dry	1210	36.6	5	"	"	"	"	"
62-53-3	Aniline	BRL	U	µg/kg dry	1210	93.1	5	"	"	"	"	"
120-12-7	Anthracene	1,620		µg/kg dry	1210	36.6	5	"	"	"	"	"
1912-24-9	Atrazine	BRL	U	µg/kg dry	1210	31.9	5	"	"	"	"	"
103-33-3	Azobenzene/Diphenyldiazine	BRL	U	µg/kg dry	1210	31.9	5	"	"	"	"	"
92-87-5	Benzidine	BRL	U	µg/kg dry	1210	137	5	"	"	"	"	"
56-55-3	Benzo (a) anthracene	4,250		µg/kg dry	1210	78.0	5	"	"	"	"	"
50-32-8	Benzo (a) pyrene	3,630		µg/kg dry	1210	41.4	5	"	"	"	"	"
205-99-2	Benzo (b) fluoranthene	3,180		µg/kg dry	1210	161	5	"	"	"	"	"
191-24-2	Benzo (g,h,i) perylene	1,320		µg/kg dry	1210	34.1	5	"	"	"	"	"
207-08-9	Benzo (k) fluoranthene	2,890		µg/kg dry	1210	48.7	5	"	"	"	"	"
65-85-0	Benzoic acid	BRL	U	µg/kg dry	1210	22.0	5	"	"	"	"	"
100-51-6	Benzyl alcohol	BRL	U	µg/kg dry	1210	39.2	5	"	"	"	"	"
111-91-1	Bis(2-chloroethoxy)methane	BRL	U	µg/kg dry	1210	24.4	5	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 1 SA70868-01	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS												
Semivolatile Organic Compounds by SW846 8270C												
Prepared by method SW846 3550B												
111-44-4	Bis(2-chloroethyl)ether	BRL	U	µg/kg dry	1210	17.1	5	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
108-60-1	Bis(2-chloroisopropyl)ether	BRL	U	µg/kg dry	1210	22.0	5	"	"	"	"	"
117-81-7	Bis(2-ethylhexyl)phthalate	BRL	U	µg/kg dry	1210	232	5	"	"	"	"	"
101-55-3	4-Bromophenyl phenyl ether	BRL	U	µg/kg dry	1210	56.1	5	"	"	"	"	"
85-68-7	Butyl benzyl phthalate	BRL	U	µg/kg dry	1210	139	5	"	"	"	"	"
86-74-8	Carbazole	862	J	µg/kg dry	1210	44.0	5	"	"	"	"	"
59-50-7	4-Chloro-3-methylphenol	BRL	U	µg/kg dry	1210	44.0	5	"	"	"	"	"
106-47-8	4-Chloroaniline	BRL	U	µg/kg dry	1210	117	5	"	"	"	"	"
91-58-7	2-Chloronaphthalene	BRL	U	µg/kg dry	1210	17.2	5	"	"	"	"	"
95-57-8	2-Chlorophenol	BRL	U	µg/kg dry	1210	24.4	5	"	"	"	"	"
7005-72-3	4-Chlorophenyl phenyl ether	BRL	U	µg/kg dry	1210	14.7	5	"	"	"	"	"
218-01-9	Chrysene	4,030		µg/kg dry	1210	17.2	5	"	"	"	"	"
53-70-3	Dibenzo (a,h) anthracene	359	J	µg/kg dry	1210	19.4	5	"	"	"	"	"
132-64-9	Dibenzofuran	1,340		µg/kg dry	1210	14.7	5	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL	U	µg/kg dry	1210	0.586	5	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL	U	µg/kg dry	1210	51.3	5	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL	U	µg/kg dry	1210	53.9	5	"	"	"	"	"
91-94-1	3,3´-Dichlorobenzidine	BRL	U	µg/kg dry	1210	87.9	5	"	"	"	"	"
120-83-2	2,4-Dichlorophenol	BRL	U	µg/kg dry	1210	31.9	5	"	"	"	"	"
84-66-2	Diethyl phthalate	BRL	U	µg/kg dry	1210	39.2	5	"	"	"	"	"
131-11-3	Dimethyl phthalate	BRL	U	µg/kg dry	1210	34.1	5	"	"	"	"	"
105-67-9	2,4-Dimethylphenol	BRL	U	µg/kg dry	1210	56.1	5	"	"	"	"	"
84-74-2	Di-n-butyl phthalate	BRL	U	µg/kg dry	1210	31.9	5	"	"	"	"	"
534-52-1	4,6-Dinitro-2-methylphenol	BRL	U	µg/kg dry	1210	29.3	5	"	"	"	"	"
51-28-5	2,4-Dinitrophenol	BRL	U	µg/kg dry	1210	75.8	5	"	"	"	"	"
121-14-2	2,4-Dinitrotoluene	BRL	U	µg/kg dry	1210	51.3	5	"	"	"	"	"
606-20-2	2,6-Dinitrotoluene	BRL	U	µg/kg dry	1210	29.3	5	"	"	"	"	"
117-84-0	Di-n-octyl phthalate	BRL	U	µg/kg dry	1210	58.6	5	"	"	"	"	"
206-44-0	Fluoranthene	11,100		µg/kg dry	1210	29.3	5	"	"	"	"	"
86-73-7	Fluorene	1,610		µg/kg dry	1210	29.3	5	"	"	"	"	"
118-74-1	Hexachlorobenzene	BRL	U	µg/kg dry	1210	90.5	5	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL	U	µg/kg dry	1210	137	5	"	"	"	"	"
77-47-4	Hexachlorocyclopentadiene	BRL	U	µg/kg dry	1210	90.5	5	"	"	"	"	"
67-72-1	Hexachloroethane	BRL	U	µg/kg dry	1210	125	5	"	"	"	"	"
193-39-5	Indeno (1,2,3-cd) pyrene	1,720		µg/kg dry	1210	56.1	5	"	"	"	"	"
90-12-0	1-Methylnaphthalene	440	J	µg/kg dry	1210	0.403	5	"	"	"	"	"
78-59-1	Isophorone	BRL	U	µg/kg dry	1210	73.3	5	"	"	"	"	"
91-57-6	2-Methylnaphthalene	540	J	µg/kg dry	1210	26.7	5	"	"	"	"	"
95-48-7	2-Methylphenol	BRL	U	µg/kg dry	1210	51.3	5	"	"	"	"	"
108-39-4, 106-44-5	3,4-Methylphenol	BRL	U	µg/kg dry	1210	29.3	5	"	"	"	"	"
91-20-3	Naphthalene	1,400		µg/kg dry	1210	46.5	5	"	"	"	"	"
88-74-4	2-Nitroaniline	BRL	U	µg/kg dry	1210	14.7	5	"	"	"	"	"
99-09-2	3-Nitroaniline	BRL	U	µg/kg dry	1210	41.4	5	"	"	"	"	"
100-01-6	4-Nitroaniline	BRL	U	µg/kg dry	4840	46.5	5	"	"	"	"	"
98-95-3	Nitrobenzene	BRL	U	µg/kg dry	1210	44.0	5	"	"	"	"	"
88-75-5	2-Nitrophenol	BRL	U	µg/kg dry	1210	56.1	5	"	"	"	"	"
100-02-7	4-Nitrophenol	BRL	U	µg/kg dry	4840	63.4	5	"	"	"	"	"
62-75-9	N-Nitrosodimethylamine	BRL	U	µg/kg dry	1210	26.9	5	"	"	"	"	"
621-64-7	N-Nitrosodi-n-propylamine	BRL	U	µg/kg dry	1210	147	5	"	"	"	"	"
86-30-6	N-Nitrosodiphenylamine	BRL	U	µg/kg dry	1210	46.5	5	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 1 SA70868-01	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS												
Semivolatile Organic Compounds by SW846 8270C												
Prepared by method SW846 3550B												
87-86-5	Pentachlorophenol	BRL	U	µg/kg dry	1210	78.0	5	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
85-01-8	Phenanthrene	10,500		µg/kg dry	1210	56.1	5	"	"	"	"	"
108-95-2	Phenol	BRL	U	µg/kg dry	1210	24.4	5	"	"	"	"	"
129-00-0	Pyrene	8,760		µg/kg dry	1210	85.7	5	"	"	"	"	"
110-86-1	Pyridine	BRL	U	µg/kg dry	1210	24.4	5	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL	U	µg/kg dry	1210	17.1	5	"	"	"	"	"
95-95-4	2,4,5-Trichlorophenol	BRL	U	µg/kg dry	1210	24.4	5	"	"	"	"	"
88-06-2	2,4,6-Trichlorophenol	BRL	U	µg/kg dry	1210	24.4	5	"	"	"	"	"
82-68-8	Pentachloronitrobenzene	BRL	U	µg/kg dry	1210	604	5	"	"	"	"	"
95-94-3	1,2,4,5-Tetrachlorobenzene	BRL	U	µg/kg dry	1210	604	5	"	"	"	"	"
Surrogate recoveries:												
321-60-8	*2-Fluorobiphenyl*	*50*		*30-130 %*				"	"	"	"	"
367-12-4	*2-Fluorophenol*	*44*		*15-110 %*				"	"	"	"	"
4165-60-0	*Nitrobenzene-d5*	*42*		*30-130 %*				"	"	"	"	"
4165-62-2	*Phenol-d5*	*36*		*15-110 %*				"	"	"	"	"
1718-51-0	*Terphenyl-dl4*	*53*		*30-130 %*				"	"	"	"	"
118-79-6	*2,4,6-Tribromophenol*	*46*		*15-110 %*				"	"	"	"	"
Total Metals by EPA 6000/7000 Series Methods												
7439-97-6	Mercury	2.23		mg/kg dry	0.0395	0.0094	1	SW846 7471A	20-Nov-07	21-Nov-07	7111615	CRM
Total Metals by EPA 200 Series Methods												
7440-22-4	Silver	BRL	U	mg/kg dry	2.11	0.492	1	EPA 200.7	16-Nov-07	20-Nov-07	7111328	SA
7440-38-2	Arsenic	8.68		mg/kg dry	2.11	0.323	1	"	"	"	"	"
7440-39-3	Barium	67.5		mg/kg dry	1.41	0.236	1	"	"	"	"	"
7440-41-7	Beryllium	0.773		mg/kg dry	0.703	0.156	1	"	"	"	"	"
7440-43-9	Cadmium	1.15		mg/kg dry	0.703	0.0239	1	"	"	"	"	"
7440-47-3	Chromium	126		mg/kg dry	1.41	0.406	1	"	"	"	"	"
7440-50-8	Copper	1,410		mg/kg dry	1.41	0.273	1	"	"	"	"	"
7439-96-5	Manganese	86.6		mg/kg dry	1.41	0.394	1	"	"	"	"	"
7440-02-0	Nickel	9.72		mg/kg dry	1.41	0.138	1	"	"	"	"	"
7439-92-1	Lead	1,050		mg/kg dry	2.11	0.219	1	"	"	"	"	"
7440-36-0	Antimony	4.67		mg/kg dry	4.22	0.513	1	"	"	"	"	"
7782-49-2	Selenium	0.618	J	mg/kg dry	2.11	0.454	1	"	"	"	"	"
7440-28-0	Thallium	BRL	U	mg/kg dry	4.22	0.659	1	"	"	"	"	"
7440-62-2	Vanadium	16.7		mg/kg dry	2.11	1.04	1	"	"	"	"	"
7440-66-6	Zinc	261		mg/kg dry	1.41	0.513	1	"	"	"	"	"
General Chemistry Parameters												
	% Solids	69.2		%			1	SM2540 G Mod.	16-Nov-07	16-Nov-07	7111396	DG

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 2 SA70868-02	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds												
	VOC Extraction	Field extracted		N/A			1	VOC Soil Extraction	12-Nov-07	12-Nov-07	7111029	DG
Volatile Organic Compounds						Initial weight: 19.59 g						
Prepared by method SW846 5030 Soil (high level)												
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon	BRL	U	µg/kg dry	84.5	34.6	50	SW 846 8260B	15-Nov-07	16-Nov-07	7111331	adu
67-64-1	Acetone	BRL	U	µg/kg dry	845	741	50	"	"	"	"	"
107-13-1	Acrylonitrile	BRL	U	µg/kg dry	84.5	68.4	50	"	"	"	"	"
71-43-2	Benzene	BRL	U	µg/kg dry	84.5	9.3	50	"	"	"	"	"
108-86-1	Bromobenzene	BRL	U	µg/kg dry	84.5	13.5	50	"	"	"	"	"
74-97-5	Bromochloromethane	BRL	U	µg/kg dry	84.5	7.6	50	"	"	"	"	"
75-27-4	Bromodichloromethane	BRL	U	µg/kg dry	84.5	5.1	50	"	"	"	"	"
75-25-2	Bromoform	BRL	U	µg/kg dry	84.5	15.2	50	"	"	"	"	"
74-83-9	Bromomethane	BRL	U	µg/kg dry	169	16.9	50	"	"	"	"	"
78-93-3	2-Butanone (MEK)	BRL	U	µg/kg dry	845	60.0	50	"	"	"	"	"
104-51-8	n-Butylbenzene	BRL	U	µg/kg dry	84.5	7.6	50	"	"	"	"	"
135-98-8	sec-Butylbenzene	BRL	U	µg/kg dry	84.5	10.1	50	"	"	"	"	"
98-06-6	tert-Butylbenzene	BRL	U	µg/kg dry	84.5	7.6	50	"	"	"	"	"
75-15-0	Carbon disulfide	BRL	U	µg/kg dry	422	7.6	50	"	"	"	"	"
56-23-5	Carbon tetrachloride	BRL	U	µg/kg dry	84.5	8.4	50	"	"	"	"	"
108-90-7	Chlorobenzene	BRL	U	µg/kg dry	84.5	11.0	50	"	"	"	"	"
75-00-3	Chloroethane	BRL	U	µg/kg dry	169	18.6	50	"	"	"	"	"
67-66-3	Chloroform	BRL	U	µg/kg dry	84.5	6.8	50	"	"	"	"	"
74-87-3	Chloromethane	BRL	U	µg/kg dry	169	7.6	50	"	"	"	"	"
95-49-8	2-Chlorotoluene	BRL	U	µg/kg dry	84.5	8.4	50	"	"	"	"	"
106-43-4	4-Chlorotoluene	BRL	U	µg/kg dry	84.5	10.1	50	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloropropane	BRL	U	µg/kg dry	169	19.4	50	"	"	"	"	"
124-48-1	Dibromochloromethane	BRL	U	µg/kg dry	84.5	12.7	50	"	"	"	"	"
106-93-4	1,2-Dibromoethane (EDB)	BRL	U	µg/kg dry	84.5	5.9	50	"	"	"	"	"
74-95-3	Dibromomethane	BRL	U	µg/kg dry	84.5	8.4	50	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL	U	µg/kg dry	84.5	19.4	50	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	74.3	J	µg/kg dry	84.5	8.4	50	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	111		µg/kg dry	84.5	11.8	50	"	"	"	"	"
75-71-8	Dichlorodifluoromethane (Freon12)	BRL	U	µg/kg dry	169	11.0	50	"	"	"	"	"
75-34-3	1,1-Dichloroethane	BRL	U	µg/kg dry	84.5	5.9	50	"	"	"	"	"
107-06-2	1,2-Dichloroethane	BRL	U	µg/kg dry	84.5	7.6	50	"	"	"	"	"
75-35-4	1,1-Dichloroethene	BRL	U	µg/kg dry	84.5	6.8	50	"	"	"	"	"
156-59-2	cis-1,2-Dichloroethene	BRL	U	µg/kg dry	84.5	5.9	50	"	"	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL	U	µg/kg dry	84.5	8.4	50	"	"	"	"	"
78-87-5	1,2-Dichloropropane	BRL	U	µg/kg dry	84.5	7.6	50	"	"	"	"	"
142-28-9	1,3-Dichloropropane	BRL	U	µg/kg dry	84.5	7.6	50	"	"	"	"	"
594-20-7	2,2-Dichloropropane	BRL	U	µg/kg dry	84.5	62.5	50	"	"	"	"	"
563-58-6	1,1-Dichloropropene	BRL	U	µg/kg dry	84.5	11.0	50	"	"	"	"	"
10061-01-5	cis-1,3-Dichloropropene	BRL	U	µg/kg dry	84.5	10.1	50	"	"	"	"	"
10061-02-6	trans-1,3-Dichloropropene	BRL	U	µg/kg dry	84.5	7.6	50	"	"	"	"	"
100-41-4	Ethylbenzene	BRL	U	µg/kg dry	84.5	10.1	50	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL	U	µg/kg dry	84.5	13.5	50	"	"	"	"	"
591-78-6	2-Hexanone (MBK)	BRL	U	µg/kg dry	845	11.0	50	"	"	"	"	"
98-82-8	Isopropylbenzene	BRL	U	µg/kg dry	84.5	11.0	50	"	"	"	"	"
99-87-6	4-Isopropyltoluene	BRL	U	µg/kg dry	84.5	10.1	50	"	"	"	"	"
1634-04-4	Methyl tert-butyl ether	BRL	U	µg/kg dry	84.5	8.4	50	"	"	"	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	U	µg/kg dry	845	9.3	50	"	"	"	"	"
75-09-2	Methylene chloride	BRL	U	µg/kg dry	845	40.5	50	"	"	"	"	"
91-20-3	Naphthalene	BRL	U	µg/kg dry	84.5	15.2	50	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 2 SA70868-02	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds												
Volatile Organic Compounds							Initial weight: 19.59 g					
Prepared by method SW846 5030 Soil (high level)												
103-65-1	n-Propylbenzene	BRL	U	µg/kg dry	84.5	11.8	50	SW 846 8260B	15-Nov-07	16-Nov-07	7111331	adu
100-42-5	Styrene	BRL	U	µg/kg dry	84.5	77.7	50	"	"	"	"	"
630-20-6	1,1,1,2-Tetrachloroethane	BRL	U	µg/kg dry	84.5	14.4	50	"	"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	BRL	U	µg/kg dry	84.5	13.5	50	"	"	"	"	"
127-18-4	Tetrachloroethene	BRL	U	µg/kg dry	84.5	5.1	50	"	"	"	"	"
108-88-3	Toluene	BRL	U	µg/kg dry	84.5	13.5	50	"	"	"	"	"
87-61-6	1,2,3-Trichlorobenzene	BRL	U	µg/kg dry	84.5	11.0	50	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL	U	µg/kg dry	84.5	6.8	50	"	"	"	"	"
71-55-6	1,1,1-Trichloroethane	BRL	U	µg/kg dry	84.5	10.1	50	"	"	"	"	"
79-00-5	1,1,2-Trichloroethane	BRL	U	µg/kg dry	84.5	5.9	50	"	"	"	"	"
79-01-6	Trichloroethene	BRL	U	µg/kg dry	84.5	9.3	50	"	"	"	"	"
75-69-4	Trichlorofluoromethane (Freon 11)	BRL	U	µg/kg dry	84.5	13.5	50	"	"	"	"	"
96-18-4	1,2,3-Trichloropropane	BRL	U	µg/kg dry	84.5	8.4	50	"	"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	BRL	U	µg/kg dry	84.5	10.1	50	"	"	"	"	"
108-67-8	1,3,5-Trimethylbenzene	BRL	U	µg/kg dry	84.5	10.1	50	"	"	"	"	"
75-01-4	Vinyl chloride	BRL	U	µg/kg dry	84.5	10.1	50	"	"	"	"	"
1330-20-7	m,p-Xylene	BRL	U	µg/kg dry	169	19.4	50	"	"	"	"	"
95-47-6	o-Xylene	BRL	U	µg/kg dry	84.5	15.2	50	"	"	"	"	"
109-99-9	Tetrahydrofuran	BRL	U	µg/kg dry	845	34.6	50	"	"	"	"	"
60-29-7	Ethyl ether	BRL	U	µg/kg dry	84.5	15.2	50	"	"	"	"	"
994-05-8	Tert-amyl methyl ether	BRL	U	µg/kg dry	84.5	9.3	50	"	"	"	"	"
637-92-3	Ethyl tert-butyl ether	BRL	U	µg/kg dry	84.5	4.2	50	"	"	"	"	"
108-20-3	Di-isopropyl ether	BRL	U	µg/kg dry	84.5	8.4	50	"	"	"	"	"
75-65-0	Tert-Butanol / butyl alcohol	BRL	U	µg/kg dry	845	626	50	"	"	"	"	"
123-91-1	1,4-Dioxane	BRL	U	µg/kg dry	1690	411	50	"	"	"	"	"
110-57-6	trans-1,4-Dichloro-2-butene	BRL	U	µg/kg dry	422	211	50	"	"	"	"	"
64-17-5	Ethanol	BRL	U	µg/kg dry	42200	7530	50	"	"	"	"	"
Surrogate recoveries:												
460-00-4	*4-Bromofluorobenzene*	*106*		*70-130 %*				"	"	"	"	"
2037-26-5	*Toluene-d8*	*104*		*70-130 %*				"	"	"	"	"
17060-07-0	*1,2-Dichloroethane-d4*	*111*		*70-130 %*				"	"	"	"	"
1868-53-7	*Dibromofluoromethane*	*97*		*70-130 %*				"	"	"	"	"
Semivolatile Organic Compounds by GCMS												
Semivolatile Organic Compounds by SW846 8270C												
Prepared by method SW846 3550B												
83-32-9	Acenaphthene	BRL	U	µg/kg dry	258	6.25	1	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
208-96-8	Acenaphthylene	BRL	U	µg/kg dry	258	7.81	1	"	"	"	"	"
62-53-3	Aniline	BRL	U	µg/kg dry	258	19.8	1	"	"	"	"	"
120-12-7	Anthracene	BRL	U	µg/kg dry	258	7.81	1	"	"	"	"	"
1912-24-9	Atrazine	BRL	U	µg/kg dry	258	6.80	1	"	"	"	"	"
103-33-3	Azobenzene/Diphenyldiazine	BRL	U	µg/kg dry	258	6.80	1	"	"	"	"	"
92-87-5	Benzidine	BRL	U	µg/kg dry	258	29.2	1	"	"	"	"	"
56-55-3	Benzo (a) anthracene	BRL	U	µg/kg dry	258	16.6	1	"	"	"	"	"
50-32-8	Benzo (a) pyrene	BRL	U	µg/kg dry	258	8.83	1	"	"	"	"	"
205-99-2	Benzo (b) fluoranthene	BRL	U	µg/kg dry	258	34.4	1	"	"	"	"	"
191-24-2	Benzo (g,h,i) perylene	BRL	U	µg/kg dry	258	7.26	1	"	"	"	"	"
207-08-9	Benzo (k) fluoranthene	BRL	U	µg/kg dry	258	10.4	1	"	"	"	"	"
65-85-0	Benzoic acid	BRL	U	µg/kg dry	258	4.69	1	"	"	"	"	"
100-51-6	Benzyl alcohol	BRL	U	µg/kg dry	258	8.36	1	"	"	"	"	"
111-91-1	Bis(2-chloroethoxy)methane	BRL	U	µg/kg dry	258	5.21	1	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 2 SA70868-02	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS												
Semivolatile Organic Compounds by SW846 8270C												
Prepared by method SW846 3550B												
111-44-4	Bis(2-chloroethyl)ether	BRL	U	µg/kg dry	258	3.65	1	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
108-60-1	Bis(2-chloroisopropyl)ether	BRL	U	µg/kg dry	258	4.69	1	"	"	"	"	"
117-81-7	Bis(2-ethylhexyl)phthalate	BRL	U	µg/kg dry	258	49.5	1	"	"	"	"	"
101-55-3	4-Bromophenyl phenyl ether	BRL	U	µg/kg dry	258	12.0	1	"	"	"	"	"
85-68-7	Butyl benzyl phthalate	BRL	U	µg/kg dry	258	29.7	1	"	"	"	"	"
86-74-8	Carbazole	BRL	U	µg/kg dry	258	9.37	1	"	"	"	"	"
59-50-7	4-Chloro-3-methylphenol	BRL	U	µg/kg dry	258	9.37	1	"	"	"	"	"
106-47-8	4-Chloroaniline	BRL	U	µg/kg dry	258	25.0	1	"	"	"	"	"
91-58-7	2-Chloronaphthalene	BRL	U	µg/kg dry	258	3.67	1	"	"	"	"	"
95-57-8	2-Chlorophenol	BRL	U	µg/kg dry	258	5.21	1	"	"	"	"	"
7005-72-3	4-Chlorophenyl phenyl ether	BRL	U	µg/kg dry	258	3.12	1	"	"	"	"	"
218-01-9	Chrysene	BRL	U	µg/kg dry	258	3.67	1	"	"	"	"	"
53-70-3	Dibenzo (a,h) anthracene	BRL	U	µg/kg dry	258	4.14	1	"	"	"	"	"
132-64-9	Dibenzofuran	BRL	U	µg/kg dry	258	3.12	1	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL	U	µg/kg dry	258	0.125	1	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL	U	µg/kg dry	258	10.9	1	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL	U	µg/kg dry	258	11.5	1	"	"	"	"	"
91-94-1	3,3'-Dichlorobenzidine	BRL	U	µg/kg dry	258	18.7	1	"	"	"	"	"
120-83-2	2,4-Dichlorophenol	BRL	U	µg/kg dry	258	6.80	1	"	"	"	"	"
84-66-2	Diethyl phthalate	BRL	U	µg/kg dry	258	8.36	1	"	"	"	"	"
131-11-3	Dimethyl phthalate	BRL	U	µg/kg dry	258	7.26	1	"	"	"	"	"
105-67-9	2,4-Dimethylphenol	BRL	U	µg/kg dry	258	12.0	1	"	"	"	"	"
84-74-2	Di-n-butyl phthalate	BRL	U	µg/kg dry	258	6.80	1	"	"	"	"	"
534-52-1	4,6-Dinitro-2-methylphenol	BRL	U	µg/kg dry	258	6.25	1	"	"	"	"	"
51-28-5	2,4-Dinitrophenol	BRL	U	µg/kg dry	258	16.2	1	"	"	"	"	"
121-14-2	2,4-Dinitrotoluene	BRL	U	µg/kg dry	258	10.9	1	"	"	"	"	"
606-20-2	2,6-Dinitrotoluene	BRL	U	µg/kg dry	258	6.25	1	"	"	"	"	"
117-84-0	Di-n-octyl phthalate	BRL	U	µg/kg dry	258	12.5	1	"	"	"	"	"
206-44-0	Fluoranthene	40.6	J	µg/kg dry	258	6.25	1	"	"	"	"	"
86-73-7	Fluorene	BRL	U	µg/kg dry	258	6.25	1	"	"	"	"	"
118-74-1	Hexachlorobenzene	BRL	U	µg/kg dry	258	19.3	1	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL	U	µg/kg dry	258	29.2	1	"	"	"	"	"
77-47-4	Hexachlorocyclopentadiene	BRL	U	µg/kg dry	258	19.3	1	"	"	"	"	"
67-72-1	Hexachloroethane	BRL	U	µg/kg dry	258	26.6	1	"	"	"	"	"
193-39-5	Indeno (1,2,3-cd) pyrene	BRL	U	µg/kg dry	258	12.0	1	"	"	"	"	"
90-12-0	1-Methylnaphthalene	BRL	U	µg/kg dry	258	0.0859	1	"	"	"	"	"
78-59-1	Isophorone	BRL	U	µg/kg dry	258	15.6	1	"	"	"	"	"
91-57-6	2-Methylnaphthalene	BRL	U	µg/kg dry	258	5.70	1	"	"	"	"	"
95-48-7	2-Methylphenol	BRL	U	µg/kg dry	258	10.9	1	"	"	"	"	"
108-39-4, 106-44-5	3,4-Methylphenol	BRL	U	µg/kg dry	258	6.25	1	"	"	"	"	"
91-20-3	Naphthalene	BRL	U	µg/kg dry	258	9.92	1	"	"	"	"	"
88-74-4	2-Nitroaniline	BRL	U	µg/kg dry	258	3.12	1	"	"	"	"	"
99-09-2	3-Nitroaniline	BRL	U	µg/kg dry	258	8.83	1	"	"	"	"	"
100-01-6	4-Nitroaniline	BRL	U	µg/kg dry	1030	9.92	1	"	"	"	"	"
98-95-3	Nitrobenzene	BRL	U	µg/kg dry	258	9.37	1	"	"	"	"	"
88-75-5	2-Nitrophenol	BRL	U	µg/kg dry	258	12.0	1	"	"	"	"	"
100-02-7	4-Nitrophenol	BRL	U	µg/kg dry	1030	13.5	1	"	"	"	"	"
62-75-9	N-Nitrosodimethylamine	BRL	U	µg/kg dry	258	5.73	1	"	"	"	"	"
621-64-7	N-Nitrosodi-n-propylamine	BRL	U	µg/kg dry	258	31.2	1	"	"	"	"	"
86-30-6	N-Nitrosodiphenylamine	BRL	U	µg/kg dry	258	9.92	1	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 2 SA70868-02	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS												
Semivolatile Organic Compounds by SW846 8270C												
Prepared by method SW846 3550B												
87-86-5	Pentachlorophenol	BRL	U	µg/kg dry	258	16.6	1	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
85-01-8	Phenanthrene	BRL	U	µg/kg dry	258	12.0	1	"	"	"	"	"
108-95-2	Phenol	BRL	U	µg/kg dry	258	5.21	1	"	"	"	"	"
129-00-0	Pyrene	35.9	J	µg/kg dry	258	18.3	1	"	"	"	"	"
110-86-1	Pyridine	BRL	U	µg/kg dry	258	5.21	1	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL	U	µg/kg dry	258	3.65	1	"	"	"	"	"
95-95-4	2,4,5-Trichlorophenol	BRL	U	µg/kg dry	258	5.21	1	"	"	"	"	"
88-06-2	2,4,6-Trichlorophenol	BRL	U	µg/kg dry	258	5.21	1	"	"	"	"	"
82-68-8	Pentachloronitrobenzene	BRL	U	µg/kg dry	258	129	1	"	"	"	"	"
95-94-3	1,2,4,5-Tetrachlorobenzene	BRL	U	µg/kg dry	258	129	1	"	"	"	"	"
Surrogate recoveries:												
321-60-8	*2-Fluorobiphenyl*	*48*		*30-130 %*				"	"	"	"	"
367-12-4	*2-Fluorophenol*	*47*		*15-110 %*				"	"	"	"	"
4165-60-0	*Nitrobenzene-d5*	*45*		*30-130 %*				"	"	"	"	"
4165-62-2	*Phenol-d5*	*39*		*15-110 %*				"	"	"	"	"
1718-51-0	*Terphenyl-dl4*	*49*		*30-130 %*				"	"	"	"	"
118-79-6	*2,4,6-Tribromophenol*	*51*		*15-110 %*				"	"	"	"	"
Total Metals by EPA 6000/7000 Series Methods												
7439-97-6	Mercury	3.06		mg/kg dry	0.0429	0.0102	1	SW846 7471A	20-Nov-07	21-Nov-07	7111615	CRM
Total Metals by EPA 200 Series Methods												
7440-22-4	Silver	BRL	U	mg/kg dry	2.09	0.488	1	EPA 200.7	16-Nov-07	20-Nov-07	7111328	SA
7440-38-2	Arsenic	6.10		mg/kg dry	2.09	0.321	1	"	"	"	"	"
7440-39-3	Barium	59.8		mg/kg dry	1.39	0.234	1	"	"	"	"	"
7440-41-7	Beryllium	0.376	J	mg/kg dry	0.697	0.155	1	"	"	"	"	"
7440-43-9	Cadmium	0.362	J	mg/kg dry	0.697	0.0237	1	"	"	"	"	"
7440-47-3	Chromium	78.5		mg/kg dry	1.39	0.403	1	"	"	"	"	"
7440-50-8	Copper	34.4		mg/kg dry	1.39	0.270	1	"	"	"	"	"
7439-96-5	Manganese	107		mg/kg dry	1.39	0.390	1	"	"	"	"	"
7440-02-0	Nickel	6.48		mg/kg dry	1.39	0.137	1	"	"	"	"	"
7439-92-1	Lead	28.8		mg/kg dry	2.09	0.217	1	"	"	"	"	"
7440-36-0	Antimony	BRL	U	mg/kg dry	4.18	0.509	1	"	"	"	"	"
7782-49-2	Selenium	0.481	J	mg/kg dry	2.09	0.450	1	"	"	"	"	"
7440-28-0	Thallium	0.815	J	mg/kg dry	4.18	0.654	1	"	"	"	"	"
7440-62-2	Vanadium	18.9		mg/kg dry	2.09	1.03	1	"	"	"	"	"
7440-66-6	Zinc	44.3		mg/kg dry	1.39	0.509	1	"	"	"	"	"
General Chemistry Parameters												
	% Solids	65.7		%			1	SM2540 G Mod.	16-Nov-07	16-Nov-07	7111396	DG

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 3 SA70868-03	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds												
	VOC Extraction	Field extracted		N/A			1	VOC Soil Extraction	12-Nov-07	12-Nov-07	7111029	DG
Volatile Organic Compounds												
Prepared by method SW846 5030 Soil (high level)						Initial weight: 20.04 g						
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon	BRL	U	µg/kg dry	54.6	22.4	50	SW 846 8260B	15-Nov-07	16-Nov-07	7111331	adu
67-64-1	Acetone	BRL	U	µg/kg dry	546	479	50	"	"	"	"	"
107-13-1	Acrylonitrile	BRL	U	µg/kg dry	54.6	44.2	50	"	"	"	"	"
71-43-2	Benzene	BRL	U	µg/kg dry	54.6	6.0	50	"	"	"	"	"
108-86-1	Bromobenzene	BRL	U	µg/kg dry	54.6	8.7	50	"	"	"	"	"
74-97-5	Bromochloromethane	BRL	U	µg/kg dry	54.6	4.9	50	"	"	"	"	"
75-27-4	Bromodichloromethane	BRL	U	µg/kg dry	54.6	3.3	50	"	"	"	"	"
75-25-2	Bromoform	BRL	U	µg/kg dry	54.6	9.8	50	"	"	"	"	"
74-83-9	Bromomethane	BRL	U	µg/kg dry	109	10.9	50	"	"	"	"	"
78-93-3	2-Butanone (MEK)	BRL	U	µg/kg dry	546	38.7	50	"	"	"	"	"
104-51-8	n-Butylbenzene	BRL	U	µg/kg dry	54.6	4.9	50	"	"	"	"	"
135-98-8	sec-Butylbenzene	BRL	U	µg/kg dry	54.6	6.5	50	"	"	"	"	"
98-06-6	tert-Butylbenzene	BRL	U	µg/kg dry	54.6	4.9	50	"	"	"	"	"
75-15-0	Carbon disulfide	BRL	U	µg/kg dry	273	4.9	50	"	"	"	"	"
56-23-5	Carbon tetrachloride	BRL	U	µg/kg dry	54.6	5.5	50	"	"	"	"	"
108-90-7	Chlorobenzene	BRL	U	µg/kg dry	54.6	7.1	50	"	"	"	"	"
75-00-3	Chloroethane	BRL	U	µg/kg dry	109	12.0	50	"	"	"	"	"
67-66-3	Chloroform	BRL	U	µg/kg dry	54.6	4.4	50	"	"	"	"	"
74-87-3	Chloromethane	BRL	U	µg/kg dry	109	4.9	50	"	"	"	"	"
95-49-8	2-Chlorotoluene	BRL	U	µg/kg dry	54.6	5.5	50	"	"	"	"	"
106-43-4	4-Chlorotoluene	BRL	U	µg/kg dry	54.6	6.5	50	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloropropane	BRL	U	µg/kg dry	109	12.6	50	"	"	"	"	"
124-48-1	Dibromochloromethane	BRL	U	µg/kg dry	54.6	8.2	50	"	"	"	"	"
106-93-4	1,2-Dibromoethane (EDB)	BRL	U	µg/kg dry	54.6	3.8	50	"	"	"	"	"
74-95-3	Dibromomethane	BRL	U	µg/kg dry	54.6	5.5	50	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL	U	µg/kg dry	54.6	12.6	50	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL	U	µg/kg dry	54.6	5.5	50	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL	U	µg/kg dry	54.6	7.6	50	"	"	"	"	"
75-71-8	Dichlorodifluoromethane (Freon12)	BRL	U	µg/kg dry	109	7.1	50	"	"	"	"	"
75-34-3	1,1-Dichloroethane	BRL	U	µg/kg dry	54.6	3.8	50	"	"	"	"	"
107-06-2	1,2-Dichloroethane	BRL	U	µg/kg dry	54.6	4.9	50	"	"	"	"	"
75-35-4	1,1-Dichloroethene	BRL	U	µg/kg dry	54.6	4.4	50	"	"	"	"	"
156-59-2	cis-1,2-Dichloroethene	BRL	U	µg/kg dry	54.6	3.8	50	"	"	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL	U	µg/kg dry	54.6	5.5	50	"	"	"	"	"
78-87-5	1,2-Dichloropropane	BRL	U	µg/kg dry	54.6	4.9	50	"	"	"	"	"
142-28-9	1,3-Dichloropropane	BRL	U	µg/kg dry	54.6	4.9	50	"	"	"	"	"
594-20-7	2,2-Dichloropropane	BRL	U	µg/kg dry	54.6	40.4	50	"	"	"	"	"
563-58-6	1,1-Dichloropropene	BRL	U	µg/kg dry	54.6	7.1	50	"	"	"	"	"
10061-01-5	cis-1,3-Dichloropropene	BRL	U	µg/kg dry	54.6	6.5	50	"	"	"	"	"
10061-02-6	trans-1,3-Dichloropropene	BRL	U	µg/kg dry	54.6	4.9	50	"	"	"	"	"
100-41-4	Ethylbenzene	BRL	U	µg/kg dry	54.6	6.5	50	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL	U	µg/kg dry	54.6	8.7	50	"	"	"	"	"
591-78-6	2-Hexanone (MBK)	BRL	U	µg/kg dry	546	7.1	50	"	"	"	"	"
98-82-8	Isopropylbenzene	BRL	U	µg/kg dry	54.6	7.1	50	"	"	"	"	"
99-87-6	4-Isopropyltoluene	BRL	U	µg/kg dry	54.6	6.5	50	"	"	"	"	"
1634-04-4	Methyl tert-butyl ether	BRL	U	µg/kg dry	54.6	5.5	50	"	"	"	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	U	µg/kg dry	546	6.0	50	"	"	"	"	"
75-09-2	Methylene chloride	BRL	U	µg/kg dry	546	26.2	50	"	"	"	"	"
91-20-3	Naphthalene	BRL	U	µg/kg dry	54.6	9.8	50	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 3 SA70868-03	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds												
Volatile Organic Compounds							Initial weight: 20.04 g					
Prepared by method SW846 5030 Soil (high level)												
103-65-1	n-Propylbenzene	BRL	U	µg/kg dry	54.6	7.6	50	SW 846 8260B	15-Nov-07	16-Nov-07	7111331	adu
100-42-5	Styrene	BRL	U	µg/kg dry	54.6	50.2	50	"	"	"	"	"
630-20-6	1,1,1,2-Tetrachloroethane	BRL	U	µg/kg dry	54.6	9.3	50	"	"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	BRL	U	µg/kg dry	54.6	8.7	50	"	"	"	"	"
127-18-4	Tetrachloroethene	BRL	U	µg/kg dry	54.6	3.3	50	"	"	"	"	"
108-88-3	Toluene	BRL	U	µg/kg dry	54.6	8.7	50	"	"	"	"	"
87-61-6	1,2,3-Trichlorobenzene	BRL	U	µg/kg dry	54.6	7.1	50	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL	U	µg/kg dry	54.6	4.4	50	"	"	"	"	"
71-55-6	1,1,1-Trichloroethane	BRL	U	µg/kg dry	54.6	6.5	50	"	"	"	"	"
79-00-5	1,1,2-Trichloroethane	BRL	U	µg/kg dry	54.6	3.8	50	"	"	"	"	"
79-01-6	Trichloroethene	BRL	U	µg/kg dry	54.6	6.0	50	"	"	"	"	"
75-69-4	Trichlorofluoromethane (Freon 11)	BRL	U	µg/kg dry	54.6	8.7	50	"	"	"	"	"
96-18-4	1,2,3-Trichloropropane	BRL	U	µg/kg dry	54.6	5.5	50	"	"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	BRL	U	µg/kg dry	54.6	6.5	50	"	"	"	"	"
108-67-8	1,3,5-Trimethylbenzene	BRL	U	µg/kg dry	54.6	6.5	50	"	"	"	"	"
75-01-4	Vinyl chloride	BRL	U	µg/kg dry	54.6	6.5	50	"	"	"	"	"
1330-20-7	m,p-Xylene	BRL	U	µg/kg dry	109	12.6	50	"	"	"	"	"
95-47-6	o-Xylene	BRL	U	µg/kg dry	54.6	9.8	50	"	"	"	"	"
109-99-9	Tetrahydrofuran	BRL	U	µg/kg dry	546	22.4	50	"	"	"	"	"
60-29-7	Ethyl ether	BRL	U	µg/kg dry	54.6	9.8	50	"	"	"	"	"
994-05-8	Tert-amyl methyl ether	BRL	U	µg/kg dry	54.6	6.0	50	"	"	"	"	"
637-92-3	Ethyl tert-butyl ether	BRL	U	µg/kg dry	54.6	2.7	50	"	"	"	"	"
108-20-3	Di-isopropyl ether	BRL	U	µg/kg dry	54.6	5.5	50	"	"	"	"	"
75-65-0	Tert-Butanol / butyl alcohol	BRL	U	µg/kg dry	546	404	50	"	"	"	"	"
123-91-1	1,4-Dioxane	BRL	U	µg/kg dry	1090	266	50	"	"	"	"	"
110-57-6	trans-1,4-Dichloro-2-butene	BRL	U	µg/kg dry	273	136	50	"	"	"	"	"
64-17-5	Ethanol	BRL	U	µg/kg dry	27300	4860	50	"	"	"	"	"
Surrogate recoveries:												
460-00-4	*4-Bromofluorobenzene*	*102*		*70-130 %*				"	"	"	"	"
2037-26-5	*Toluene-d8*	*104*		*70-130 %*				"	"	"	"	"
17060-07-0	*1,2-Dichloroethane-d4*	*112*		*70-130 %*				"	"	"	"	"
1868-53-7	*Dibromofluoromethane*	*98*		*70-130 %*				"	"	"	"	"
Semivolatile Organic Compounds by GCMS												
Semivolatile Organic Compounds by SW846 8270C												
Prepared by method SW846 3550B												
83-32-9	Acenaphthene	BRL	U	µg/kg dry	201	4.88	1	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
208-96-8	Acenaphthylene	BRL	U	µg/kg dry	201	6.10	1	"	"	"	"	"
62-53-3	Aniline	BRL	U	µg/kg dry	201	15.5	1	"	"	"	"	"
120-12-7	Anthracene	BRL	U	µg/kg dry	201	6.10	1	"	"	"	"	"
1912-24-9	Atrazine	BRL	U	µg/kg dry	201	5.31	1	"	"	"	"	"
103-33-3	Azobenzene/Diphenyldiazine	BRL	U	µg/kg dry	201	5.31	1	"	"	"	"	"
92-87-5	Benzidine	BRL	U	µg/kg dry	201	22.8	1	"	"	"	"	"
56-55-3	Benzo (a) anthracene	BRL	U	µg/kg dry	201	13.0	1	"	"	"	"	"
50-32-8	Benzo (a) pyrene	BRL	U	µg/kg dry	201	6.90	1	"	"	"	"	"
205-99-2	Benzo (b) fluoranthene	BRL	U	µg/kg dry	201	26.9	1	"	"	"	"	"
191-24-2	Benzo (g,h,i) perylene	BRL	U	µg/kg dry	201	5.68	1	"	"	"	"	"
207-08-9	Benzo (k) fluoranthene	BRL	U	µg/kg dry	201	8.12	1	"	"	"	"	"
65-85-0	Benzoic acid	BRL	U	µg/kg dry	201	3.66	1	"	"	"	"	"
100-51-6	Benzyl alcohol	BRL	U	µg/kg dry	201	6.53	1	"	"	"	"	"
111-91-1	Bis(2-chloroethoxy)methane	BRL	U	µg/kg dry	201	4.07	1	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 3 SA70868-03	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS												
Semivolatile Organic Compounds by SW846 8270C												
Prepared by method SW846 3550B												
111-44-4	Bis(2-chloroethyl)ether	BRL	U	µg/kg dry	201	2.85	1	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
108-60-1	Bis(2-chloroisopropyl)ether	BRL	U	µg/kg dry	201	3.66	1	"	"	"	"	"
117-81-7	Bis(2-ethylhexyl)phthalate	BRL	U	µg/kg dry	201	38.7	1	"	"	"	"	"
101-55-3	4-Bromophenyl phenyl ether	BRL	U	µg/kg dry	201	9.34	1	"	"	"	"	"
85-68-7	Butyl benzyl phthalate	BRL	U	µg/kg dry	201	23.2	1	"	"	"	"	"
86-74-8	Carbazole	BRL	U	µg/kg dry	201	7.33	1	"	"	"	"	"
59-50-7	4-Chloro-3-methylphenol	BRL	U	µg/kg dry	201	7.33	1	"	"	"	"	"
106-47-8	4-Chloroaniline	BRL	U	µg/kg dry	201	19.5	1	"	"	"	"	"
91-58-7	2-Chloronaphthalene	BRL	U	µg/kg dry	201	2.87	1	"	"	"	"	"
95-57-8	2-Chlorophenol	BRL	U	µg/kg dry	201	4.07	1	"	"	"	"	"
7005-72-3	4-Chlorophenyl phenyl ether	BRL	U	µg/kg dry	201	2.44	1	"	"	"	"	"
218-01-9	Chrysene	BRL	U	µg/kg dry	201	2.87	1	"	"	"	"	"
53-70-3	Dibenzo (a,h) anthracene	BRL	U	µg/kg dry	201	3.24	1	"	"	"	"	"
132-64-9	Dibenzofuran	BRL	U	µg/kg dry	201	2.44	1	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL	U	µg/kg dry	201	0.0977	1	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL	U	µg/kg dry	201	8.55	1	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL	U	µg/kg dry	201	8.97	1	"	"	"	"	"
91-94-1	3,3´-Dichlorobenzidine	BRL	U	µg/kg dry	201	14.7	1	"	"	"	"	"
120-83-2	2,4-Dichlorophenol	BRL	U	µg/kg dry	201	5.31	1	"	"	"	"	"
84-66-2	Diethyl phthalate	BRL	U	µg/kg dry	201	6.53	1	"	"	"	"	"
131-11-3	Dimethyl phthalate	BRL	U	µg/kg dry	201	5.68	1	"	"	"	"	"
105-67-9	2,4-Dimethylphenol	BRL	U	µg/kg dry	201	9.34	1	"	"	"	"	"
84-74-2	Di-n-butyl phthalate	BRL	U	µg/kg dry	201	5.31	1	"	"	"	"	"
534-52-1	4,6-Dinitro-2-methylphenol	BRL	U	µg/kg dry	201	4.88	1	"	"	"	"	"
51-28-5	2,4-Dinitrophenol	BRL	U	µg/kg dry	201	12.6	1	"	"	"	"	"
121-14-2	2,4-Dinitrotoluene	BRL	U	µg/kg dry	201	8.55	1	"	"	"	"	"
606-20-2	2,6-Dinitrotoluene	BRL	U	µg/kg dry	201	4.88	1	"	"	"	"	"
117-84-0	Di-n-octyl phthalate	BRL	U	µg/kg dry	201	9.77	1	"	"	"	"	"
206-44-0	Fluoranthene	BRL	U	µg/kg dry	201	4.88	1	"	"	"	"	"
86-73-7	Fluorene	BRL	U	µg/kg dry	201	4.88	1	"	"	"	"	"
118-74-1	Hexachlorobenzene	BRL	U	µg/kg dry	201	15.1	1	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL	U	µg/kg dry	201	22.8	1	"	"	"	"	"
77-47-4	Hexachlorocyclopentadiene	BRL	U	µg/kg dry	201	15.1	1	"	"	"	"	"
67-72-1	Hexachloroethane	BRL	U	µg/kg dry	201	20.8	1	"	"	"	"	"
193-39-5	Indeno (1,2,3-cd) pyrene	BRL	U	µg/kg dry	201	9.34	1	"	"	"	"	"
90-12-0	1-Methylnaphthalene	BRL	U	µg/kg dry	201	0.0671	1	"	"	"	"	"
78-59-1	Isophorone	BRL	U	µg/kg dry	201	12.2	1	"	"	"	"	"
91-57-6	2-Methylnaphthalene	BRL	U	µg/kg dry	201	4.46	1	"	"	"	"	"
95-48-7	2-Methylphenol	BRL	U	µg/kg dry	201	8.55	1	"	"	"	"	"
108-39-4, 106-44-5	3,4-Methylphenol	BRL	U	µg/kg dry	201	4.88	1	"	"	"	"	"
91-20-3	Naphthalene	BRL	U	µg/kg dry	201	7.75	1	"	"	"	"	"
88-74-4	2-Nitroaniline	BRL	U	µg/kg dry	201	2.44	1	"	"	"	"	"
99-09-2	3-Nitroaniline	BRL	U	µg/kg dry	201	6.90	1	"	"	"	"	"
100-01-6	4-Nitroaniline	BRL	U	µg/kg dry	806	7.75	1	"	"	"	"	"
98-95-3	Nitrobenzene	BRL	U	µg/kg dry	201	7.33	1	"	"	"	"	"
88-75-5	2-Nitrophenol	BRL	U	µg/kg dry	201	9.34	1	"	"	"	"	"
100-02-7	4-Nitrophenol	BRL	U	µg/kg dry	806	10.6	1	"	"	"	"	"
62-75-9	N-Nitrosodimethylamine	BRL	U	µg/kg dry	201	4.48	1	"	"	"	"	"
621-64-7	N-Nitrosodi-n-propylamine	BRL	U	µg/kg dry	201	24.4	1	"	"	"	"	"
86-30-6	N-Nitrosodiphenylamine	BRL	U	µg/kg dry	201	7.75	1	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 3 SA70868-03	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS												
Semivolatile Organic Compounds by SW846 8270C												
Prepared by method SW846 3550B												
87-86-5	Pentachlorophenol	BRL	U	µg/kg dry	201	13.0	1	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
85-01-8	Phenanthrene	BRL	U	µg/kg dry	201	9.34	1	"	"	"	"	"
108-95-2	Phenol	BRL	U	µg/kg dry	201	4.07	1	"	"	"	"	"
129-00-0	Pyrene	BRL	U	µg/kg dry	201	14.3	1	"	"	"	"	"
110-86-1	Pyridine	BRL	U	µg/kg dry	201	4.07	1	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL	U	µg/kg dry	201	2.85	1	"	"	"	"	"
95-95-4	2,4,5-Trichlorophenol	BRL	U	µg/kg dry	201	4.07	1	"	"	"	"	"
88-06-2	2,4,6-Trichlorophenol	BRL	U	µg/kg dry	201	4.07	1	"	"	"	"	"
82-68-8	Pentachloronitrobenzene	BRL	U	µg/kg dry	201	101	1	"	"	"	"	"
95-94-3	1,2,4,5-Tetrachlorobenzene	BRL	U	µg/kg dry	201	101	1	"	"	"	"	"
Surrogate recoveries:												
321-60-8	*2-Fluorobiphenyl*	*53*		*30-130 %*				"	"	"	"	"
367-12-4	*2-Fluorophenol*	*52*		*15-110 %*				"	"	"	"	"
4165-60-0	*Nitrobenzene-d5*	*49*		*30-130 %*				"	"	"	"	"
4165-62-2	*Phenol-d5*	*44*		*15-110 %*				"	"	"	"	"
1718-51-0	*Terphenyl-dl4*	*55*		*30-130 %*				"	"	"	"	"
118-79-6	*2,4,6-Tribromophenol*	*61*		*15-110 %*				"	"	"	"	"
Total Metals by EPA 6000/7000 Series Methods												
7439-97-6	Mercury	0.166		mg/kg dry	0.0321	0.0077	1	SW846 7471A	20-Nov-07	21-Nov-07	7111615	CRM
Total Metals by EPA 200 Series Methods												
7440-22-4	Silver	BRL	U	mg/kg dry	1.76	0.410	1	EPA 200.7	16-Nov-07	21-Nov-07	7111328	SA
7440-38-2	Arsenic	2.03		mg/kg dry	1.76	0.270	1	"	"	"	"	"
7440-39-3	Barium	9.52		mg/kg dry	1.17	0.197	1	"	"	"	"	"
7440-41-7	Beryllium	0.316	J	mg/kg dry	0.586	0.130	1	"	"	"	"	"
7440-43-9	Cadmium	0.240	J	mg/kg dry	0.586	0.0199	1	"	"	"	"	"
7440-47-3	Chromium	15.6		mg/kg dry	1.17	0.339	1	"	"	"	"	"
7440-50-8	Copper	7.96		mg/kg dry	1.17	0.227	1	"	"	"	"	"
7439-96-5	Manganese	62.2		mg/kg dry	1.17	0.328	1	"	"	"	"	"
7440-02-0	Nickel	1.52		mg/kg dry	1.17	0.115	1	"	"	"	"	"
7439-92-1	Lead	17.0		mg/kg dry	1.76	0.183	1	"	"	"	"	"
7440-36-0	Antimony	BRL	U	mg/kg dry	3.52	0.428	1	"	"	"	"	"
7782-49-2	Selenium	BRL	U	mg/kg dry	1.76	0.379	1	"	"	"	"	"
7440-28-0	Thallium	BRL	U	mg/kg dry	3.52	0.550	1	"	"	"	"	"
7440-62-2	Vanadium	5.14		mg/kg dry	1.76	0.870	1	"	"	"	"	"
7440-66-6	Zinc	25.6		mg/kg dry	1.17	0.428	1	"	"	"	"	"
General Chemistry Parameters												
	% Solids	83.6		%			1	SM2540 G Mod.	16-Nov-07	16-Nov-07	7111396	DG

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 4 SA70868-04	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds												
	VOC Extraction	Field extracted		N/A			1	VOC Soil Extraction	12-Nov-07	12-Nov-07	7111029	DG
Volatile Organic Compounds						Initial weight: 22.18 g						
Prepared by method SW846 5030 Soil (high level)												
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon	BRL	U	µg/kg dry	83.3	34.2	50	SW 846 8260B	15-Nov-07	16-Nov-07	7111331	adu
67-64-1	Acetone	BRL	U	µg/kg dry	833	731	50	"	"	"	"	"
107-13-1	Acrylonitrile	BRL	U	µg/kg dry	83.3	67.5	50	"	"	"	"	"
71-43-2	Benzene	BRL	U	µg/kg dry	83.3	9.2	50	"	"	"	"	"
108-86-1	Bromobenzene	BRL	U	µg/kg dry	83.3	13.3	50	"	"	"	"	"
74-97-5	Bromochloromethane	BRL	U	µg/kg dry	83.3	7.5	50	"	"	"	"	"
75-27-4	Bromodichloromethane	BRL	U	µg/kg dry	83.3	5.0	50	"	"	"	"	"
75-25-2	Bromoform	BRL	U	µg/kg dry	83.3	15.0	50	"	"	"	"	"
74-83-9	Bromomethane	BRL	U	µg/kg dry	167	16.7	50	"	"	"	"	"
78-93-3	2-Butanone (MEK)	BRL	U	µg/kg dry	833	59.2	50	"	"	"	"	"
104-51-8	n-Butylbenzene	BRL	U	µg/kg dry	83.3	7.5	50	"	"	"	"	"
135-98-8	sec-Butylbenzene	BRL	U	µg/kg dry	83.3	10.0	50	"	"	"	"	"
98-06-6	tert-Butylbenzene	BRL	U	µg/kg dry	83.3	7.5	50	"	"	"	"	"
75-15-0	Carbon disulfide	BRL	U	µg/kg dry	417	7.5	50	"	"	"	"	"
56-23-5	Carbon tetrachloride	BRL	U	µg/kg dry	83.3	8.3	50	"	"	"	"	"
108-90-7	Chlorobenzene	BRL	U	µg/kg dry	83.3	10.8	50	"	"	"	"	"
75-00-3	Chloroethane	BRL	U	µg/kg dry	167	18.3	50	"	"	"	"	"
67-66-3	Chloroform	BRL	U	µg/kg dry	83.3	6.7	50	"	"	"	"	"
74-87-3	Chloromethane	BRL	U	µg/kg dry	167	7.5	50	"	"	"	"	"
95-49-8	2-Chlorotoluene	BRL	U	µg/kg dry	83.3	8.3	50	"	"	"	"	"
106-43-4	4-Chlorotoluene	BRL	U	µg/kg dry	83.3	10.0	50	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloropropane	BRL	U	µg/kg dry	167	19.2	50	"	"	"	"	"
124-48-1	Dibromochloromethane	BRL	U	µg/kg dry	83.3	12.5	50	"	"	"	"	"
106-93-4	1,2-Dibromoethane (EDB)	BRL	U	µg/kg dry	83.3	5.8	50	"	"	"	"	"
74-95-3	Dibromomethane	BRL	U	µg/kg dry	83.3	8.3	50	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL	U	µg/kg dry	83.3	19.2	50	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL	U	µg/kg dry	83.3	8.3	50	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL	U	µg/kg dry	83.3	11.7	50	"	"	"	"	"
75-71-8	Dichlorodifluoromethane (Freon12)	BRL	U	µg/kg dry	167	10.8	50	"	"	"	"	"
75-34-3	1,1-Dichloroethane	BRL	U	µg/kg dry	83.3	5.8	50	"	"	"	"	"
107-06-2	1,2-Dichloroethane	BRL	U	µg/kg dry	83.3	7.5	50	"	"	"	"	"
75-35-4	1,1-Dichloroethene	BRL	U	µg/kg dry	83.3	6.7	50	"	"	"	"	"
156-59-2	cis-1,2-Dichloroethene	BRL	U	µg/kg dry	83.3	5.8	50	"	"	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL	U	µg/kg dry	83.3	8.3	50	"	"	"	"	"
78-87-5	1,2-Dichloropropane	BRL	U	µg/kg dry	83.3	7.5	50	"	"	"	"	"
142-28-9	1,3-Dichloropropane	BRL	U	µg/kg dry	83.3	7.5	50	"	"	"	"	"
594-20-7	2,2-Dichloropropane	BRL	U	µg/kg dry	83.3	61.7	50	"	"	"	"	"
563-58-6	1,1-Dichloropropene	BRL	U	µg/kg dry	83.3	10.8	50	"	"	"	"	"
10061-01-5	cis-1,3-Dichloropropene	BRL	U	µg/kg dry	83.3	10.0	50	"	"	"	"	"
10061-02-6	trans-1,3-Dichloropropene	BRL	U	µg/kg dry	83.3	7.5	50	"	"	"	"	"
100-41-4	Ethylbenzene	BRL	U	µg/kg dry	83.3	10.0	50	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL	U	µg/kg dry	83.3	13.3	50	"	"	"	"	"
591-78-6	2-Hexanone (MBK)	BRL	U	µg/kg dry	833	10.8	50	"	"	"	"	"
98-82-8	Isopropylbenzene	BRL	U	µg/kg dry	83.3	10.8	50	"	"	"	"	"
99-87-6	4-Isopropyltoluene	BRL	U	µg/kg dry	83.3	10.0	50	"	"	"	"	"
1634-04-4	Methyl tert-butyl ether	BRL	U	µg/kg dry	83.3	8.3	50	"	"	"	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	U	µg/kg dry	833	9.2	50	"	"	"	"	"
75-09-2	Methylene chloride	BRL	U	µg/kg dry	833	40.0	50	"	"	"	"	"
91-20-3	Naphthalene	BRL	U	µg/kg dry	83.3	15.0	50	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 4 SA70868-04	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds												
Volatile Organic Compounds							Initial weight: 22.18 g					
Prepared by method SW846 5030 Soil (high level)												
103-65-1	n-Propylbenzene	BRL	U	µg/kg dry	83.3	11.7	50	SW 846 8260B	15-Nov-07	16-Nov-07	7111331	adu
100-42-5	Styrene	BRL	U	µg/kg dry	83.3	76.7	50	"	"	"	"	"
630-20-6	1,1,1,2-Tetrachloroethane	BRL	U	µg/kg dry	83.3	14.2	50	"	"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	BRL	U	µg/kg dry	83.3	13.3	50	"	"	"	"	"
127-18-4	Tetrachloroethene	BRL	U	µg/kg dry	83.3	5.0	50	"	"	"	"	"
108-88-3	Toluene	BRL	U	µg/kg dry	83.3	13.3	50	"	"	"	"	"
87-61-6	1,2,3-Trichlorobenzene	BRL	U	µg/kg dry	83.3	10.8	50	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL	U	µg/kg dry	83.3	6.7	50	"	"	"	"	"
71-55-6	1,1,1-Trichloroethane	BRL	U	µg/kg dry	83.3	10.0	50	"	"	"	"	"
79-00-5	1,1,2-Trichloroethane	BRL	U	µg/kg dry	83.3	5.8	50	"	"	"	"	"
79-01-6	Trichloroethene	BRL	U	µg/kg dry	83.3	9.2	50	"	"	"	"	"
75-69-4	Trichlorofluoromethane (Freon 11)	BRL	U	µg/kg dry	83.3	13.3	50	"	"	"	"	"
96-18-4	1,2,3-Trichloropropane	BRL	U	µg/kg dry	83.3	8.3	50	"	"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	BRL	U	µg/kg dry	83.3	10.0	50	"	"	"	"	"
108-67-8	1,3,5-Trimethylbenzene	BRL	U	µg/kg dry	83.3	10.0	50	"	"	"	"	"
75-01-4	Vinyl chloride	BRL	U	µg/kg dry	83.3	10.0	50	"	"	"	"	"
1330-20-7	m,p-Xylene	BRL	U	µg/kg dry	167	19.2	50	"	"	"	"	"
95-47-6	o-Xylene	BRL	U	µg/kg dry	83.3	15.0	50	"	"	"	"	"
109-99-9	Tetrahydrofuran	BRL	U	µg/kg dry	833	34.2	50	"	"	"	"	"
60-29-7	Ethyl ether	BRL	U	µg/kg dry	83.3	15.0	50	"	"	"	"	"
994-05-8	Tert-amyl methyl ether	BRL	U	µg/kg dry	83.3	9.2	50	"	"	"	"	"
637-92-3	Ethyl tert-butyl ether	BRL	U	µg/kg dry	83.3	4.2	50	"	"	"	"	"
108-20-3	Di-isopropyl ether	BRL	U	µg/kg dry	83.3	8.3	50	"	"	"	"	"
75-65-0	Tert-Butanol / butyl alcohol	BRL	U	µg/kg dry	833	617	50	"	"	"	"	"
123-91-1	1,4-Dioxane	BRL	U	µg/kg dry	1670	406	50	"	"	"	"	"
110-57-6	trans-1,4-Dichloro-2-butene	BRL	U	µg/kg dry	417	208	50	"	"	"	"	"
64-17-5	Ethanol	BRL	U	µg/kg dry	41700	7430	50	"	"	"	"	"
Surrogate recoveries:												
460-00-4	*4-Bromofluorobenzene*	*106*		*70-130 %*				"	"	"	"	"
2037-26-5	*Toluene-d8*	*104*		*70-130 %*				"	"	"	"	"
17060-07-0	*1,2-Dichloroethane-d4*	*116*		*70-130 %*				"	"	"	"	"
1868-53-7	*Dibromofluoromethane*	*100*		*70-130 %*				"	"	"	"	"
Semivolatile Organic Compounds by GCMS												
Semivolatile Organic Compounds by SW846 8270C												
Prepared by method SW846 3550B												
83-32-9	Acenaphthene	BRL	U	µg/kg dry	530	12.9	2	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
208-96-8	Acenaphthylene	BRL	U	µg/kg dry	530	16.1	2	"	"	"	"	"
62-53-3	Aniline	BRL	U	µg/kg dry	530	40.8	2	"	"	"	"	"
120-12-7	Anthracene	BRL	U	µg/kg dry	530	16.1	2	"	"	"	"	"
1912-24-9	Atrazine	BRL	U	µg/kg dry	530	14.0	2	"	"	"	"	"
103-33-3	Azobenzene/Diphenyldiazine	BRL	U	µg/kg dry	530	14.0	2	"	"	"	"	"
92-87-5	Benzidine	BRL	U	µg/kg dry	530	60.1	2	"	"	"	"	"
56-55-3	Benzo (a) anthracene	82.5	J	µg/kg dry	530	34.2	2	"	"	"	"	"
50-32-8	Benzo (a) pyrene	64.3	J	µg/kg dry	530	18.2	2	"	"	"	"	"
205-99-2	Benzo (b) fluoranthene	BRL	U	µg/kg dry	530	70.7	2	"	"	"	"	"
191-24-2	Benzo (g,h,i) perylene	BRL	U	µg/kg dry	530	14.9	2	"	"	"	"	"
207-08-9	Benzo (k) fluoranthene	64.3	J	µg/kg dry	530	21.4	2	"	"	"	"	"
65-85-0	Benzoic acid	BRL	U	µg/kg dry	530	9.65	2	"	"	"	"	"
100-51-6	Benzyl alcohol	BRL	U	µg/kg dry	530	17.2	2	"	"	"	"	"
111-91-1	Bis(2-chloroethoxy)methane	BRL	U	µg/kg dry	530	10.7	2	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 4 SA70868-04	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS												
Semivolatile Organic Compounds by SW846 8270C												
Prepared by method SW846 3550B												
111-44-4	Bis(2-chloroethyl)ether	BRL	U	µg/kg dry	530	7.51	2	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
108-60-1	Bis(2-chloroisopropyl)ether	BRL	U	µg/kg dry	530	9.65	2	"	"	"	"	"
117-81-7	Bis(2-ethylhexyl)phthalate	BRL	U	µg/kg dry	530	102	2	"	"	"	"	"
101-55-3	4-Bromophenyl phenyl ether	BRL	U	µg/kg dry	530	24.6	2	"	"	"	"	"
85-68-7	Butyl benzyl phthalate	BRL	U	µg/kg dry	530	61.1	2	"	"	"	"	"
86-74-8	Carbazole	BRL	U	µg/kg dry	530	19.3	2	"	"	"	"	"
59-50-7	4-Chloro-3-methylphenol	BRL	U	µg/kg dry	530	19.3	2	"	"	"	"	"
106-47-8	4-Chloroaniline	BRL	U	µg/kg dry	530	51.4	2	"	"	"	"	"
91-58-7	2-Chloronaphthalene	BRL	U	µg/kg dry	530	7.56	2	"	"	"	"	"
95-57-8	2-Chlorophenol	BRL	U	µg/kg dry	530	10.7	2	"	"	"	"	"
7005-72-3	4-Chlorophenyl phenyl ether	BRL	U	µg/kg dry	530	6.43	2	"	"	"	"	"
218-01-9	Chrysene	82.5	J	µg/kg dry	530	7.56	2	"	"	"	"	"
53-70-3	Dibenzo (a,h) anthracene	BRL	U	µg/kg dry	530	8.52	2	"	"	"	"	"
132-64-9	Dibenzofuran	BRL	U	µg/kg dry	530	6.43	2	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL	U	µg/kg dry	530	0.257	2	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL	U	µg/kg dry	530	22.5	2	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL	U	µg/kg dry	530	23.6	2	"	"	"	"	"
91-94-1	3,3´-Dichlorobenzidine	BRL	U	µg/kg dry	530	38.6	2	"	"	"	"	"
120-83-2	2,4-Dichlorophenol	BRL	U	µg/kg dry	530	14.0	2	"	"	"	"	"
84-66-2	Diethyl phthalate	BRL	U	µg/kg dry	530	17.2	2	"	"	"	"	"
131-11-3	Dimethyl phthalate	BRL	U	µg/kg dry	530	14.9	2	"	"	"	"	"
105-67-9	2,4-Dimethylphenol	BRL	U	µg/kg dry	530	24.6	2	"	"	"	"	"
84-74-2	Di-n-butyl phthalate	BRL	U	µg/kg dry	530	14.0	2	"	"	"	"	"
534-52-1	4,6-Dinitro-2-methylphenol	BRL	U	µg/kg dry	530	12.9	2	"	"	"	"	"
51-28-5	2,4-Dinitrophenol	BRL	U	µg/kg dry	530	33.3	2	"	"	"	"	"
121-14-2	2,4-Dinitrotoluene	BRL	U	µg/kg dry	530	22.5	2	"	"	"	"	"
606-20-2	2,6-Dinitrotoluene	BRL	U	µg/kg dry	530	12.9	2	"	"	"	"	"
117-84-0	Di-n-octyl phthalate	BRL	U	µg/kg dry	530	25.7	2	"	"	"	"	"
206-44-0	Fluoranthene	200	J	µg/kg dry	530	12.9	2	"	"	"	"	"
86-73-7	Fluorene	BRL	U	µg/kg dry	530	12.9	2	"	"	"	"	"
118-74-1	Hexachlorobenzene	BRL	U	µg/kg dry	530	39.7	2	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL	U	µg/kg dry	530	60.1	2	"	"	"	"	"
77-47-4	Hexachlorocyclopentadiene	BRL	U	µg/kg dry	530	39.7	2	"	"	"	"	"
67-72-1	Hexachloroethane	BRL	U	µg/kg dry	530	54.7	2	"	"	"	"	"
193-39-5	Indeno (1,2,3-cd) pyrene	BRL	U	µg/kg dry	530	24.6	2	"	"	"	"	"
90-12-0	1-Methylnaphthalene	BRL	U	µg/kg dry	530	0.177	2	"	"	"	"	"
78-59-1	Isophorone	BRL	U	µg/kg dry	530	32.2	2	"	"	"	"	"
91-57-6	2-Methylnaphthalene	BRL	U	µg/kg dry	530	11.7	2	"	"	"	"	"
95-48-7	2-Methylphenol	BRL	U	µg/kg dry	530	22.5	2	"	"	"	"	"
108-39-4, 106-44-5	3,4-Methylphenol	BRL	U	µg/kg dry	530	12.9	2	"	"	"	"	"
91-20-3	Naphthalene	BRL	U	µg/kg dry	530	20.4	2	"	"	"	"	"
88-74-4	2-Nitroaniline	BRL	U	µg/kg dry	530	6.43	2	"	"	"	"	"
99-09-2	3-Nitroaniline	BRL	U	µg/kg dry	530	18.2	2	"	"	"	"	"
100-01-6	4-Nitroaniline	BRL	U	µg/kg dry	2120	20.4	2	"	"	"	"	"
98-95-3	Nitrobenzene	BRL	U	µg/kg dry	530	19.3	2	"	"	"	"	"
88-75-5	2-Nitrophenol	BRL	U	µg/kg dry	530	24.6	2	"	"	"	"	"
100-02-7	4-Nitrophenol	BRL	U	µg/kg dry	2120	27.8	2	"	"	"	"	"
62-75-9	N-Nitrosodimethylamine	BRL	U	µg/kg dry	530	11.8	2	"	"	"	"	"
621-64-7	N-Nitrosodi-n-propylamine	BRL	U	µg/kg dry	530	64.3	2	"	"	"	"	"
86-30-6	N-Nitrosodiphenylamine	BRL	U	µg/kg dry	530	20.4	2	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 4 SA70868-04	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS												
Semivolatile Organic Compounds by SW846 8270C												
Prepared by method SW846 3550B												
87-86-5	Pentachlorophenol	BRL	U	µg/kg dry	530	34.2	2	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
85-01-8	Phenanthrene	72.9	J	µg/kg dry	530	24.6	2	"	"	"	"	"
108-95-2	Phenol	BRL	U	µg/kg dry	530	10.7	2	"	"	"	"	"
129-00-0	Pyrene	148	J	µg/kg dry	530	37.6	2	"	"	"	"	"
110-86-1	Pyridine	BRL	U	µg/kg dry	530	10.7	2	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL	U	µg/kg dry	530	7.51	2	"	"	"	"	"
95-95-4	2,4,5-Trichlorophenol	BRL	U	µg/kg dry	530	10.7	2	"	"	"	"	"
88-06-2	2,4,6-Trichlorophenol	BRL	U	µg/kg dry	530	10.7	2	"	"	"	"	"
82-68-8	Pentachloronitrobenzene	BRL	U	µg/kg dry	530	265	2	"	"	"	"	"
95-94-3	1,2,4,5-Tetrachlorobenzene	BRL	U	µg/kg dry	530	265	2	"	"	"	"	"
Surrogate recoveries:												
321-60-8	*2-Fluorobiphenyl*	*51*		*30-130 %*				"	"	"	"	"
367-12-4	*2-Fluorophenol*	*37*		*15-110 %*				"	"	"	"	"
4165-60-0	*Nitrobenzene-d5*	*37*		*30-130 %*				"	"	"	"	"
4165-62-2	*Phenol-d5*	*32*		*15-110 %*				"	"	"	"	"
1718-51-0	*Terphenyl-dl4*	*47*		*30-130 %*				"	"	"	"	"
118-79-6	*2,4,6-Tribromophenol*	*45*		*15-110 %*				"	"	"	"	"
Total Metals by EPA 6000/7000 Series Methods												
7439-97-6	Mercury	3.77		mg/kg dry	0.0410	0.0098	1	SW846 7471A	16-Nov-07	19-Nov-07	7111330	CRM
Total Metals by EPA 200 Series Methods												
7440-22-4	Silver	BRL	U	mg/kg dry	2.09	0.487	1	EPA 200.7	16-Nov-07	21-Nov-07	7111328	SA
7440-38-2	Arsenic	7.17		mg/kg dry	2.09	0.320	1	"	"	"	"	"
7440-39-3	Barium	35.1		mg/kg dry	1.39	0.234	1	"	"	"	"	"
7440-41-7	Beryllium	0.494	J	mg/kg dry	0.695	0.154	1	"	"	"	"	"
7440-43-9	Cadmium	0.570	J	mg/kg dry	0.695	0.0236	1	"	"	"	"	"
7440-47-3	Chromium	139		mg/kg dry	1.39	0.402	1	"	"	"	"	"
7440-50-8	Copper	34.0		mg/kg dry	1.39	0.270	1	"	"	"	"	"
7439-96-5	Manganese	72.2		mg/kg dry	1.39	0.389	1	"	"	"	"	"
7440-02-0	Nickel	5.99		mg/kg dry	1.39	0.136	1	"	"	"	"	"
7439-92-1	Lead	75.6		mg/kg dry	2.09	0.217	1	"	"	"	"	"
7440-36-0	Antimony	1.75	J	mg/kg dry	4.17	0.507	1	"	"	"	"	"
7782-49-2	Selenium	0.570	J	mg/kg dry	2.09	0.449	1	"	"	"	"	"
7440-28-0	Thallium	BRL	U	mg/kg dry	4.17	0.652	1	"	"	"	"	"
7440-62-2	Vanadium	14.2		mg/kg dry	2.09	1.03	1	"	"	"	"	"
7440-66-6	Zinc	1,280		mg/kg dry	13.9	5.07	10	"	"	21-Nov-07	"	"
General Chemistry Parameters												
	% Solids	62.9		%			1	SM2540 G Mod.	16-Nov-07	16-Nov-07	7111396	DG

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 5 SA70868-05	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds												
	VOC Extraction	Field extracted		N/A			1	VOC Soil Extraction	12-Nov-07	12-Nov-07	7111029	DG
Volatile Organic Compounds						Initial weight: 23.45 g						
Prepared by method SW846 5030 Soil (high level)												
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon	BRL	U	µg/kg dry	67.4	27.6	50	SW 846 8260B	15-Nov-07	16-Nov-07	7111331	adu
67-64-1	Acetone	BRL	U	µg/kg dry	674	591	50	"	"	"	"	"
107-13-1	Acrylonitrile	BRL	U	µg/kg dry	67.4	54.6	50	"	"	"	"	"
71-43-2	Benzene	BRL	U	µg/kg dry	67.4	7.4	50	"	"	"	"	"
108-86-1	Bromobenzene	BRL	U	µg/kg dry	67.4	10.8	50	"	"	"	"	"
74-97-5	Bromochloromethane	BRL	U	µg/kg dry	67.4	6.1	50	"	"	"	"	"
75-27-4	Bromodichloromethane	BRL	U	µg/kg dry	67.4	4.0	50	"	"	"	"	"
75-25-2	Bromoform	BRL	U	µg/kg dry	67.4	12.1	50	"	"	"	"	"
74-83-9	Bromomethane	BRL	U	µg/kg dry	135	13.5	50	"	"	"	"	"
78-93-3	2-Butanone (MEK)	BRL	U	µg/kg dry	674	47.8	50	"	"	"	"	"
104-51-8	n-Butylbenzene	BRL	U	µg/kg dry	67.4	6.1	50	"	"	"	"	"
135-98-8	sec-Butylbenzene	BRL	U	µg/kg dry	67.4	8.1	50	"	"	"	"	"
98-06-6	tert-Butylbenzene	BRL	U	µg/kg dry	67.4	6.1	50	"	"	"	"	"
75-15-0	Carbon disulfide	BRL	U	µg/kg dry	337	6.1	50	"	"	"	"	"
56-23-5	Carbon tetrachloride	BRL	U	µg/kg dry	67.4	6.7	50	"	"	"	"	"
108-90-7	Chlorobenzene	BRL	U	µg/kg dry	67.4	8.8	50	"	"	"	"	"
75-00-3	Chloroethane	BRL	U	µg/kg dry	135	14.8	50	"	"	"	"	"
67-66-3	Chloroform	BRL	U	µg/kg dry	67.4	5.4	50	"	"	"	"	"
74-87-3	Chloromethane	BRL	U	µg/kg dry	135	6.1	50	"	"	"	"	"
95-49-8	2-Chlorotoluene	BRL	U	µg/kg dry	67.4	6.7	50	"	"	"	"	"
106-43-4	4-Chlorotoluene	BRL	U	µg/kg dry	67.4	8.1	50	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloropropane	BRL	U	µg/kg dry	135	15.5	50	"	"	"	"	"
124-48-1	Dibromochloromethane	BRL	U	µg/kg dry	67.4	10.1	50	"	"	"	"	"
106-93-4	1,2-Dibromoethane (EDB)	BRL	U	µg/kg dry	67.4	4.7	50	"	"	"	"	"
74-95-3	Dibromomethane	BRL	U	µg/kg dry	67.4	6.7	50	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL	U	µg/kg dry	67.4	15.5	50	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL	U	µg/kg dry	67.4	6.7	50	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL	U	µg/kg dry	67.4	9.4	50	"	"	"	"	"
75-71-8	Dichlorodifluoromethane (Freon12)	BRL	U	µg/kg dry	135	8.8	50	"	"	"	"	"
75-34-3	1,1-Dichloroethane	BRL	U	µg/kg dry	67.4	4.7	50	"	"	"	"	"
107-06-2	1,2-Dichloroethane	BRL	U	µg/kg dry	67.4	6.1	50	"	"	"	"	"
75-35-4	1,1-Dichloroethene	BRL	U	µg/kg dry	67.4	5.4	50	"	"	"	"	"
156-59-2	cis-1,2-Dichloroethene	BRL	U	µg/kg dry	67.4	4.7	50	"	"	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL	U	µg/kg dry	67.4	6.7	50	"	"	"	"	"
78-87-5	1,2-Dichloropropane	BRL	U	µg/kg dry	67.4	6.1	50	"	"	"	"	"
142-28-9	1,3-Dichloropropane	BRL	U	µg/kg dry	67.4	6.1	50	"	"	"	"	"
594-20-7	2,2-Dichloropropane	BRL	U	µg/kg dry	67.4	49.8	50	"	"	"	"	"
563-58-6	1,1-Dichloropropene	BRL	U	µg/kg dry	67.4	8.8	50	"	"	"	"	"
10061-01-5	cis-1,3-Dichloropropene	BRL	U	µg/kg dry	67.4	8.1	50	"	"	"	"	"
10061-02-6	trans-1,3-Dichloropropene	BRL	U	µg/kg dry	67.4	6.1	50	"	"	"	"	"
100-41-4	Ethylbenzene	BRL	U	µg/kg dry	67.4	8.1	50	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL	U	µg/kg dry	67.4	10.8	50	"	"	"	"	"
591-78-6	2-Hexanone (MBK)	BRL	U	µg/kg dry	674	8.8	50	"	"	"	"	"
98-82-8	Isopropylbenzene	BRL	U	µg/kg dry	67.4	8.8	50	"	"	"	"	"
99-87-6	4-Isopropyltoluene	BRL	U	µg/kg dry	67.4	8.1	50	"	"	"	"	"
1634-04-4	Methyl tert-butyl ether	BRL	U	µg/kg dry	67.4	6.7	50	"	"	"	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	U	µg/kg dry	674	7.4	50	"	"	"	"	"
75-09-2	Methylene chloride	BRL	U	µg/kg dry	674	32.3	50	"	"	"	"	"
91-20-3	Naphthalene	BRL	U	µg/kg dry	67.4	12.1	50	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 5 SA70868-05	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds												
Volatile Organic Compounds							Initial weight: 23.45 g					
Prepared by method SW846 5030 Soil (high level)												
103-65-1	n-Propylbenzene	BRL	U	µg/kg dry	67.4	9.4	50	SW 846 8260B	15-Nov-07	16-Nov-07	7111331	adu
100-42-5	Styrene	BRL	U	µg/kg dry	67.4	62.0	50	"	"	"	"	"
630-20-6	1,1,1,2-Tetrachloroethane	BRL	U	µg/kg dry	67.4	11.5	50	"	"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	BRL	U	µg/kg dry	67.4	10.8	50	"	"	"	"	"
127-18-4	Tetrachloroethene	BRL	U	µg/kg dry	67.4	4.0	50	"	"	"	"	"
108-88-3	Toluene	BRL	U	µg/kg dry	67.4	10.8	50	"	"	"	"	"
87-61-6	1,2,3-Trichlorobenzene	BRL	U	µg/kg dry	67.4	8.8	50	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL	U	µg/kg dry	67.4	5.4	50	"	"	"	"	"
71-55-6	1,1,1-Trichloroethane	BRL	U	µg/kg dry	67.4	8.1	50	"	"	"	"	"
79-00-5	1,1,2-Trichloroethane	BRL	U	µg/kg dry	67.4	4.7	50	"	"	"	"	"
79-01-6	Trichloroethene	BRL	U	µg/kg dry	67.4	7.4	50	"	"	"	"	"
75-69-4	Trichlorofluoromethane (Freon 11)	BRL	U	µg/kg dry	67.4	10.8	50	"	"	"	"	"
96-18-4	1,2,3-Trichloropropane	BRL	U	µg/kg dry	67.4	6.7	50	"	"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	BRL	U	µg/kg dry	67.4	8.1	50	"	"	"	"	"
108-67-8	1,3,5-Trimethylbenzene	BRL	U	µg/kg dry	67.4	8.1	50	"	"	"	"	"
75-01-4	Vinyl chloride	BRL	U	µg/kg dry	67.4	8.1	50	"	"	"	"	"
1330-20-7	m,p-Xylene	BRL	U	µg/kg dry	135	15.5	50	"	"	"	"	"
95-47-6	o-Xylene	BRL	U	µg/kg dry	67.4	12.1	50	"	"	"	"	"
109-99-9	Tetrahydrofuran	BRL	U	µg/kg dry	674	27.6	50	"	"	"	"	"
60-29-7	Ethyl ether	BRL	U	µg/kg dry	67.4	12.1	50	"	"	"	"	"
994-05-8	Tert-amyl methyl ether	BRL	U	µg/kg dry	67.4	7.4	50	"	"	"	"	"
637-92-3	Ethyl tert-butyl ether	BRL	U	µg/kg dry	67.4	3.4	50	"	"	"	"	"
108-20-3	Di-isopropyl ether	BRL	U	µg/kg dry	67.4	6.7	50	"	"	"	"	"
75-65-0	Tert-Butanol / butyl alcohol	BRL	U	µg/kg dry	674	499	50	"	"	"	"	"
123-91-1	1,4-Dioxane	BRL	U	µg/kg dry	1350	328	50	"	"	"	"	"
110-57-6	trans-1,4-Dichloro-2-butene	BRL	U	µg/kg dry	337	168	50	"	"	"	"	"
64-17-5	Ethanol	BRL	U	µg/kg dry	33700	6000	50	"	"	"	"	"
Surrogate recoveries:												
460-00-4	*4-Bromofluorobenzene*	*104*		*70-130 %*				"	"	"	"	"
2037-26-5	*Toluene-d8*	*102*		*70-130 %*				"	"	"	"	"
17060-07-0	*1,2-Dichloroethane-d4*	*108*		*70-130 %*				"	"	"	"	"
1868-53-7	*Dibromofluoromethane*	*95*		*70-130 %*				"	"	"	"	"
Semivolatile Organic Compounds by GCMS												
Semivolatile Organic Compounds by SW846 8270C												
Prepared by method SW846 3550B												
83-32-9	Acenaphthene	BRL	U	µg/kg dry	241	5.83	1	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
208-96-8	Acenaphthylene	BRL	U	µg/kg dry	241	7.29	1	"	"	"	"	"
62-53-3	Aniline	BRL	U	µg/kg dry	241	18.5	1	"	"	"	"	"
120-12-7	Anthracene	BRL	U	µg/kg dry	241	7.29	1	"	"	"	"	"
1912-24-9	Atrazine	BRL	U	µg/kg dry	241	6.34	1	"	"	"	"	"
103-33-3	Azobenzene/Diphenyldiazine	BRL	U	µg/kg dry	241	6.34	1	"	"	"	"	"
92-87-5	Benzidine	BRL	U	µg/kg dry	241	27.3	1	"	"	"	"	"
56-55-3	Benzo (a) anthracene	36.5	J	µg/kg dry	241	15.5	1	"	"	"	"	"
50-32-8	Benzo (a) pyrene	BRL	U	µg/kg dry	241	8.24	1	"	"	"	"	"
205-99-2	Benzo (b) fluoranthene	BRL	U	µg/kg dry	241	32.1	1	"	"	"	"	"
191-24-2	Benzo (g,h,i) perylene	BRL	U	µg/kg dry	241	6.78	1	"	"	"	"	"
207-08-9	Benzo (k) fluoranthene	BRL	U	µg/kg dry	241	9.70	1	"	"	"	"	"
65-85-0	Benzoic acid	BRL	U	µg/kg dry	241	4.38	1	"	"	"	"	"
100-51-6	Benzyl alcohol	BRL	U	µg/kg dry	241	7.80	1	"	"	"	"	"
111-91-1	Bis(2-chloroethoxy)methane	BRL	U	µg/kg dry	241	4.86	1	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 5 SA70868-05	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS												
Semivolatile Organic Compounds by SW846 8270C												
Prepared by method SW846 3550B												
111-44-4	Bis(2-chloroethyl)ether	BRL	U	µg/kg dry	241	3.41	1	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
108-60-1	Bis(2-chloroisopropyl)ether	BRL	U	µg/kg dry	241	4.38	1	"	"	"	"	"
117-81-7	Bis(2-ethylhexyl)phthalate	BRL	U	µg/kg dry	241	46.2	1	"	"	"	"	"
101-55-3	4-Bromophenyl phenyl ether	BRL	U	µg/kg dry	241	11.2	1	"	"	"	"	"
85-68-7	Butyl benzyl phthalate	BRL	U	µg/kg dry	241	27.7	1	"	"	"	"	"
86-74-8	Carbazole	BRL	U	µg/kg dry	241	8.75	1	"	"	"	"	"
59-50-7	4-Chloro-3-methylphenol	BRL	U	µg/kg dry	241	8.75	1	"	"	"	"	"
106-47-8	4-Chloroaniline	BRL	U	µg/kg dry	241	23.3	1	"	"	"	"	"
91-58-7	2-Chloronaphthalene	BRL	U	µg/kg dry	241	3.43	1	"	"	"	"	"
95-57-8	2-Chlorophenol	BRL	U	µg/kg dry	241	4.86	1	"	"	"	"	"
7005-72-3	4-Chlorophenyl phenyl ether	BRL	U	µg/kg dry	241	2.92	1	"	"	"	"	"
218-01-9	Chrysene	33.5	J	µg/kg dry	241	3.43	1	"	"	"	"	"
53-70-3	Dibenzo (a,h) anthracene	BRL	U	µg/kg dry	241	3.86	1	"	"	"	"	"
132-64-9	Dibenzofuran	BRL	U	µg/kg dry	241	2.92	1	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL	U	µg/kg dry	241	0.117	1	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL	U	µg/kg dry	241	10.2	1	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL	U	µg/kg dry	241	10.7	1	"	"	"	"	"
91-94-1	3,3´-Dichlorobenzidine	BRL	U	µg/kg dry	241	17.5	1	"	"	"	"	"
120-83-2	2,4-Dichlorophenol	BRL	U	µg/kg dry	241	6.34	1	"	"	"	"	"
84-66-2	Diethyl phthalate	BRL	U	µg/kg dry	241	7.80	1	"	"	"	"	"
131-11-3	Dimethyl phthalate	BRL	U	µg/kg dry	241	6.78	1	"	"	"	"	"
105-67-9	2,4-Dimethylphenol	BRL	U	µg/kg dry	241	11.2	1	"	"	"	"	"
84-74-2	Di-n-butyl phthalate	BRL	U	µg/kg dry	241	6.34	1	"	"	"	"	"
534-52-1	4,6-Dinitro-2-methylphenol	BRL	U	µg/kg dry	241	5.83	1	"	"	"	"	"
51-28-5	2,4-Dinitrophenol	BRL	U	µg/kg dry	241	15.1	1	"	"	"	"	"
121-14-2	2,4-Dinitrotoluene	BRL	U	µg/kg dry	241	10.2	1	"	"	"	"	"
606-20-2	2,6-Dinitrotoluene	BRL	U	µg/kg dry	241	5.83	1	"	"	"	"	"
117-84-0	Di-n-octyl phthalate	BRL	U	µg/kg dry	241	11.7	1	"	"	"	"	"
206-44-0	Fluoranthene	69.5	J	µg/kg dry	241	5.83	1	"	"	"	"	"
86-73-7	Fluorene	BRL	U	µg/kg dry	241	5.83	1	"	"	"	"	"
118-74-1	Hexachlorobenzene	BRL	U	µg/kg dry	241	18.0	1	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL	U	µg/kg dry	241	27.3	1	"	"	"	"	"
77-47-4	Hexachlorocyclopentadiene	BRL	U	µg/kg dry	241	18.0	1	"	"	"	"	"
67-72-1	Hexachloroethane	BRL	U	µg/kg dry	241	24.8	1	"	"	"	"	"
193-39-5	Indeno (1,2,3-cd) pyrene	BRL	U	µg/kg dry	241	11.2	1	"	"	"	"	"
90-12-0	1-Methylnaphthalene	BRL	U	µg/kg dry	241	0.0802	1	"	"	"	"	"
78-59-1	Isophorone	BRL	U	µg/kg dry	241	14.6	1	"	"	"	"	"
91-57-6	2-Methylnaphthalene	BRL	U	µg/kg dry	241	5.32	1	"	"	"	"	"
95-48-7	2-Methylphenol	BRL	U	µg/kg dry	241	10.2	1	"	"	"	"	"
108-39-4, 106-44-5	3,4-Methylphenol	BRL	U	µg/kg dry	241	5.83	1	"	"	"	"	"
91-20-3	Naphthalene	BRL	U	µg/kg dry	241	9.26	1	"	"	"	"	"
88-74-4	2-Nitroaniline	BRL	U	µg/kg dry	241	2.92	1	"	"	"	"	"
99-09-2	3-Nitroaniline	BRL	U	µg/kg dry	241	8.24	1	"	"	"	"	"
100-01-6	4-Nitroaniline	BRL	U	µg/kg dry	963	9.26	1	"	"	"	"	"
98-95-3	Nitrobenzene	BRL	U	µg/kg dry	241	8.75	1	"	"	"	"	"
88-75-5	2-Nitrophenol	BRL	U	µg/kg dry	241	11.2	1	"	"	"	"	"
100-02-7	4-Nitrophenol	BRL	U	µg/kg dry	963	12.6	1	"	"	"	"	"
62-75-9	N-Nitrosodimethylamine	BRL	U	µg/kg dry	241	5.35	1	"	"	"	"	"
621-64-7	N-Nitrosodi-n-propylamine	BRL	U	µg/kg dry	241	29.2	1	"	"	"	"	"
86-30-6	N-Nitrosodiphenylamine	BRL	U	µg/kg dry	241	9.26	1	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 5 SA70868-05	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS												
Semivolatile Organic Compounds by SW846 8270C												
Prepared by method SW846 3550B												
87-86-5	Pentachlorophenol	BRL	U	µg/kg dry	241	15.5	1	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
85-01-8	Phenanthrene	38.9	J	µg/kg dry	241	11.2	1	"	"	"	"	"
108-95-2	Phenol	BRL	U	µg/kg dry	241	4.86	1	"	"	"	"	"
129-00-0	Pyrene	60.3	J	µg/kg dry	241	17.1	1	"	"	"	"	"
110-86-1	Pyridine	BRL	U	µg/kg dry	241	4.86	1	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL	U	µg/kg dry	241	3.41	1	"	"	"	"	"
95-95-4	2,4,5-Trichlorophenol	BRL	U	µg/kg dry	241	4.86	1	"	"	"	"	"
88-06-2	2,4,6-Trichlorophenol	BRL	U	µg/kg dry	241	4.86	1	"	"	"	"	"
82-68-8	Pentachloronitrobenzene	BRL	U	µg/kg dry	241	120	1	"	"	"	"	"
95-94-3	1,2,4,5-Tetrachlorobenzene	BRL	U	µg/kg dry	241	120	1	"	"	"	"	"
Surrogate recoveries:												
321-60-8	*2-Fluorobiphenyl*	*46*		*30-130 %*				"	"	"	"	"
367-12-4	*2-Fluorophenol*	*51*		*15-110 %*				"	"	"	"	"
4165-60-0	*Nitrobenzene-d5*	*48*		*30-130 %*				"	"	"	"	"
4165-62-2	*Phenol-d5*	*43*		*15-110 %*				"	"	"	"	"
1718-51-0	*Terphenyl-dl4*	*56*		*30-130 %*				"	"	"	"	"
118-79-6	*2,4,6-Tribromophenol*	*58*		*15-110 %*				"	"	"	"	"
Total Metals by EPA 6000/7000 Series Methods												
7439-97-6	Mercury	0.159		mg/kg dry	0.0389	0.0093	1	SW846 7471A	16-Nov-07	19-Nov-07	7111330	CRM
Total Metals by EPA 200 Series Methods												
7440-22-4	Silver	BRL	U	mg/kg dry	2.09	0.487	1	EPA 200.7	16-Nov-07	21-Nov-07	7111328	SA
7440-38-2	Arsenic	BRL	U	mg/kg dry	2.09	0.320	1	"	"	"	"	"
7440-39-3	Barium	22.9		mg/kg dry	1.39	0.234	1	"	"	"	"	"
7440-41-7	Beryllium	0.167	J	mg/kg dry	0.696	0.154	1	"	"	"	"	"
7440-43-9	Cadmium	0.230	J	mg/kg dry	0.696	0.0236	1	"	"	"	"	"
7440-47-3	Chromium	134		mg/kg dry	1.39	0.402	1	"	"	"	"	"
7440-50-8	Copper	31.1		mg/kg dry	1.39	0.270	1	"	"	"	"	"
7439-96-5	Manganese	59.5		mg/kg dry	1.39	0.390	1	"	"	"	"	"
7440-02-0	Nickel	6.00		mg/kg dry	1.39	0.136	1	"	"	"	"	"
7439-92-1	Lead	35.7		mg/kg dry	2.09	0.217	1	"	"	"	"	"
7440-36-0	Antimony	1.18	J	mg/kg dry	4.17	0.508	1	"	"	"	"	"
7782-49-2	Selenium	0.807	J	mg/kg dry	2.09	0.449	1	"	"	"	"	"
7440-28-0	Thallium	1.06	J	mg/kg dry	4.17	0.652	1	"	"	"	"	"
7440-62-2	Vanadium	9.53		mg/kg dry	2.09	1.03	1	"	"	"	"	"
7440-66-6	Zinc	176		mg/kg dry	1.39	0.508	1	"	"	"	"	"
General Chemistry Parameters												
	% Solids	69.9		%			1	SM2540 G Mod.	16-Nov-07	16-Nov-07	7111396	DG

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 6 SA70868-06	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds												
	VOC Extraction	Field extracted		N/A			1	VOC Soil Extraction	12-Nov-07	12-Nov-07	7111029	DG
Volatile Organic Compounds						Initial weight: 18.07 g						
Prepared by method SW846 5030 Soil (high level)												
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon	BRL	U	µg/kg dry	80.5	33.0	50	SW 846 8260B	15-Nov-07	16-Nov-07	7111331	adu
67-64-1	Acetone	BRL	U	µg/kg dry	805	706	50	"	"	"	"	"
107-13-1	Acrylonitrile	BRL	U	µg/kg dry	80.5	65.2	50	"	"	"	"	"
71-43-2	Benzene	BRL	U	µg/kg dry	80.5	8.9	50	"	"	"	"	"
108-86-1	Bromobenzene	BRL	U	µg/kg dry	80.5	12.9	50	"	"	"	"	"
74-97-5	Bromochloromethane	BRL	U	µg/kg dry	80.5	7.2	50	"	"	"	"	"
75-27-4	Bromodichloromethane	BRL	U	µg/kg dry	80.5	4.8	50	"	"	"	"	"
75-25-2	Bromoform	BRL	U	µg/kg dry	80.5	14.5	50	"	"	"	"	"
74-83-9	Bromomethane	BRL	U	µg/kg dry	161	16.1	50	"	"	"	"	"
78-93-3	2-Butanone (MEK)	BRL	U	µg/kg dry	805	57.2	50	"	"	"	"	"
104-51-8	n-Butylbenzene	BRL	U	µg/kg dry	80.5	7.2	50	"	"	"	"	"
135-98-8	sec-Butylbenzene	BRL	U	µg/kg dry	80.5	9.7	50	"	"	"	"	"
98-06-6	tert-Butylbenzene	BRL	U	µg/kg dry	80.5	7.2	50	"	"	"	"	"
75-15-0	Carbon disulfide	BRL	U	µg/kg dry	403	7.2	50	"	"	"	"	"
56-23-5	Carbon tetrachloride	BRL	U	µg/kg dry	80.5	8.1	50	"	"	"	"	"
108-90-7	Chlorobenzene	BRL	U	µg/kg dry	80.5	10.5	50	"	"	"	"	"
75-00-3	Chloroethane	BRL	U	µg/kg dry	161	17.7	50	"	"	"	"	"
67-66-3	Chloroform	BRL	U	µg/kg dry	80.5	6.4	50	"	"	"	"	"
74-87-3	Chloromethane	BRL	U	µg/kg dry	161	7.2	50	"	"	"	"	"
95-49-8	2-Chlorotoluene	BRL	U	µg/kg dry	80.5	8.1	50	"	"	"	"	"
106-43-4	4-Chlorotoluene	BRL	U	µg/kg dry	80.5	9.7	50	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloropropane	BRL	U	µg/kg dry	161	18.5	50	"	"	"	"	"
124-48-1	Dibromochloromethane	BRL	U	µg/kg dry	80.5	12.1	50	"	"	"	"	"
106-93-4	1,2-Dibromoethane (EDB)	BRL	U	µg/kg dry	80.5	5.6	50	"	"	"	"	"
74-95-3	Dibromomethane	BRL	U	µg/kg dry	80.5	8.1	50	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL	U	µg/kg dry	80.5	18.5	50	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL	U	µg/kg dry	80.5	8.1	50	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL	U	µg/kg dry	80.5	11.3	50	"	"	"	"	"
75-71-8	Dichlorodifluoromethane (Freon12)	BRL	U	µg/kg dry	161	10.5	50	"	"	"	"	"
75-34-3	1,1-Dichloroethane	BRL	U	µg/kg dry	80.5	5.6	50	"	"	"	"	"
107-06-2	1,2-Dichloroethane	BRL	U	µg/kg dry	80.5	7.2	50	"	"	"	"	"
75-35-4	1,1-Dichloroethene	BRL	U	µg/kg dry	80.5	6.4	50	"	"	"	"	"
156-59-2	cis-1,2-Dichloroethene	BRL	U	µg/kg dry	80.5	5.6	50	"	"	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL	U	µg/kg dry	80.5	8.1	50	"	"	"	"	"
78-87-5	1,2-Dichloropropane	BRL	U	µg/kg dry	80.5	7.2	50	"	"	"	"	"
142-28-9	1,3-Dichloropropane	BRL	U	µg/kg dry	80.5	7.2	50	"	"	"	"	"
594-20-7	2,2-Dichloropropane	BRL	U	µg/kg dry	80.5	59.6	50	"	"	"	"	"
563-58-6	1,1-Dichloropropene	BRL	U	µg/kg dry	80.5	10.5	50	"	"	"	"	"
10061-01-5	cis-1,3-Dichloropropene	BRL	U	µg/kg dry	80.5	9.7	50	"	"	"	"	"
10061-02-6	trans-1,3-Dichloropropene	BRL	U	µg/kg dry	80.5	7.2	50	"	"	"	"	"
100-41-4	Ethylbenzene	BRL	U	µg/kg dry	80.5	9.7	50	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL	U	µg/kg dry	80.5	12.9	50	"	"	"	"	"
591-78-6	2-Hexanone (MBK)	BRL	U	µg/kg dry	805	10.5	50	"	"	"	"	"
98-82-8	Isopropylbenzene	BRL	U	µg/kg dry	80.5	10.5	50	"	"	"	"	"
99-87-6	4-Isopropyltoluene	BRL	U	µg/kg dry	80.5	9.7	50	"	"	"	"	"
1634-04-4	Methyl tert-butyl ether	BRL	U	µg/kg dry	80.5	8.1	50	"	"	"	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	U	µg/kg dry	805	8.9	50	"	"	"	"	"
75-09-2	Methylene chloride	BRL	U	µg/kg dry	805	38.7	50	"	"	"	"	"
91-20-3	Naphthalene	BRL	U	µg/kg dry	80.5	14.5	50	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 6 SA70868-06	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds												
Volatile Organic Compounds												
Prepared by method SW846 5030 Soil (high level)						Initial weight: 18.07 g						
103-65-1	n-Propylbenzene	BRL	U	µg/kg dry	80.5	11.3	50	SW 846 8260B	15-Nov-07	16-Nov-07	7111331	adu
100-42-5	Styrene	BRL	U	µg/kg dry	80.5	74.1	50	"	"	"	"	"
630-20-6	1,1,1,2-Tetrachloroethane	BRL	U	µg/kg dry	80.5	13.7	50	"	"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	BRL	U	µg/kg dry	80.5	12.9	50	"	"	"	"	"
127-18-4	Tetrachloroethene	BRL	U	µg/kg dry	80.5	4.8	50	"	"	"	"	"
108-88-3	Toluene	BRL	U	µg/kg dry	80.5	12.9	50	"	"	"	"	"
87-61-6	1,2,3-Trichlorobenzene	BRL	U	µg/kg dry	80.5	10.5	50	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL	U	µg/kg dry	80.5	6.4	50	"	"	"	"	"
71-55-6	1,1,1-Trichloroethane	BRL	U	µg/kg dry	80.5	9.7	50	"	"	"	"	"
79-00-5	1,1,2-Trichloroethane	BRL	U	µg/kg dry	80.5	5.6	50	"	"	"	"	"
79-01-6	Trichloroethene	BRL	U	µg/kg dry	80.5	8.9	50	"	"	"	"	"
75-69-4	Trichlorofluoromethane (Freon 11)	BRL	U	µg/kg dry	80.5	12.9	50	"	"	"	"	"
96-18-4	1,2,3-Trichloropropane	BRL	U	µg/kg dry	80.5	8.1	50	"	"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	BRL	U	µg/kg dry	80.5	9.7	50	"	"	"	"	"
108-67-8	1,3,5-Trimethylbenzene	BRL	U	µg/kg dry	80.5	9.7	50	"	"	"	"	"
75-01-4	Vinyl chloride	BRL	U	µg/kg dry	80.5	9.7	50	"	"	"	"	"
1330-20-7	m,p-Xylene	BRL	U	µg/kg dry	161	18.5	50	"	"	"	"	"
95-47-6	o-Xylene	BRL	U	µg/kg dry	80.5	14.5	50	"	"	"	"	"
109-99-9	Tetrahydrofuran	BRL	U	µg/kg dry	805	33.0	50	"	"	"	"	"
60-29-7	Ethyl ether	BRL	U	µg/kg dry	80.5	14.5	50	"	"	"	"	"
994-05-8	Tert-amyl methyl ether	BRL	U	µg/kg dry	80.5	8.9	50	"	"	"	"	"
637-92-3	Ethyl tert-butyl ether	BRL	U	µg/kg dry	80.5	4.0	50	"	"	"	"	"
108-20-3	Di-isopropyl ether	BRL	U	µg/kg dry	80.5	8.1	50	"	"	"	"	"
75-65-0	Tert-Butanol / butyl alcohol	BRL	U	µg/kg dry	805	597	50	"	"	"	"	"
123-91-1	1,4-Dioxane	BRL	U	µg/kg dry	1610	392	50	"	"	"	"	"
110-57-6	trans-1,4-Dichloro-2-butene	BRL	U	µg/kg dry	403	201	50	"	"	"	"	"
64-17-5	Ethanol	BRL	U	µg/kg dry	40300	7180	50	"	"	"	"	"
Surrogate recoveries:												
460-00-4	*4-Bromofluorobenzene*	*101*		*70-130 %*				"	"	"	"	"
2037-26-5	*Toluene-d8*	*104*		*70-130 %*				"	"	"	"	"
17060-07-0	*1,2-Dichloroethane-d4*	*109*		*70-130 %*				"	"	"	"	"
1868-53-7	*Dibromofluoromethane*	*97*		*70-130 %*				"	"	"	"	"
Semivolatile Organic Compounds by GCMS												
Semivolatile Organic Compounds by SW846 8270C												
Prepared by method SW846 3550B												
83-32-9	Acenaphthene	BRL	U	µg/kg dry	243	5.90	1	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
208-96-8	Acenaphthylene	BRL	U	µg/kg dry	243	7.37	1	"	"	"	"	"
62-53-3	Aniline	BRL	U	µg/kg dry	243	18.7	1	"	"	"	"	"
120-12-7	Anthracene	BRL	U	µg/kg dry	243	7.37	1	"	"	"	"	"
1912-24-9	Atrazine	BRL	U	µg/kg dry	243	6.41	1	"	"	"	"	"
103-33-3	Azobenzene/Diphenyldiazine	BRL	U	µg/kg dry	243	6.41	1	"	"	"	"	"
92-87-5	Benzidine	BRL	U	µg/kg dry	243	27.6	1	"	"	"	"	"
56-55-3	Benzo (a) anthracene	28.0	J	µg/kg dry	243	15.7	1	"	"	"	"	"
50-32-8	Benzo (a) pyrene	29.5	J	µg/kg dry	243	8.33	1	"	"	"	"	"
205-99-2	Benzo (b) fluoranthene	BRL	U	µg/kg dry	243	32.4	1	"	"	"	"	"
191-24-2	Benzo (g,h,i) perylene	BRL	U	µg/kg dry	243	6.86	1	"	"	"	"	"
207-08-9	Benzo (k) fluoranthene	27.0	J	µg/kg dry	243	9.81	1	"	"	"	"	"
65-85-0	Benzoic acid	BRL	U	µg/kg dry	243	4.42	1	"	"	"	"	"
100-51-6	Benzyl alcohol	BRL	U	µg/kg dry	243	7.89	1	"	"	"	"	"
111-91-1	Bis(2-chloroethoxy)methane	BRL	U	µg/kg dry	243	4.92	1	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 6 SA70868-06	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

Semivolatile Organic Compounds by GCMS

Semivolatile Organic Compounds by SW846 8270C

Prepared by method SW846 3550B

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
111-44-4	Bis(2-chloroethyl)ether	BRL	U	µg/kg dry	243	3.44	1	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
108-60-1	Bis(2-chloroisopropyl)ether	BRL	U	µg/kg dry	243	4.42	1	"	"	"	"	"
117-81-7	Bis(2-ethylhexyl)phthalate	BRL	U	µg/kg dry	243	46.7	1	"	"	"	"	"
101-55-3	4-Bromophenyl phenyl ether	BRL	U	µg/kg dry	243	11.3	1	"	"	"	"	"
85-68-7	Butyl benzyl phthalate	BRL	U	µg/kg dry	243	28.0	1	"	"	"	"	"
86-74-8	Carbazole	BRL	U	µg/kg dry	243	8.85	1	"	"	"	"	"
59-50-7	4-Chloro-3-methylphenol	BRL	U	µg/kg dry	243	8.85	1	"	"	"	"	"
106-47-8	4-Chloroaniline	BRL	U	µg/kg dry	243	23.6	1	"	"	"	"	"
91-58-7	2-Chloronaphthalene	BRL	U	µg/kg dry	243	3.47	1	"	"	"	"	"
95-57-8	2-Chlorophenol	BRL	U	µg/kg dry	243	4.92	1	"	"	"	"	"
7005-72-3	4-Chlorophenyl phenyl ether	BRL	U	µg/kg dry	243	2.95	1	"	"	"	"	"
218-01-9	Chrysene	33.4	J	µg/kg dry	243	3.47	1	"	"	"	"	"
53-70-3	Dibenzo (a,h) anthracene	BRL	U	µg/kg dry	243	3.91	1	"	"	"	"	"
132-64-9	Dibenzofuran	BRL	U	µg/kg dry	243	2.95	1	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL	U	µg/kg dry	243	0.118	1	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL	U	µg/kg dry	243	10.3	1	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL	U	µg/kg dry	243	10.8	1	"	"	"	"	"
91-94-1	3,3'-Dichlorobenzidine	BRL	U	µg/kg dry	243	17.7	1	"	"	"	"	"
120-83-2	2,4-Dichlorophenol	BRL	U	µg/kg dry	243	6.41	1	"	"	"	"	"
84-66-2	Diethyl phthalate	BRL	U	µg/kg dry	243	7.89	1	"	"	"	"	"
131-11-3	Dimethyl phthalate	BRL	U	µg/kg dry	243	6.86	1	"	"	"	"	"
105-67-9	2,4-Dimethylphenol	BRL	U	µg/kg dry	243	11.3	1	"	"	"	"	"
84-74-2	Di-n-butyl phthalate	BRL	U	µg/kg dry	243	6.41	1	"	"	"	"	"
534-52-1	4,6-Dinitro-2-methylphenol	BRL	U	µg/kg dry	243	5.90	1	"	"	"	"	"
51-28-5	2,4-Dinitrophenol	BRL	U	µg/kg dry	243	15.3	1	"	"	"	"	"
121-14-2	2,4-Dinitrotoluene	BRL	U	µg/kg dry	243	10.3	1	"	"	"	"	"
606-20-2	2,6-Dinitrotoluene	BRL	U	µg/kg dry	243	5.90	1	"	"	"	"	"
117-84-0	Di-n-octyl phthalate	BRL	U	µg/kg dry	243	11.8	1	"	"	"	"	"
206-44-0	Fluoranthene	69.8	J	µg/kg dry	243	5.90	1	"	"	"	"	"
86-73-7	Fluorene	BRL	U	µg/kg dry	243	5.90	1	"	"	"	"	"
118-74-1	Hexachlorobenzene	BRL	U	µg/kg dry	243	18.2	1	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL	U	µg/kg dry	243	27.6	1	"	"	"	"	"
77-47-4	Hexachlorocyclopentadiene	BRL	U	µg/kg dry	243	18.2	1	"	"	"	"	"
67-72-1	Hexachloroethane	BRL	U	µg/kg dry	243	25.1	1	"	"	"	"	"
193-39-5	Indeno (1,2,3-cd) pyrene	BRL	U	µg/kg dry	243	11.3	1	"	"	"	"	"
90-12-0	1-Methylnaphthalene	BRL	U	µg/kg dry	243	0.0811	1	"	"	"	"	"
78-59-1	Isophorone	BRL	U	µg/kg dry	243	14.7	1	"	"	"	"	"
91-57-6	2-Methylnaphthalene	BRL	U	µg/kg dry	243	5.38	1	"	"	"	"	"
95-48-7	2-Methylphenol	BRL	U	µg/kg dry	243	10.3	1	"	"	"	"	"
108-39-4, 106-44-5	3,4-Methylphenol	BRL	U	µg/kg dry	243	5.90	1	"	"	"	"	"
91-20-3	Naphthalene	BRL	U	µg/kg dry	243	9.36	1	"	"	"	"	"
88-74-4	2-Nitroaniline	BRL	U	µg/kg dry	243	2.95	1	"	"	"	"	"
99-09-2	3-Nitroaniline	BRL	U	µg/kg dry	243	8.33	1	"	"	"	"	"
100-01-6	4-Nitroaniline	BRL	U	µg/kg dry	973	9.36	1	"	"	"	"	"
98-95-3	Nitrobenzene	BRL	U	µg/kg dry	243	8.85	1	"	"	"	"	"
88-75-5	2-Nitrophenol	BRL	U	µg/kg dry	243	11.3	1	"	"	"	"	"
100-02-7	4-Nitrophenol	BRL	U	µg/kg dry	973	12.8	1	"	"	"	"	"
62-75-9	N-Nitrosodimethylamine	BRL	U	µg/kg dry	243	5.41	1	"	"	"	"	"
621-64-7	N-Nitrosodi-n-propylamine	BRL	U	µg/kg dry	243	29.5	1	"	"	"	"	"
86-30-6	N-Nitrosodiphenylamine	BRL	U	µg/kg dry	243	9.36	1	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 6 SA70868-06	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS												
Semivolatile Organic Compounds by SW846 8270C												
Prepared by method SW846 3550B												
87-86-5	Pentachlorophenol	BRL	U	µg/kg dry	243	15.7	1	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
85-01-8	Phenanthrene	56.0	J	µg/kg dry	243	11.3	1	"	"	"	"	"
108-95-2	Phenol	BRL	U	µg/kg dry	243	4.92	1	"	"	"	"	"
129-00-0	Pyrene	64.4	J	µg/kg dry	243	17.3	1	"	"	"	"	"
110-86-1	Pyridine	BRL	U	µg/kg dry	243	4.92	1	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL	U	µg/kg dry	243	3.44	1	"	"	"	"	"
95-95-4	2,4,5-Trichlorophenol	BRL	U	µg/kg dry	243	4.92	1	"	"	"	"	"
88-06-2	2,4,6-Trichlorophenol	BRL	U	µg/kg dry	243	4.92	1	"	"	"	"	"
82-68-8	Pentachloronitrobenzene	BRL	U	µg/kg dry	243	122	1	"	"	"	"	"
95-94-3	1,2,4,5-Tetrachlorobenzene	BRL	U	µg/kg dry	243	122	1	"	"	"	"	"
Surrogate recoveries:												
321-60-8	*2-Fluorobiphenyl*	*63*		*30-130 %*				"	"	"	"	"
367-12-4	*2-Fluorophenol*	*59*		*15-110 %*				"	"	"	"	"
4165-60-0	*Nitrobenzene-d5*	*55*		*30-130 %*				"	"	"	"	"
4165-62-2	*Phenol-d5*	*53*		*15-110 %*				"	"	"	"	"
1718-51-0	*Terphenyl-dl4*	*60*		*30-130 %*				"	"	"	"	"
118-79-6	*2,4,6-Tribromophenol*	*70*		*15-110 %*				"	"	"	"	"
Total Metals by EPA 6000/7000 Series Methods												
7439-97-6	Mercury	0.401		mg/kg dry	0.0378	0.0090	1	SW846 7471A	16-Nov-07	19-Nov-07	7111330	CRM
Total Metals by EPA 200 Series Methods												
7440-22-4	Silver	BRL	U	mg/kg dry	1.92	0.448	1	EPA 200.7	16-Nov-07	21-Nov-07	7111328	SA
7440-38-2	Arsenic	1.87	J	mg/kg dry	1.92	0.294	1	"	"	"	"	"
7440-39-3	Barium	20.6		mg/kg dry	1.28	0.215	1	"	"	"	"	"
7440-41-7	Beryllium	0.237	J	mg/kg dry	0.639	0.142	1	"	"	"	"	"
7440-43-9	Cadmium	0.211	J	mg/kg dry	0.639	0.0217	1	"	"	"	"	"
7440-47-3	Chromium	73.0		mg/kg dry	1.28	0.370	1	"	"	"	"	"
7440-50-8	Copper	47.5		mg/kg dry	1.28	0.248	1	"	"	"	"	"
7439-96-5	Manganese	74.0		mg/kg dry	1.28	0.358	1	"	"	"	"	"
7440-02-0	Nickel	2.94		mg/kg dry	1.28	0.125	1	"	"	"	"	"
7439-92-1	Lead	62.7		mg/kg dry	1.92	0.199	1	"	"	"	"	"
7440-36-0	Antimony	BRL	U	mg/kg dry	3.84	0.467	1	"	"	"	"	"
7782-49-2	Selenium	BRL	U	mg/kg dry	1.92	0.413	1	"	"	"	"	"
7440-28-0	Thallium	1.06	J	mg/kg dry	3.84	0.600	1	"	"	"	"	"
7440-62-2	Vanadium	8.04		mg/kg dry	1.92	0.949	1	"	"	"	"	"
7440-66-6	Zinc	70.7		mg/kg dry	1.28	0.467	1	"	"	"	"	"
General Chemistry Parameters												
	% Solids	70.1		%			1	SM2540 G Mod.	16-Nov-07	16-Nov-07	7111396	DG

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 7 SA70868-07	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds												
	VOC Extraction	Field extracted		N/A			1	VOC Soil Extraction	12-Nov-07	12-Nov-07	7111029	DG
Volatile Organic Compounds						Initial weight: 17.59 g						
Prepared by method SW846 5030 Soil (high level)												
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon	BRL	U	µg/kg dry	87.8	36.0	50	SW 846 8260B	15-Nov-07	16-Nov-07	7111331	adu
67-64-1	Acetone	BRL	U	µg/kg dry	878	770	50	"	"	"	"	"
107-13-1	Acrylonitrile	BRL	U	µg/kg dry	87.8	71.1	50	"	"	"	"	"
71-43-2	Benzene	BRL	U	µg/kg dry	87.8	9.7	50	"	"	"	"	"
108-86-1	Bromobenzene	BRL	U	µg/kg dry	87.8	14.1	50	"	"	"	"	"
74-97-5	Bromochloromethane	BRL	U	µg/kg dry	87.8	7.9	50	"	"	"	"	"
75-27-4	Bromodichloromethane	BRL	U	µg/kg dry	87.8	5.3	50	"	"	"	"	"
75-25-2	Bromoform	BRL	U	µg/kg dry	87.8	15.8	50	"	"	"	"	"
74-83-9	Bromomethane	BRL	U	µg/kg dry	176	17.6	50	"	"	"	"	"
78-93-3	2-Butanone (MEK)	BRL	U	µg/kg dry	878	62.4	50	"	"	"	"	"
104-51-8	n-Butylbenzene	BRL	U	µg/kg dry	87.8	7.9	50	"	"	"	"	"
135-98-8	sec-Butylbenzene	BRL	U	µg/kg dry	87.8	10.5	50	"	"	"	"	"
98-06-6	tert-Butylbenzene	BRL	U	µg/kg dry	87.8	7.9	50	"	"	"	"	"
75-15-0	Carbon disulfide	BRL	U	µg/kg dry	439	7.9	50	"	"	"	"	"
56-23-5	Carbon tetrachloride	BRL	U	µg/kg dry	87.8	8.8	50	"	"	"	"	"
108-90-7	Chlorobenzene	BRL	U	µg/kg dry	87.8	11.4	50	"	"	"	"	"
75-00-3	Chloroethane	BRL	U	µg/kg dry	176	19.3	50	"	"	"	"	"
67-66-3	Chloroform	BRL	U	µg/kg dry	87.8	7.0	50	"	"	"	"	"
74-87-3	Chloromethane	BRL	U	µg/kg dry	176	7.9	50	"	"	"	"	"
95-49-8	2-Chlorotoluene	BRL	U	µg/kg dry	87.8	8.8	50	"	"	"	"	"
106-43-4	4-Chlorotoluene	BRL	U	µg/kg dry	87.8	10.5	50	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloropropane	BRL	U	µg/kg dry	176	20.2	50	"	"	"	"	"
124-48-1	Dibromochloromethane	BRL	U	µg/kg dry	87.8	13.2	50	"	"	"	"	"
106-93-4	1,2-Dibromoethane (EDB)	BRL	U	µg/kg dry	87.8	6.1	50	"	"	"	"	"
74-95-3	Dibromomethane	BRL	U	µg/kg dry	87.8	8.8	50	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL	U	µg/kg dry	87.8	20.2	50	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL	U	µg/kg dry	87.8	8.8	50	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL	U	µg/kg dry	87.8	12.3	50	"	"	"	"	"
75-71-8	Dichlorodifluoromethane (Freon12)	BRL	U	µg/kg dry	176	11.4	50	"	"	"	"	"
75-34-3	1,1-Dichloroethane	BRL	U	µg/kg dry	87.8	6.1	50	"	"	"	"	"
107-06-2	1,2-Dichloroethane	BRL	U	µg/kg dry	87.8	7.9	50	"	"	"	"	"
75-35-4	1,1-Dichloroethene	BRL	U	µg/kg dry	87.8	7.0	50	"	"	"	"	"
156-59-2	cis-1,2-Dichloroethene	BRL	U	µg/kg dry	87.8	6.1	50	"	"	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL	U	µg/kg dry	87.8	8.8	50	"	"	"	"	"
78-87-5	1,2-Dichloropropane	BRL	U	µg/kg dry	87.8	7.9	50	"	"	"	"	"
142-28-9	1,3-Dichloropropane	BRL	U	µg/kg dry	87.8	7.9	50	"	"	"	"	"
594-20-7	2,2-Dichloropropane	BRL	U	µg/kg dry	87.8	65.0	50	"	"	"	"	"
563-58-6	1,1-Dichloropropene	BRL	U	µg/kg dry	87.8	11.4	50	"	"	"	"	"
10061-01-5	cis-1,3-Dichloropropene	BRL	U	µg/kg dry	87.8	10.5	50	"	"	"	"	"
10061-02-6	trans-1,3-Dichloropropene	BRL	U	µg/kg dry	87.8	7.9	50	"	"	"	"	"
100-41-4	Ethylbenzene	BRL	U	µg/kg dry	87.8	10.5	50	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL	U	µg/kg dry	87.8	14.1	50	"	"	"	"	"
591-78-6	2-Hexanone (MBK)	BRL	U	µg/kg dry	878	11.4	50	"	"	"	"	"
98-82-8	Isopropylbenzene	BRL	U	µg/kg dry	87.8	11.4	50	"	"	"	"	"
99-87-6	4-Isopropyltoluene	BRL	U	µg/kg dry	87.8	10.5	50	"	"	"	"	"
1634-04-4	Methyl tert-butyl ether	BRL	U	µg/kg dry	87.8	8.8	50	"	"	"	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	U	µg/kg dry	878	9.7	50	"	"	"	"	"
75-09-2	Methylene chloride	BRL	U	µg/kg dry	878	42.2	50	"	"	"	"	"
91-20-3	Naphthalene	BRL	U	µg/kg dry	87.8	15.8	50	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 7 SA70868-07	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds												
Volatile Organic Compounds							Initial weight: 17.59 g					
Prepared by method SW846 5030 Soil (high level)												
103-65-1	n-Propylbenzene	BRL	U	µg/kg dry	87.8	12.3	50	SW 846 8260B	15-Nov-07	16-Nov-07	7111331	adu
100-42-5	Styrene	BRL	U	µg/kg dry	87.8	80.8	50	"	"	"	"	"
630-20-6	1,1,1,2-Tetrachloroethane	BRL	U	µg/kg dry	87.8	14.9	50	"	"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	BRL	U	µg/kg dry	87.8	14.1	50	"	"	"	"	"
127-18-4	Tetrachloroethene	BRL	U	µg/kg dry	87.8	5.3	50	"	"	"	"	"
108-88-3	Toluene	BRL	U	µg/kg dry	87.8	14.1	50	"	"	"	"	"
87-61-6	1,2,3-Trichlorobenzene	BRL	U	µg/kg dry	87.8	11.4	50	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL	U	µg/kg dry	87.8	7.0	50	"	"	"	"	"
71-55-6	1,1,1-Trichloroethane	BRL	U	µg/kg dry	87.8	10.5	50	"	"	"	"	"
79-00-5	1,1,2-Trichloroethane	BRL	U	µg/kg dry	87.8	6.1	50	"	"	"	"	"
79-01-6	Trichloroethene	BRL	U	µg/kg dry	87.8	9.7	50	"	"	"	"	"
75-69-4	Trichlorofluoromethane (Freon 11)	BRL	U	µg/kg dry	87.8	14.1	50	"	"	"	"	"
96-18-4	1,2,3-Trichloropropane	BRL	U	µg/kg dry	87.8	8.8	50	"	"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	BRL	U	µg/kg dry	87.8	10.5	50	"	"	"	"	"
108-67-8	1,3,5-Trimethylbenzene	BRL	U	µg/kg dry	87.8	10.5	50	"	"	"	"	"
75-01-4	Vinyl chloride	BRL	U	µg/kg dry	87.8	10.5	50	"	"	"	"	"
1330-20-7	m,p-Xylene	BRL	U	µg/kg dry	176	20.2	50	"	"	"	"	"
95-47-6	o-Xylene	BRL	U	µg/kg dry	87.8	15.8	50	"	"	"	"	"
109-99-9	Tetrahydrofuran	BRL	U	µg/kg dry	878	36.0	50	"	"	"	"	"
60-29-7	Ethyl ether	BRL	U	µg/kg dry	87.8	15.8	50	"	"	"	"	"
994-05-8	Tert-amyl methyl ether	BRL	U	µg/kg dry	87.8	9.7	50	"	"	"	"	"
637-92-3	Ethyl tert-butyl ether	BRL	U	µg/kg dry	87.8	4.4	50	"	"	"	"	"
108-20-3	Di-isopropyl ether	BRL	U	µg/kg dry	87.8	8.8	50	"	"	"	"	"
75-65-0	Tert-Butanol / butyl alcohol	BRL	U	µg/kg dry	878	651	50	"	"	"	"	"
123-91-1	1,4-Dioxane	BRL	U	µg/kg dry	1760	428	50	"	"	"	"	"
110-57-6	trans-1,4-Dichloro-2-butene	BRL	U	µg/kg dry	439	220	50	"	"	"	"	"
64-17-5	Ethanol	BRL	U	µg/kg dry	43900	7830	50	"	"	"	"	"
Surrogate recoveries:												
460-00-4	*4-Bromofluorobenzene*	*104*		*70-130 %*				"	"	"	"	"
2037-26-5	*Toluene-d8*	*106*		*70-130 %*				"	"	"	"	"
17060-07-0	*1,2-Dichloroethane-d4*	*117*		*70-130 %*				"	"	"	"	"
1868-53-7	*Dibromofluoromethane*	*99*		*70-130 %*				"	"	"	"	"
Semivolatile Organic Compounds by GCMS												
Semivolatile Organic Compounds by SW846 8270C												
Prepared by method SW846 3550B												
83-32-9	Acenaphthene	BRL	U	µg/kg dry	250	6.07	1	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
208-96-8	Acenaphthylene	BRL	U	µg/kg dry	250	7.58	1	"	"	"	"	"
62-53-3	Aniline	BRL	U	µg/kg dry	250	19.3	1	"	"	"	"	"
120-12-7	Anthracene	42.5	J	µg/kg dry	250	7.58	1	"	"	"	"	"
1912-24-9	Atrazine	BRL	U	µg/kg dry	250	6.60	1	"	"	"	"	"
103-33-3	Azobenzene/Diphenyldiazine	BRL	U	µg/kg dry	250	6.60	1	"	"	"	"	"
92-87-5	Benzidine	BRL	U	µg/kg dry	250	28.4	1	"	"	"	"	"
56-55-3	Benzo (a) anthracene	170	J	µg/kg dry	250	16.2	1	"	"	"	"	"
50-32-8	Benzo (a) pyrene	154	J	µg/kg dry	250	8.57	1	"	"	"	"	"
205-99-2	Benzo (b) fluoranthene	136	J	µg/kg dry	250	33.4	1	"	"	"	"	"
191-24-2	Benzo (g,h,i) perylene	58.2	J	µg/kg dry	250	7.05	1	"	"	"	"	"
207-08-9	Benzo (k) fluoranthene	144	J	µg/kg dry	250	10.1	1	"	"	"	"	"
65-85-0	Benzoic acid	BRL	U	µg/kg dry	250	4.55	1	"	"	"	"	"
100-51-6	Benzyl alcohol	BRL	U	µg/kg dry	250	8.12	1	"	"	"	"	"
111-91-1	Bis(2-chloroethoxy)methane	BRL	U	µg/kg dry	250	5.06	1	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 7 SA70868-07	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS												
Semivolatile Organic Compounds by SW846 8270C												
Prepared by method SW846 3550B												
111-44-4	Bis(2-chloroethyl)ether	BRL	U	µg/kg dry	250	3.54	1	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
108-60-1	Bis(2-chloroisopropyl)ether	BRL	U	µg/kg dry	250	4.55	1	"	"	"	"	"
117-81-7	Bis(2-ethylhexyl)phthalate	BRL	U	µg/kg dry	250	48.1	1	"	"	"	"	"
101-55-3	4-Bromophenyl phenyl ether	BRL	U	µg/kg dry	250	11.6	1	"	"	"	"	"
85-68-7	Butyl benzyl phthalate	BRL	U	µg/kg dry	250	28.8	1	"	"	"	"	"
86-74-8	Carbazole	BRL	U	µg/kg dry	250	9.10	1	"	"	"	"	"
59-50-7	4-Chloro-3-methylphenol	BRL	U	µg/kg dry	250	9.10	1	"	"	"	"	"
106-47-8	4-Chloroaniline	BRL	U	µg/kg dry	250	24.3	1	"	"	"	"	"
91-58-7	2-Chloronaphthalene	BRL	U	µg/kg dry	250	3.56	1	"	"	"	"	"
95-57-8	2-Chlorophenol	BRL	U	µg/kg dry	250	5.06	1	"	"	"	"	"
7005-72-3	4-Chlorophenyl phenyl ether	BRL	U	µg/kg dry	250	3.03	1	"	"	"	"	"
218-01-9	Chrysene	176	J	µg/kg dry	250	3.56	1	"	"	"	"	"
53-70-3	Dibenzo (a,h) anthracene	BRL	U	µg/kg dry	250	4.02	1	"	"	"	"	"
132-64-9	Dibenzofuran	BRL	U	µg/kg dry	250	3.03	1	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL	U	µg/kg dry	250	0.121	1	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL	U	µg/kg dry	250	10.6	1	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL	U	µg/kg dry	250	11.1	1	"	"	"	"	"
91-94-1	3,3´-Dichlorobenzidine	BRL	U	µg/kg dry	250	18.2	1	"	"	"	"	"
120-83-2	2,4-Dichlorophenol	BRL	U	µg/kg dry	250	6.60	1	"	"	"	"	"
84-66-2	Diethyl phthalate	BRL	U	µg/kg dry	250	8.12	1	"	"	"	"	"
131-11-3	Dimethyl phthalate	BRL	U	µg/kg dry	250	7.05	1	"	"	"	"	"
105-67-9	2,4-Dimethylphenol	BRL	U	µg/kg dry	250	11.6	1	"	"	"	"	"
84-74-2	Di-n-butyl phthalate	BRL	U	µg/kg dry	250	6.60	1	"	"	"	"	"
534-52-1	4,6-Dinitro-2-methylphenol	BRL	U	µg/kg dry	250	6.07	1	"	"	"	"	"
51-28-5	2,4-Dinitrophenol	BRL	U	µg/kg dry	250	15.7	1	"	"	"	"	"
121-14-2	2,4-Dinitrotoluene	BRL	U	µg/kg dry	250	10.6	1	"	"	"	"	"
606-20-2	2,6-Dinitrotoluene	BRL	U	µg/kg dry	250	6.07	1	"	"	"	"	"
117-84-0	Di-n-octyl phthalate	BRL	U	µg/kg dry	250	12.1	1	"	"	"	"	"
206-44-0	Fluoranthene	392		µg/kg dry	250	6.07	1	"	"	"	"	"
86-73-7	Fluorene	BRL	U	µg/kg dry	250	6.07	1	"	"	"	"	"
118-74-1	Hexachlorobenzene	BRL	U	µg/kg dry	250	18.7	1	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL	U	µg/kg dry	250	28.4	1	"	"	"	"	"
77-47-4	Hexachlorocyclopentadiene	BRL	U	µg/kg dry	250	18.7	1	"	"	"	"	"
67-72-1	Hexachloroethane	BRL	U	µg/kg dry	250	25.8	1	"	"	"	"	"
193-39-5	Indeno (1,2,3-cd) pyrene	69.8	J	µg/kg dry	250	11.6	1	"	"	"	"	"
90-12-0	1-Methylnaphthalene	BRL	U	µg/kg dry	250	0.0834	1	"	"	"	"	"
78-59-1	Isophorone	BRL	U	µg/kg dry	250	15.2	1	"	"	"	"	"
91-57-6	2-Methylnaphthalene	BRL	U	µg/kg dry	250	5.54	1	"	"	"	"	"
95-48-7	2-Methylphenol	BRL	U	µg/kg dry	250	10.6	1	"	"	"	"	"
108-39-4, 106-44-5	3,4-Methylphenol	BRL	U	µg/kg dry	250	6.07	1	"	"	"	"	"
91-20-3	Naphthalene	BRL	U	µg/kg dry	250	9.63	1	"	"	"	"	"
88-74-4	2-Nitroaniline	BRL	U	µg/kg dry	250	3.03	1	"	"	"	"	"
99-09-2	3-Nitroaniline	BRL	U	µg/kg dry	250	8.57	1	"	"	"	"	"
100-01-6	4-Nitroaniline	BRL	U	µg/kg dry	1000	9.63	1	"	"	"	"	"
98-95-3	Nitrobenzene	BRL	U	µg/kg dry	250	9.10	1	"	"	"	"	"
88-75-5	2-Nitrophenol	BRL	U	µg/kg dry	250	11.6	1	"	"	"	"	"
100-02-7	4-Nitrophenol	BRL	U	µg/kg dry	1000	13.1	1	"	"	"	"	"
62-75-9	N-Nitrosodimethylamine	BRL	U	µg/kg dry	250	5.57	1	"	"	"	"	"
621-64-7	N-Nitrosodi-n-propylamine	BRL	U	µg/kg dry	250	30.3	1	"	"	"	"	"
86-30-6	N-Nitrosodiphenylamine	BRL	U	µg/kg dry	250	9.63	1	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 7 SA70868-07	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS												
Semivolatile Organic Compounds by SW846 8270C												
Prepared by method SW846 3550B												
87-86-5	Pentachlorophenol	BRL	U	µg/kg dry	250	16.2	1	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
85-01-8	Phenanthrene	180	J	µg/kg dry	250	11.6	1	"	"	"	"	"
108-95-2	Phenol	BRL	U	µg/kg dry	250	5.06	1	"	"	"	"	"
129-00-0	Pyrene	273		µg/kg dry	250	17.7	1	"	"	"	"	"
110-86-1	Pyridine	BRL	U	µg/kg dry	250	5.06	1	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL	U	µg/kg dry	250	3.54	1	"	"	"	"	"
95-95-4	2,4,5-Trichlorophenol	BRL	U	µg/kg dry	250	5.06	1	"	"	"	"	"
88-06-2	2,4,6-Trichlorophenol	BRL	U	µg/kg dry	250	5.06	1	"	"	"	"	"
82-68-8	Pentachloronitrobenzene	BRL	U	µg/kg dry	250	125	1	"	"	"	"	"
95-94-3	1,2,4,5-Tetrachlorobenzene	BRL	U	µg/kg dry	250	125	1	"	"	"	"	"
Surrogate recoveries:												
321-60-8	*2-Fluorobiphenyl*	*51*		*30-130 %*				"	"	"	"	"
367-12-4	*2-Fluorophenol*	*49*		*15-110 %*				"	"	"	"	"
4165-60-0	*Nitrobenzene-d5*	*47*		*30-130 %*				"	"	"	"	"
4165-62-2	*Phenol-d5*	*33*		*15-110 %*				"	"	"	"	"
1718-51-0	*Terphenyl-dl4*	*52*		*30-130 %*				"	"	"	"	"
118-79-6	*2,4,6-Tribromophenol*	*52*		*15-110 %*				"	"	"	"	"
Total Metals by EPA 6000/7000 Series Methods												
7439-97-6	Mercury	0.215		mg/kg dry	0.0391	0.0094	1	SW846 7471A	16-Nov-07	19-Nov-07	7111330	CRM
Total Metals by EPA 200 Series Methods												
7440-22-4	Silver	BRL	U	mg/kg dry	2.03	0.474	1	EPA 200.7	16-Nov-07	21-Nov-07	7111328	SA
7440-38-2	Arsenic	4.87		mg/kg dry	2.03	0.312	1	"	"	"	"	"
7440-39-3	Barium	48.4		mg/kg dry	1.35	0.228	1	"	"	"	"	"
7440-41-7	Beryllium	0.386	J	mg/kg dry	0.677	0.150	1	"	"	"	"	"
7440-43-9	Cadmium	0.393	J	mg/kg dry	0.677	0.0230	1	"	"	"	"	"
7440-47-3	Chromium	48.8		mg/kg dry	1.35	0.392	1	"	"	"	"	"
7440-50-8	Copper	141		mg/kg dry	1.35	0.263	1	"	"	"	"	"
7439-96-5	Manganese	91.9		mg/kg dry	1.35	0.379	1	"	"	"	"	"
7440-02-0	Nickel	3.54		mg/kg dry	1.35	0.133	1	"	"	"	"	"
7439-92-1	Lead	101		mg/kg dry	2.03	0.211	1	"	"	"	"	"
7440-36-0	Antimony	1.24	J	mg/kg dry	4.06	0.495	1	"	"	"	"	"
7782-49-2	Selenium	0.867	J	mg/kg dry	2.03	0.438	1	"	"	"	"	"
7440-28-0	Thallium	0.738	J	mg/kg dry	4.06	0.635	1	"	"	"	"	"
7440-62-2	Vanadium	7.20		mg/kg dry	2.03	1.01	1	"	"	"	"	"
7440-66-6	Zinc	70.0		mg/kg dry	1.35	0.495	1	"	"	"	"	"
General Chemistry Parameters												
	% Solids	67.2		%			1	SM2540 G Mod.	16-Nov-07	16-Nov-07	7111396	DG

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 8 SA70868-08	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds												
	VOC Extraction	Field extracted		N/A			1	VOC Soil Extraction	12-Nov-07	12-Nov-07	7111029	DG
Volatile Organic Compounds						Initial weight: 18.34 g						
Prepared by method SW846 5030 Soil (high level)												
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon	BRL	U	µg/kg dry	89.1	36.5	50	SW 846 8260B	18-Nov-07	18-Nov-07	7111480	adu
67-64-1	Acetone	BRL	U	µg/kg dry	891	782	50	"	"	"	"	"
107-13-1	Acrylonitrile	BRL	U	µg/kg dry	89.1	72.2	50	"	"	"	"	"
71-43-2	Benzene	BRL	U	µg/kg dry	89.1	9.8	50	"	"	"	"	"
108-86-1	Bromobenzene	BRL	U	µg/kg dry	89.1	14.3	50	"	"	"	"	"
74-97-5	Bromochloromethane	BRL	U	µg/kg dry	89.1	8.0	50	"	"	"	"	"
75-27-4	Bromodichloromethane	BRL	U	µg/kg dry	89.1	5.3	50	"	"	"	"	"
75-25-2	Bromoform	BRL	U	µg/kg dry	89.1	16.0	50	"	"	"	"	"
74-83-9	Bromomethane	BRL	U	µg/kg dry	178	17.8	50	"	"	"	"	"
78-93-3	2-Butanone (MEK)	BRL	U	µg/kg dry	891	63.3	50	"	"	"	"	"
104-51-8	n-Butylbenzene	BRL	U	µg/kg dry	89.1	8.0	50	"	"	"	"	"
135-98-8	sec-Butylbenzene	BRL	U	µg/kg dry	89.1	10.7	50	"	"	"	"	"
98-06-6	tert-Butylbenzene	BRL	U	µg/kg dry	89.1	8.0	50	"	"	"	"	"
75-15-0	Carbon disulfide	BRL	U	µg/kg dry	446	8.0	50	"	"	"	"	"
56-23-5	Carbon tetrachloride	BRL	U	µg/kg dry	89.1	8.9	50	"	"	"	"	"
108-90-7	Chlorobenzene	BRL	U	µg/kg dry	89.1	11.6	50	"	"	"	"	"
75-00-3	Chloroethane	BRL	U	µg/kg dry	178	19.6	50	"	"	"	"	"
67-66-3	Chloroform	BRL	U	µg/kg dry	89.1	7.1	50	"	"	"	"	"
74-87-3	Chloromethane	BRL	U	µg/kg dry	178	8.0	50	"	"	"	"	"
95-49-8	2-Chlorotoluene	BRL	U	µg/kg dry	89.1	8.9	50	"	"	"	"	"
106-43-4	4-Chlorotoluene	BRL	U	µg/kg dry	89.1	10.7	50	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloropropane	BRL	U	µg/kg dry	178	20.5	50	"	"	"	"	"
124-48-1	Dibromochloromethane	BRL	U	µg/kg dry	89.1	13.4	50	"	"	"	"	"
106-93-4	1,2-Dibromoethane (EDB)	BRL	U	µg/kg dry	89.1	6.2	50	"	"	"	"	"
74-95-3	Dibromomethane	BRL	U	µg/kg dry	89.1	8.9	50	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL	U	µg/kg dry	89.1	20.5	50	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL	U	µg/kg dry	89.1	8.9	50	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL	U	µg/kg dry	89.1	12.5	50	"	"	"	"	"
75-71-8	Dichlorodifluoromethane (Freon12)	BRL	U	µg/kg dry	178	11.6	50	"	"	"	"	"
75-34-3	1,1-Dichloroethane	BRL	U	µg/kg dry	89.1	6.2	50	"	"	"	"	"
107-06-2	1,2-Dichloroethane	BRL	U	µg/kg dry	89.1	8.0	50	"	"	"	"	"
75-35-4	1,1-Dichloroethene	BRL	U	µg/kg dry	89.1	7.1	50	"	"	"	"	"
156-59-2	cis-1,2-Dichloroethene	BRL	U	µg/kg dry	89.1	6.2	50	"	"	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL	U	µg/kg dry	89.1	8.9	50	"	"	"	"	"
78-87-5	1,2-Dichloropropane	BRL	U	µg/kg dry	89.1	8.0	50	"	"	"	"	"
142-28-9	1,3-Dichloropropane	BRL	U	µg/kg dry	89.1	8.0	50	"	"	"	"	"
594-20-7	2,2-Dichloropropane	BRL	U	µg/kg dry	89.1	66.0	50	"	"	"	"	"
563-58-6	1,1-Dichloropropene	BRL	U	µg/kg dry	89.1	11.6	50	"	"	"	"	"
10061-01-5	cis-1,3-Dichloropropene	BRL	U	µg/kg dry	89.1	10.7	50	"	"	"	"	"
10061-02-6	trans-1,3-Dichloropropene	BRL	U	µg/kg dry	89.1	8.0	50	"	"	"	"	"
100-41-4	Ethylbenzene	BRL	U	µg/kg dry	89.1	10.7	50	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL	U	µg/kg dry	89.1	14.3	50	"	"	"	"	"
591-78-6	2-Hexanone (MBK)	BRL	U	µg/kg dry	891	11.6	50	"	"	"	"	"
98-82-8	Isopropylbenzene	BRL	U	µg/kg dry	89.1	11.6	50	"	"	"	"	"
99-87-6	4-Isopropyltoluene	BRL	U	µg/kg dry	89.1	10.7	50	"	"	"	"	"
1634-04-4	Methyl tert-butyl ether	BRL	U	µg/kg dry	89.1	8.9	50	"	"	"	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	U	µg/kg dry	891	9.8	50	"	"	"	"	"
75-09-2	Methylene chloride	BRL	U	µg/kg dry	891	42.8	50	"	"	"	"	"
91-20-3	Naphthalene	BRL	U	µg/kg dry	89.1	16.0	50	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 8 SA70868-08	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds												
Volatile Organic Compounds							Initial weight: 18.34 g					
Prepared by method SW846 5030 Soil (high level)												
103-65-1	n-Propylbenzene	BRL	U	µg/kg dry	89.1	12.5	50	SW 846 8260B	18-Nov-07	18-Nov-07	7111480	adu
100-42-5	Styrene	BRL	U	µg/kg dry	89.1	82.0	50	"	"	"	"	"
630-20-6	1,1,1,2-Tetrachloroethane	BRL	U	µg/kg dry	89.1	15.2	50	"	"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	BRL	U	µg/kg dry	89.1	14.3	50	"	"	"	"	"
127-18-4	Tetrachloroethene	BRL	U	µg/kg dry	89.1	5.3	50	"	"	"	"	"
108-88-3	Toluene	200		µg/kg dry	89.1	14.3	50	"	"	"	"	"
87-61-6	1,2,3-Trichlorobenzene	BRL	U	µg/kg dry	89.1	11.6	50	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL	U	µg/kg dry	89.1	7.1	50	"	"	"	"	"
71-55-6	1,1,1-Trichloroethane	BRL	U	µg/kg dry	89.1	10.7	50	"	"	"	"	"
79-00-5	1,1,2-Trichloroethane	BRL	U	µg/kg dry	89.1	6.2	50	"	"	"	"	"
79-01-6	Trichloroethene	BRL	U	µg/kg dry	89.1	9.8	50	"	"	"	"	"
75-69-4	Trichlorofluoromethane (Freon 11)	BRL	U	µg/kg dry	89.1	14.3	50	"	"	"	"	"
96-18-4	1,2,3-Trichloropropane	BRL	U	µg/kg dry	89.1	8.9	50	"	"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	BRL	U	µg/kg dry	89.1	10.7	50	"	"	"	"	"
108-67-8	1,3,5-Trimethylbenzene	BRL	U	µg/kg dry	89.1	10.7	50	"	"	"	"	"
75-01-4	Vinyl chloride	BRL	U	µg/kg dry	89.1	10.7	50	"	"	"	"	"
1330-20-7	m,p-Xylene	BRL	U	µg/kg dry	178	20.5	50	"	"	"	"	"
95-47-6	o-Xylene	BRL	U	µg/kg dry	89.1	16.0	50	"	"	"	"	"
109-99-9	Tetrahydrofuran	BRL	U	µg/kg dry	891	36.5	50	"	"	"	"	"
60-29-7	Ethyl ether	BRL	U	µg/kg dry	89.1	16.0	50	"	"	"	"	"
994-05-8	Tert-amyl methyl ether	BRL	U	µg/kg dry	89.1	9.8	50	"	"	"	"	"
637-92-3	Ethyl tert-butyl ether	BRL	U	µg/kg dry	89.1	4.5	50	"	"	"	"	"
108-20-3	Di-isopropyl ether	BRL	U	µg/kg dry	89.1	8.9	50	"	"	"	"	"
75-65-0	Tert-Butanol / butyl alcohol	BRL	U	µg/kg dry	891	660	50	"	"	"	"	"
123-91-1	1,4-Dioxane	BRL	U	µg/kg dry	1780	434	50	"	"	"	"	"
110-57-6	trans-1,4-Dichloro-2-butene	BRL	U	µg/kg dry	446	223	50	"	"	"	"	"
64-17-5	Ethanol	BRL	U	µg/kg dry	44600	7940	50	"	"	"	"	"
Surrogate recoveries:												
460-00-4	*4-Bromofluorobenzene*	*101*		*70-130 %*				"	"	"	"	"
2037-26-5	*Toluene-d8*	*102*		*70-130 %*				"	"	"	"	"
17060-07-0	*1,2-Dichloroethane-d4*	*98*		*70-130 %*				"	"	"	"	"
1868-53-7	*Dibromofluoromethane*	*94*		*70-130 %*				"	"	"	"	"
Semivolatile Organic Compounds by GCMS												
Semivolatile Organic Compounds by SW846 8270C												
Prepared by method SW846 3550B												
83-32-9	Acenaphthene	BRL	U	µg/kg dry	1290	31.3	5	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
208-96-8	Acenaphthylene	1,010	J	µg/kg dry	1290	39.1	5	"	"	"	"	"
62-53-3	Aniline	BRL	U	µg/kg dry	1290	99.4	5	"	"	"	"	"
120-12-7	Anthracene	686	J	µg/kg dry	1290	39.1	5	"	"	"	"	"
1912-24-9	Atrazine	BRL	U	µg/kg dry	1290	34.1	5	"	"	"	"	"
103-33-3	Azobenzene/Diphenyldiazine	BRL	U	µg/kg dry	1290	34.1	5	"	"	"	"	"
92-87-5	Benzidine	BRL	U	µg/kg dry	1290	146	5	"	"	"	"	"
56-55-3	Benzo (a) anthracene	3,520		µg/kg dry	1290	83.4	5	"	"	"	"	"
50-32-8	Benzo (a) pyrene	3,540		µg/kg dry	1290	44.2	5	"	"	"	"	"
205-99-2	Benzo (b) fluoranthene	3,650		µg/kg dry	1290	172	5	"	"	"	"	"
191-24-2	Benzo (g,h,i) perylene	1,620		µg/kg dry	1290	36.4	5	"	"	"	"	"
207-08-9	Benzo (k) fluoranthene	3,560		µg/kg dry	1290	52.1	5	"	"	"	"	"
65-85-0	Benzoic acid	BRL	U	µg/kg dry	1290	23.5	5	"	"	"	"	"
100-51-6	Benzyl alcohol	BRL	U	µg/kg dry	1290	41.9	5	"	"	"	"	"
111-91-1	Bis(2-chloroethoxy)methane	BRL	U	µg/kg dry	1290	26.1	5	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 8 SA70868-08	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS												
Semivolatile Organic Compounds by SW846 8270C												
Prepared by method SW846 3550B												
111-44-4	Bis(2-chloroethyl)ether	BRL	U	µg/kg dry	1290	18.3	5	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
108-60-1	Bis(2-chloroisopropyl)ether	BRL	U	µg/kg dry	1290	23.5	5	"	"	"	"	"
117-81-7	Bis(2-ethylhexyl)phthalate	BRL	U	µg/kg dry	1290	248	5	"	"	"	"	"
101-55-3	4-Bromophenyl phenyl ether	BRL	U	µg/kg dry	1290	59.9	5	"	"	"	"	"
85-68-7	Butyl benzyl phthalate	BRL	U	µg/kg dry	1290	149	5	"	"	"	"	"
86-74-8	Carbazole	196	J	µg/kg dry	1290	47.0	5	"	"	"	"	"
59-50-7	4-Chloro-3-methylphenol	BRL	U	µg/kg dry	1290	47.0	5	"	"	"	"	"
106-47-8	4-Chloroaniline	BRL	U	µg/kg dry	1290	125	5	"	"	"	"	"
91-58-7	2-Chloronaphthalene	BRL	U	µg/kg dry	1290	18.4	5	"	"	"	"	"
95-57-8	2-Chlorophenol	BRL	U	µg/kg dry	1290	26.1	5	"	"	"	"	"
7005-72-3	4-Chlorophenyl phenyl ether	BRL	U	µg/kg dry	1290	15.7	5	"	"	"	"	"
218-01-9	Chrysene	4,190		µg/kg dry	1290	18.4	5	"	"	"	"	"
53-70-3	Dibenzo (a,h) anthracene	355	J	µg/kg dry	1290	20.7	5	"	"	"	"	"
132-64-9	Dibenzofuran	BRL	U	µg/kg dry	1290	15.7	5	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL	U	µg/kg dry	1290	0.626	5	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL	U	µg/kg dry	1290	54.8	5	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL	U	µg/kg dry	1290	57.5	5	"	"	"	"	"
91-94-1	3,3´-Dichlorobenzidine	BRL	U	µg/kg dry	1290	93.9	5	"	"	"	"	"
120-83-2	2,4-Dichlorophenol	BRL	U	µg/kg dry	1290	34.1	5	"	"	"	"	"
84-66-2	Diethyl phthalate	BRL	U	µg/kg dry	1290	41.9	5	"	"	"	"	"
131-11-3	Dimethyl phthalate	BRL	U	µg/kg dry	1290	36.4	5	"	"	"	"	"
105-67-9	2,4-Dimethylphenol	BRL	U	µg/kg dry	1290	59.9	5	"	"	"	"	"
84-74-2	Di-n-butyl phthalate	BRL	U	µg/kg dry	1290	34.1	5	"	"	"	"	"
534-52-1	4,6-Dinitro-2-methylphenol	BRL	U	µg/kg dry	1290	31.3	5	"	"	"	"	"
51-28-5	2,4-Dinitrophenol	BRL	U	µg/kg dry	1290	81.0	5	"	"	"	"	"
121-14-2	2,4-Dinitrotoluene	BRL	U	µg/kg dry	1290	54.8	5	"	"	"	"	"
606-20-2	2,6-Dinitrotoluene	BRL	U	µg/kg dry	1290	31.3	5	"	"	"	"	"
117-84-0	Di-n-octyl phthalate	BRL	U	µg/kg dry	1290	62.6	5	"	"	"	"	"
206-44-0	Fluoranthene	7,850		µg/kg dry	1290	31.3	5	"	"	"	"	"
86-73-7	Fluorene	264	J	µg/kg dry	1290	31.3	5	"	"	"	"	"
118-74-1	Hexachlorobenzene	BRL	U	µg/kg dry	1290	96.7	5	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL	U	µg/kg dry	1290	146	5	"	"	"	"	"
77-47-4	Hexachlorocyclopentadiene	BRL	U	µg/kg dry	1290	96.7	5	"	"	"	"	"
67-72-1	Hexachloroethane	BRL	U	µg/kg dry	1290	133	5	"	"	"	"	"
193-39-5	Indeno (1,2,3-cd) pyrene	1,750		µg/kg dry	1290	59.9	5	"	"	"	"	"
90-12-0	1-Methylnaphthalene	BRL	U	µg/kg dry	1290	0.431	5	"	"	"	"	"
78-59-1	Isophorone	BRL	U	µg/kg dry	1290	78.3	5	"	"	"	"	"
91-57-6	2-Methylnaphthalene	BRL	U	µg/kg dry	1290	28.6	5	"	"	"	"	"
95-48-7	2-Methylphenol	BRL	U	µg/kg dry	1290	54.8	5	"	"	"	"	"
108-39-4, 106-44-5	3,4-Methylphenol	BRL	U	µg/kg dry	1290	31.3	5	"	"	"	"	"
91-20-3	Naphthalene	BRL	U	µg/kg dry	1290	49.7	5	"	"	"	"	"
88-74-4	2-Nitroaniline	BRL	U	µg/kg dry	1290	15.7	5	"	"	"	"	"
99-09-2	3-Nitroaniline	BRL	U	µg/kg dry	1290	44.2	5	"	"	"	"	"
100-01-6	4-Nitroaniline	BRL	U	µg/kg dry	5170	49.7	5	"	"	"	"	"
98-95-3	Nitrobenzene	BRL	U	µg/kg dry	1290	47.0	5	"	"	"	"	"
88-75-5	2-Nitrophenol	BRL	U	µg/kg dry	1290	59.9	5	"	"	"	"	"
100-02-7	4-Nitrophenol	BRL	U	µg/kg dry	5170	67.7	5	"	"	"	"	"
62-75-9	N-Nitrosodimethylamine	BRL	U	µg/kg dry	1290	28.7	5	"	"	"	"	"
621-64-7	N-Nitrosodi-n-propylamine	BRL	U	µg/kg dry	1290	157	5	"	"	"	"	"
86-30-6	N-Nitrosodiphenylamine	BRL	U	µg/kg dry	1290	49.7	5	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 8 SA70868-08	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS												
Semivolatile Organic Compounds by SW846 8270C												
Prepared by method SW846 3550B												
87-86-5	Pentachlorophenol	BRL	U	µg/kg dry	1290	83.4	5	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
85-01-8	Phenanthrene	2,920		µg/kg dry	1290	59.9	5	"	"	"	"	"
108-95-2	Phenol	BRL	U	µg/kg dry	1290	26.1	5	"	"	"	"	"
129-00-0	Pyrene	6,850		µg/kg dry	1290	91.6	5	"	"	"	"	"
110-86-1	Pyridine	BRL	U	µg/kg dry	1290	26.1	5	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL	U	µg/kg dry	1290	18.3	5	"	"	"	"	"
95-95-4	2,4,5-Trichlorophenol	BRL	U	µg/kg dry	1290	26.1	5	"	"	"	"	"
88-06-2	2,4,6-Trichlorophenol	BRL	U	µg/kg dry	1290	26.1	5	"	"	"	"	"
82-68-8	Pentachloronitrobenzene	BRL	U	µg/kg dry	1290	646	5	"	"	"	"	"
95-94-3	1,2,4,5-Tetrachlorobenzene	BRL	U	µg/kg dry	1290	646	5	"	"	"	"	"
Surrogate recoveries:												
321-60-8	*2-Fluorobiphenyl*	*54*		*30-130 %*				"	"	"	"	"
367-12-4	*2-Fluorophenol*	*52*		*15-110 %*				"	"	"	"	"
4165-60-0	*Nitrobenzene-d5*	*38*		*30-130 %*				"	"	"	"	"
4165-62-2	*Phenol-d5*	*37*		*15-110 %*				"	"	"	"	"
1718-51-0	*Terphenyl-dl4*	*55*		*30-130 %*				"	"	"	"	"
118-79-6	*2,4,6-Tribromophenol*	*51*		*15-110 %*				"	"	"	"	"
Total Metals by EPA 6000/7000 Series Methods												
7439-97-6	Mercury	0.303		mg/kg dry	0.0411	0.0098	1	SW846 7471A	16-Nov-07	19-Nov-07	7111330	CRM
Total Metals by EPA 200 Series Methods												
7440-22-4	Silver	BRL	U	mg/kg dry	2.26	0.528	1	EPA 200.7	16-Nov-07	21-Nov-07	7111328	SA
7440-38-2	Arsenic	1.21	J	mg/kg dry	2.26	0.347	1	"	"	"	"	"
7440-39-3	Barium	27.4		mg/kg dry	1.51	0.253	1	"	"	"	"	"
7440-41-7	Beryllium	0.324	J	mg/kg dry	0.754	0.167	1	"	"	"	"	"
7440-43-9	Cadmium	0.468	J	mg/kg dry	0.754	0.0256	1	"	"	"	"	"
7440-47-3	Chromium	25.0		mg/kg dry	1.51	0.436	1	"	"	"	"	"
7440-50-8	Copper	18.1		mg/kg dry	1.51	0.293	1	"	"	"	"	"
7439-96-5	Manganese	64.6		mg/kg dry	1.51	0.422	1	"	"	"	"	"
7440-02-0	Nickel	2.50		mg/kg dry	1.51	0.148	1	"	"	"	"	"
7439-92-1	Lead	51.0		mg/kg dry	2.26	0.235	1	"	"	"	"	"
7440-36-0	Antimony	0.912	J	mg/kg dry	4.52	0.550	1	"	"	"	"	"
7782-49-2	Selenium	BRL	U	mg/kg dry	2.26	0.487	1	"	"	"	"	"
7440-28-0	Thallium	BRL	U	mg/kg dry	4.52	0.707	1	"	"	"	"	"
7440-62-2	Vanadium	7.21		mg/kg dry	2.26	1.12	1	"	"	"	"	"
7440-66-6	Zinc	75.4		mg/kg dry	1.51	0.550	1	"	"	"	"	"
General Chemistry Parameters												
	% Solids	65.3		%			1	SM2540 G Mod.	16-Nov-07	16-Nov-07	7111397	DG

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-27 SA70868-09	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds												
	VOC Extraction	Field extracted		N/A			1	VOC Soil Extraction	12-Nov-07	12-Nov-07	7111029	DG
Volatile Organic Compounds						Initial weight: 25.58 g						
Prepared by method SW846 5030 Soil (high level)												
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon	BRL	U	µg/kg dry	31.2	12.8	50	SW 846 8260B	16-Nov-07	16-Nov-07	7111382	adu
67-64-1	Acetone	BRL	U	µg/kg dry	312	274	50	"	"	"	"	"
107-13-1	Acrylonitrile	BRL	U	µg/kg dry	31.2	25.3	50	"	"	"	"	"
71-43-2	Benzene	BRL	U	µg/kg dry	31.2	3.4	50	"	"	"	"	"
108-86-1	Bromobenzene	BRL	U	µg/kg dry	31.2	5.0	50	"	"	"	"	"
74-97-5	Bromochloromethane	BRL	U	µg/kg dry	31.2	2.8	50	"	"	"	"	"
75-27-4	Bromodichloromethane	BRL	U	µg/kg dry	31.2	1.9	50	"	"	"	"	"
75-25-2	Bromoform	BRL	U	µg/kg dry	31.2	5.6	50	"	"	"	"	"
74-83-9	Bromomethane	BRL	U	µg/kg dry	62.4	6.2	50	"	"	"	"	"
78-93-3	2-Butanone (MEK)	BRL	U	µg/kg dry	312	22.2	50	"	"	"	"	"
104-51-8	n-Butylbenzene	BRL	U	µg/kg dry	31.2	2.8	50	"	"	"	"	"
135-98-8	sec-Butylbenzene	BRL	U	µg/kg dry	31.2	3.7	50	"	"	"	"	"
98-06-6	tert-Butylbenzene	BRL	U	µg/kg dry	31.2	2.8	50	"	"	"	"	"
75-15-0	Carbon disulfide	BRL	U	µg/kg dry	156	2.8	50	"	"	"	"	"
56-23-5	Carbon tetrachloride	BRL	U	µg/kg dry	31.2	3.1	50	"	"	"	"	"
108-90-7	Chlorobenzene	BRL	U	µg/kg dry	31.2	4.1	50	"	"	"	"	"
75-00-3	Chloroethane	BRL	U	µg/kg dry	62.4	6.9	50	"	"	"	"	"
67-66-3	Chloroform	BRL	U	µg/kg dry	31.2	2.5	50	"	"	"	"	"
74-87-3	Chloromethane	BRL	U	µg/kg dry	62.4	2.8	50	"	"	"	"	"
95-49-8	2-Chlorotoluene	BRL	U	µg/kg dry	31.2	3.1	50	"	"	"	"	"
106-43-4	4-Chlorotoluene	BRL	U	µg/kg dry	31.2	3.7	50	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloropropane	BRL	U	µg/kg dry	62.4	7.2	50	"	"	"	"	"
124-48-1	Dibromochloromethane	BRL	U	µg/kg dry	31.2	4.7	50	"	"	"	"	"
106-93-4	1,2-Dibromoethane (EDB)	BRL	U	µg/kg dry	31.2	2.2	50	"	"	"	"	"
74-95-3	Dibromomethane	BRL	U	µg/kg dry	31.2	3.1	50	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL	U	µg/kg dry	31.2	7.2	50	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL	U	µg/kg dry	31.2	3.1	50	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL	U	µg/kg dry	31.2	4.4	50	"	"	"	"	"
75-71-8	Dichlorodifluoromethane (Freon12)	BRL	U	µg/kg dry	62.4	4.1	50	"	"	"	"	"
75-34-3	1,1-Dichloroethane	BRL	U	µg/kg dry	31.2	2.2	50	"	"	"	"	"
107-06-2	1,2-Dichloroethane	BRL	U	µg/kg dry	31.2	2.8	50	"	"	"	"	"
75-35-4	1,1-Dichloroethene	BRL	U	µg/kg dry	31.2	2.5	50	"	"	"	"	"
156-59-2	cis-1,2-Dichloroethene	BRL	U	µg/kg dry	31.2	2.2	50	"	"	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL	U	µg/kg dry	31.2	3.1	50	"	"	"	"	"
78-87-5	1,2-Dichloropropane	BRL	U	µg/kg dry	31.2	2.8	50	"	"	"	"	"
142-28-9	1,3-Dichloropropane	BRL	U	µg/kg dry	31.2	2.8	50	"	"	"	"	"
594-20-7	2,2-Dichloropropane	BRL	U	µg/kg dry	31.2	23.1	50	"	"	"	"	"
563-58-6	1,1-Dichloropropene	BRL	U	µg/kg dry	31.2	4.1	50	"	"	"	"	"
10061-01-5	cis-1,3-Dichloropropene	BRL	U	µg/kg dry	31.2	3.7	50	"	"	"	"	"
10061-02-6	trans-1,3-Dichloropropene	BRL	U	µg/kg dry	31.2	2.8	50	"	"	"	"	"
100-41-4	Ethylbenzene	BRL	U	µg/kg dry	31.2	3.7	50	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL	U	µg/kg dry	31.2	5.0	50	"	"	"	"	"
591-78-6	2-Hexanone (MBK)	BRL	U	µg/kg dry	312	4.1	50	"	"	"	"	"
98-82-8	Isopropylbenzene	BRL	U	µg/kg dry	31.2	4.1	50	"	"	"	"	"
99-87-6	4-Isopropyltoluene	BRL	U	µg/kg dry	31.2	3.7	50	"	"	"	"	"
1634-04-4	Methyl tert-butyl ether	BRL	U	µg/kg dry	31.2	3.1	50	"	"	"	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	U	µg/kg dry	312	3.4	50	"	"	"	"	"
75-09-2	Methylene chloride	BRL	U	µg/kg dry	312	15.0	50	"	"	"	"	"
91-20-3	Naphthalene	BRL	U	µg/kg dry	31.2	5.6	50	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-27 SA70868-09	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds												
Volatile Organic Compounds							Initial weight: 25.58 g					
Prepared by method SW846 5030 Soil (high level)												
103-65-1	n-Propylbenzene	BRL	U	µg/kg dry	31.2	4.4	50	SW 846 8260B	16-Nov-07	16-Nov-07	7111382	adu
100-42-5	Styrene	BRL	U	µg/kg dry	31.2	28.7	50	"	"	"	"	"
630-20-6	1,1,1,2-Tetrachloroethane	BRL	U	µg/kg dry	31.2	5.3	50	"	"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	BRL	U	µg/kg dry	31.2	5.0	50	"	"	"	"	"
127-18-4	Tetrachloroethene	BRL	U	µg/kg dry	31.2	1.9	50	"	"	"	"	"
108-88-3	Toluene	BRL	U	µg/kg dry	31.2	5.0	50	"	"	"	"	"
87-61-6	1,2,3-Trichlorobenzene	BRL	U	µg/kg dry	31.2	4.1	50	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL	U	µg/kg dry	31.2	2.5	50	"	"	"	"	"
71-55-6	1,1,1-Trichloroethane	BRL	U	µg/kg dry	31.2	3.7	50	"	"	"	"	"
79-00-5	1,1,2-Trichloroethane	BRL	U	µg/kg dry	31.2	2.2	50	"	"	"	"	"
79-01-6	Trichloroethene	BRL	U	µg/kg dry	31.2	3.4	50	"	"	"	"	"
75-69-4	Trichlorofluoromethane (Freon 11)	BRL	U	µg/kg dry	31.2	5.0	50	"	"	"	"	"
96-18-4	1,2,3-Trichloropropane	BRL	U	µg/kg dry	31.2	3.1	50	"	"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	BRL	U	µg/kg dry	31.2	3.7	50	"	"	"	"	"
108-67-8	1,3,5-Trimethylbenzene	BRL	U	µg/kg dry	31.2	3.7	50	"	"	"	"	"
75-01-4	Vinyl chloride	BRL	U	µg/kg dry	31.2	3.7	50	"	"	"	"	"
1330-20-7	m,p-Xylene	BRL	U	µg/kg dry	62.4	7.2	50	"	"	"	"	"
95-47-6	o-Xylene	BRL	U	µg/kg dry	31.2	5.6	50	"	"	"	"	"
109-99-9	Tetrahydrofuran	BRL	U	µg/kg dry	312	12.8	50	"	"	"	"	"
60-29-7	Ethyl ether	BRL	U	µg/kg dry	31.2	5.6	50	"	"	"	"	"
994-05-8	Tert-amyl methyl ether	BRL	U	µg/kg dry	31.2	3.4	50	"	"	"	"	"
637-92-3	Ethyl tert-butyl ether	BRL	U	µg/kg dry	31.2	1.6	50	"	"	"	"	"
108-20-3	Di-isopropyl ether	BRL	U	µg/kg dry	31.2	3.1	50	"	"	"	"	"
75-65-0	Tert-Butanol / butyl alcohol	BRL	U	µg/kg dry	312	231	50	"	"	"	"	"
123-91-1	1,4-Dioxane	BRL	U	µg/kg dry	624	152	50	"	"	"	"	"
110-57-6	trans-1,4-Dichloro-2-butene	BRL	U	µg/kg dry	156	78.0	50	"	"	"	"	"
64-17-5	Ethanol	BRL	U	µg/kg dry	15600	2780	50	"	"	"	"	"
Surrogate recoveries:												
460-00-4	*4-Bromofluorobenzene*	*103*		*70-130 %*				"	"	"	"	"
2037-26-5	*Toluene-d8*	*103*		*70-130 %*				"	"	"	"	"
17060-07-0	*1,2-Dichloroethane-d4*	*102*		*70-130 %*				"	"	"	"	"
1868-53-7	*Dibromofluoromethane*	*93*		*70-130 %*				"	"	"	"	"
Semivolatile Organic Compounds by GCMS												
PAHs by SW846 8270C												
Prepared by method SW846 3550B												
83-32-9	Acenaphthene	BRL	U	µg/kg dry	133	0.120	1	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
208-96-8	Acenaphthylene	BRL	U	µg/kg dry	133	0.150	1	"	"	"	"	"
120-12-7	Anthracene	BRL	U	µg/kg dry	133	0.150	1	"	"	"	"	"
56-55-3	Benzo (a) anthracene	BRL	U	µg/kg dry	133	0.319	1	"	"	"	"	"
50-32-8	Benzo (a) pyrene	BRL	U	µg/kg dry	133	0.170	1	"	"	"	"	"
205-99-2	Benzo (b) fluoranthene	BRL	U	µg/kg dry	133	0.659	1	"	"	"	"	"
191-24-2	Benzo (g,h,i) perylene	BRL	U	µg/kg dry	133	0.140	1	"	"	"	"	"
207-08-9	Benzo (k) fluoranthene	BRL	U	µg/kg dry	133	0.200	1	"	"	"	"	"
218-01-9	Chrysene	BRL	U	µg/kg dry	133	0.0698	1	"	"	"	"	"
53-70-3	Dibenzo (a,h) anthracene	BRL	U	µg/kg dry	133	0.0798	1	"	"	"	"	"
206-44-0	Fluoranthene	BRL	U	µg/kg dry	133	0.120	1	"	"	"	"	"
86-73-7	Fluorene	BRL	U	µg/kg dry	133	0.120	1	"	"	"	"	"
193-39-5	Indeno (1,2,3-cd) pyrene	BRL	U	µg/kg dry	133	0.230	1	"	"	"	"	"
90-12-0	1-Methylnaphthalene	BRL	U	µg/kg dry	133	0.110	1	"	"	"	"	"
91-57-6	2-Methylnaphthalene	BRL	U	µg/kg dry	133	0.110	1	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-27 SA70868-09	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS												
PAHs by SW846 8270C												
Prepared by method SW846 3550B												
91-20-3	Naphthalene	BRL	U	µg/kg dry	133	0.190	1	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
85-01-8	Phenanthrene	BRL	U	µg/kg dry	133	0.230	1	"	"	"	"	"
129-00-0	Pyrene	BRL	U	µg/kg dry	133	0.349	1	"	"	"	"	"
Surrogate recoveries:												
321-60-8	*2-Fluorobiphenyl*	*62*		*30-130 %*				"	"	"	"	"
1718-51-0	*Terphenyl-dl4*	*71*		*30-130 %*				"	"	"	"	"
Total Metals by EPA 6000/7000 Series Methods												
7439-97-6	Mercury	BRL	U	mg/kg dry	0.0295	0.0071	1	SW846 7471A	16-Nov-07	19-Nov-07	7111330	CRM
Total Metals by EPA 200 Series Methods												
7440-22-4	Silver	BRL	U	mg/kg dry	1.33	0.311	1	EPA 200.7	16-Nov-07	21-Nov-07	7111328	SA
7440-38-2	Arsenic	BRL	U	mg/kg dry	1.33	0.204	1	"	"	"	"	"
7440-39-3	Barium	7.93		mg/kg dry	0.887	0.149	1	"	"	"	"	"
7440-41-7	Beryllium	0.160	J	mg/kg dry	0.444	0.0985	1	"	"	"	"	"
7440-43-9	Cadmium	0.124	J	mg/kg dry	0.444	0.0151	1	"	"	"	"	"
7440-47-3	Chromium	3.75		mg/kg dry	0.887	0.256	1	"	"	"	"	"
7440-50-8	Copper	2.71		mg/kg dry	0.887	0.172	1	"	"	"	"	"
7439-96-5	Manganese	55.2		mg/kg dry	0.887	0.248	1	"	"	"	"	"
7440-02-0	Nickel	1.76		mg/kg dry	0.887	0.0870	1	"	"	"	"	"
7439-92-1	Lead	1.45	J	mg/kg dry	1.51	0.138	1	"	"	21-Nov-07	"	"
7440-36-0	Antimony	0.426	J	mg/kg dry	2.66	0.324	1	"	"	21-Nov-07	"	"
7782-49-2	Selenium	BRL	U	mg/kg dry	1.33	0.287	1	"	"	"	"	"
7440-28-0	Thallium	BRL	U	mg/kg dry	2.66	0.416	1	"	"	"	"	"
7440-62-2	Vanadium	4.69		mg/kg dry	1.33	0.658	1	"	"	"	"	"
7440-66-6	Zinc	7.67		mg/kg dry	0.887	0.324	1	"	"	"	"	"
General Chemistry Parameters												
	% Solids	97.7		%			1	SM2540 G Mod.	16-Nov-07	16-Nov-07	7111397	DG

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-28 SA70868-10	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds												
	VOC Extraction	Field extracted		N/A			1	VOC Soil Extraction	12-Nov-07	12-Nov-07	7111029	DG
Volatile Organic Compounds						Initial weight: 26.53 g						
Prepared by method SW846 5030 Soil (high level)												
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon	BRL	U	µg/kg dry	29.4	12.1	50	SW 846 8260B	16-Nov-07	16-Nov-07	7111382	adu
67-64-1	Acetone	BRL	U	µg/kg dry	294	258	50	"	"	"	"	"
107-13-1	Acrylonitrile	BRL	U	µg/kg dry	29.4	23.8	50	"	"	"	"	"
71-43-2	Benzene	BRL	U	µg/kg dry	29.4	3.2	50	"	"	"	"	"
108-86-1	Bromobenzene	BRL	U	µg/kg dry	29.4	4.7	50	"	"	"	"	"
74-97-5	Bromochloromethane	BRL	U	µg/kg dry	29.4	2.6	50	"	"	"	"	"
75-27-4	Bromodichloromethane	BRL	U	µg/kg dry	29.4	1.8	50	"	"	"	"	"
75-25-2	Bromoform	BRL	U	µg/kg dry	29.4	5.3	50	"	"	"	"	"
74-83-9	Bromomethane	BRL	U	µg/kg dry	58.8	5.9	50	"	"	"	"	"
78-93-3	2-Butanone (MEK)	BRL	U	µg/kg dry	294	20.9	50	"	"	"	"	"
104-51-8	n-Butylbenzene	BRL	U	µg/kg dry	29.4	2.6	50	"	"	"	"	"
135-98-8	sec-Butylbenzene	BRL	U	µg/kg dry	29.4	3.5	50	"	"	"	"	"
98-06-6	tert-Butylbenzene	BRL	U	µg/kg dry	29.4	2.6	50	"	"	"	"	"
75-15-0	Carbon disulfide	BRL	U	µg/kg dry	147	2.6	50	"	"	"	"	"
56-23-5	Carbon tetrachloride	BRL	U	µg/kg dry	29.4	2.9	50	"	"	"	"	"
108-90-7	Chlorobenzene	BRL	U	µg/kg dry	29.4	3.8	50	"	"	"	"	"
75-00-3	Chloroethane	BRL	U	µg/kg dry	58.8	6.5	50	"	"	"	"	"
67-66-3	Chloroform	BRL	U	µg/kg dry	29.4	2.4	50	"	"	"	"	"
74-87-3	Chloromethane	BRL	U	µg/kg dry	58.8	2.6	50	"	"	"	"	"
95-49-8	2-Chlorotoluene	BRL	U	µg/kg dry	29.4	2.9	50	"	"	"	"	"
106-43-4	4-Chlorotoluene	BRL	U	µg/kg dry	29.4	3.5	50	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloropropane	BRL	U	µg/kg dry	58.8	6.8	50	"	"	"	"	"
124-48-1	Dibromochloromethane	BRL	U	µg/kg dry	29.4	4.4	50	"	"	"	"	"
106-93-4	1,2-Dibromoethane (EDB)	BRL	U	µg/kg dry	29.4	2.1	50	"	"	"	"	"
74-95-3	Dibromomethane	BRL	U	µg/kg dry	29.4	2.9	50	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL	U	µg/kg dry	29.4	6.8	50	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL	U	µg/kg dry	29.4	2.9	50	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL	U	µg/kg dry	29.4	4.1	50	"	"	"	"	"
75-71-8	Dichlorodifluoromethane (Freon12)	BRL	U	µg/kg dry	58.8	3.8	50	"	"	"	"	"
75-34-3	1,1-Dichloroethane	BRL	U	µg/kg dry	29.4	2.1	50	"	"	"	"	"
107-06-2	1,2-Dichloroethane	BRL	U	µg/kg dry	29.4	2.6	50	"	"	"	"	"
75-35-4	1,1-Dichloroethene	BRL	U	µg/kg dry	29.4	2.4	50	"	"	"	"	"
156-59-2	cis-1,2-Dichloroethene	BRL	U	µg/kg dry	29.4	2.1	50	"	"	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL	U	µg/kg dry	29.4	2.9	50	"	"	"	"	"
78-87-5	1,2-Dichloropropane	BRL	U	µg/kg dry	29.4	2.6	50	"	"	"	"	"
142-28-9	1,3-Dichloropropane	BRL	U	µg/kg dry	29.4	2.6	50	"	"	"	"	"
594-20-7	2,2-Dichloropropane	BRL	U	µg/kg dry	29.4	21.8	50	"	"	"	"	"
563-58-6	1,1-Dichloropropene	BRL	U	µg/kg dry	29.4	3.8	50	"	"	"	"	"
10061-01-5	cis-1,3-Dichloropropene	BRL	U	µg/kg dry	29.4	3.5	50	"	"	"	"	"
10061-02-6	trans-1,3-Dichloropropene	BRL	U	µg/kg dry	29.4	2.6	50	"	"	"	"	"
100-41-4	Ethylbenzene	BRL	U	µg/kg dry	29.4	3.5	50	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL	U	µg/kg dry	29.4	4.7	50	"	"	"	"	"
591-78-6	2-Hexanone (MBK)	BRL	U	µg/kg dry	294	3.8	50	"	"	"	"	"
98-82-8	Isopropylbenzene	BRL	U	µg/kg dry	29.4	3.8	50	"	"	"	"	"
99-87-6	4-Isopropyltoluene	BRL	U	µg/kg dry	29.4	3.5	50	"	"	"	"	"
1634-04-4	Methyl tert-butyl ether	BRL	U	µg/kg dry	29.4	2.9	50	"	"	"	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	U	µg/kg dry	294	3.2	50	"	"	"	"	"
75-09-2	Methylene chloride	BRL	U	µg/kg dry	294	14.1	50	"	"	"	"	"
91-20-3	Naphthalene	BRL	U	µg/kg dry	29.4	5.3	50	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-28 SA70868-10	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds												
Volatile Organic Compounds												
Prepared by method SW846 5030 Soil (high level)					Initial weight: 26.53 g							
103-65-1	n-Propylbenzene	BRL	U	µg/kg dry	29.4	4.1	50	SW 846 8260B	16-Nov-07	16-Nov-07	7111382	adu
100-42-5	Styrene	BRL	U	µg/kg dry	29.4	27.0	50	"	"	"	"	"
630-20-6	1,1,1,2-Tetrachloroethane	BRL	U	µg/kg dry	29.4	5.0	50	"	"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	BRL	U	µg/kg dry	29.4	4.7	50	"	"	"	"	"
127-18-4	Tetrachloroethene	BRL	U	µg/kg dry	29.4	1.8	50	"	"	"	"	"
108-88-3	Toluene	BRL	U	µg/kg dry	29.4	4.7	50	"	"	"	"	"
87-61-6	1,2,3-Trichlorobenzene	BRL	U	µg/kg dry	29.4	3.8	50	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL	U	µg/kg dry	29.4	2.4	50	"	"	"	"	"
71-55-6	1,1,1-Trichloroethane	BRL	U	µg/kg dry	29.4	3.5	50	"	"	"	"	"
79-00-5	1,1,2-Trichloroethane	BRL	U	µg/kg dry	29.4	2.1	50	"	"	"	"	"
79-01-6	Trichloroethene	BRL	U	µg/kg dry	29.4	3.2	50	"	"	"	"	"
75-69-4	Trichlorofluoromethane (Freon 11)	BRL	U	µg/kg dry	29.4	4.7	50	"	"	"	"	"
96-18-4	1,2,3-Trichloropropane	BRL	U	µg/kg dry	29.4	2.9	50	"	"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	BRL	U	µg/kg dry	29.4	3.5	50	"	"	"	"	"
108-67-8	1,3,5-Trimethylbenzene	BRL	U	µg/kg dry	29.4	3.5	50	"	"	"	"	"
75-01-4	Vinyl chloride	BRL	U	µg/kg dry	29.4	3.5	50	"	"	"	"	"
1330-20-7	m,p-Xylene	BRL	U	µg/kg dry	58.8	6.8	50	"	"	"	"	"
95-47-6	o-Xylene	BRL	U	µg/kg dry	29.4	5.3	50	"	"	"	"	"
109-99-9	Tetrahydrofuran	BRL	U	µg/kg dry	294	12.1	50	"	"	"	"	"
60-29-7	Ethyl ether	BRL	U	µg/kg dry	29.4	5.3	50	"	"	"	"	"
994-05-8	Tert-amyl methyl ether	BRL	U	µg/kg dry	29.4	3.2	50	"	"	"	"	"
637-92-3	Ethyl tert-butyl ether	BRL	U	µg/kg dry	29.4	1.5	50	"	"	"	"	"
108-20-3	Di-isopropyl ether	BRL	U	µg/kg dry	29.4	2.9	50	"	"	"	"	"
75-65-0	Tert-Butanol / butyl alcohol	BRL	U	µg/kg dry	294	218	50	"	"	"	"	"
123-91-1	1,4-Dioxane	BRL	U	µg/kg dry	588	143	50	"	"	"	"	"
110-57-6	trans-1,4-Dichloro-2-butene	BRL	U	µg/kg dry	147	73.5	50	"	"	"	"	"
64-17-5	Ethanol	BRL	U	µg/kg dry	14700	2620	50	"	"	"	"	"
Surrogate recoveries:												
460-00-4	*4-Bromofluorobenzene*	*101*		*70-130 %*				"	"	"	"	"
2037-26-5	*Toluene-d8*	*102*		*70-130 %*				"	"	"	"	"
17060-07-0	*1,2-Dichloroethane-d4*	*100*		*70-130 %*				"	"	"	"	"
1868-53-7	*Dibromofluoromethane*	*93*		*70-130 %*				"	"	"	"	"
Semivolatile Organic Compounds by GCMS												
PAHs by SW846 8270C												
Prepared by method SW846 3550B												
83-32-9	Acenaphthene	BRL	U	µg/kg dry	129	0.116	1	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
208-96-8	Acenaphthylene	BRL	U	µg/kg dry	129	0.145	1	"	"	"	"	"
120-12-7	Anthracene	BRL	U	µg/kg dry	129	0.145	1	"	"	"	"	"
56-55-3	Benzo (a) anthracene	BRL	U	µg/kg dry	129	0.310	1	"	"	"	"	"
50-32-8	Benzo (a) pyrene	BRL	U	µg/kg dry	129	0.165	1	"	"	"	"	"
205-99-2	Benzo (b) fluoranthene	BRL	U	µg/kg dry	129	0.639	1	"	"	"	"	"
191-24-2	Benzo (g,h,i) perylene	BRL	U	µg/kg dry	129	0.136	1	"	"	"	"	"
207-08-9	Benzo (k) fluoranthene	BRL	U	µg/kg dry	129	0.194	1	"	"	"	"	"
218-01-9	Chrysene	BRL	U	µg/kg dry	129	0.0678	1	"	"	"	"	"
53-70-3	Dibenzo (a,h) anthracene	BRL	U	µg/kg dry	129	0.0774	1	"	"	"	"	"
206-44-0	Fluoranthene	BRL	U	µg/kg dry	129	0.116	1	"	"	"	"	"
86-73-7	Fluorene	BRL	U	µg/kg dry	129	0.116	1	"	"	"	"	"
193-39-5	Indeno (1,2,3-cd) pyrene	BRL	U	µg/kg dry	129	0.223	1	"	"	"	"	"
90-12-0	1-Methylnaphthalene	BRL	U	µg/kg dry	129	0.106	1	"	"	"	"	"
91-57-6	2-Methylnaphthalene	BRL	U	µg/kg dry	129	0.106	1	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-28 SA70868-10	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS												
PAHs by SW846 8270C												
Prepared by method SW846 3550B												
91-20-3	Naphthalene	BRL	U	µg/kg dry	129	0.184	1	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
85-01-8	Phenanthrene	BRL	U	µg/kg dry	129	0.223	1	"	"	"	"	"
129-00-0	Pyrene	BRL	U	µg/kg dry	129	0.339	1	"	"	"	"	"
Surrogate recoveries:												
321-60-8	*2-Fluorobiphenyl*	*74*		*30-130 %*				"	"	"	"	"
1718-51-0	*Terphenyl-dl4*	*74*		*30-130 %*				"	"	"	"	"
Total Metals by EPA 6000/7000 Series Methods												
7439-97-6	Mercury	BRL	U	mg/kg dry	0.0278	0.0067	1	SW846 7471A	16-Nov-07	19-Nov-07	7111330	CRM
Total Metals by EPA 200 Series Methods												
7440-22-4	Silver	BRL	U	mg/kg dry	1.28	0.299	1	EPA 200.7	16-Nov-07	21-Nov-07	7111328	SA
7440-38-2	Arsenic	BRL	U	mg/kg dry	1.28	0.197	1	"	"	"	"	"
7440-39-3	Barium	18.1		mg/kg dry	0.855	0.144	1	"	"	"	"	"
7440-41-7	Beryllium	0.192	J	mg/kg dry	0.428	0.0949	1	"	"	"	"	"
7440-43-9	Cadmium	0.197	J	mg/kg dry	0.428	0.0145	1	"	"	"	"	"
7440-47-3	Chromium	4.27		mg/kg dry	0.855	0.247	1	"	"	"	"	"
7440-50-8	Copper	1.51		mg/kg dry	0.855	0.166	1	"	"	"	"	"
7439-96-5	Manganese	380		mg/kg dry	0.855	0.239	1	"	"	"	"	"
7440-02-0	Nickel	1.37		mg/kg dry	0.855	0.0838	1	"	"	"	"	"
7439-92-1	Lead	1.41		mg/kg dry	1.28	0.133	1	"	"	"	"	"
7440-36-0	Antimony	BRL	U	mg/kg dry	2.57	0.312	1	"	"	"	"	"
7782-49-2	Selenium	BRL	U	mg/kg dry	1.28	0.276	1	"	"	"	"	"
7440-28-0	Thallium	1.40	J	mg/kg dry	2.57	0.401	1	"	"	"	"	"
7440-62-2	Vanadium	8.05		mg/kg dry	1.28	0.634	1	"	"	"	"	"
7440-66-6	Zinc	13.2		mg/kg dry	0.855	0.312	1	"	"	"	"	"
General Chemistry Parameters												
	% Solids	98.6		%			1	SM2540 G Mod.	16-Nov-07	16-Nov-07	7111397	DG

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-29 SA70868-11	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds												
	VOC Extraction	Field extracted		N/A			1	VOC Soil Extraction	12-Nov-07	12-Nov-07	7111029	DG
Volatile Organic Compounds						Initial weight: 20.53 g						
Prepared by method SW846 5030 Soil (high level)												
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon	BRL	U	µg/kg dry	46.7	19.2	50	SW 846 8260B	16-Nov-07	16-Nov-07	7111382	adu
67-64-1	Acetone	BRL	U	µg/kg dry	467	410	50	"	"	"	"	"
107-13-1	Acrylonitrile	BRL	U	µg/kg dry	46.7	37.8	50	"	"	"	"	"
71-43-2	Benzene	BRL	U	µg/kg dry	46.7	5.1	50	"	"	"	"	"
108-86-1	Bromobenzene	BRL	U	µg/kg dry	46.7	7.5	50	"	"	"	"	"
74-97-5	Bromochloromethane	BRL	U	µg/kg dry	46.7	4.2	50	"	"	"	"	"
75-27-4	Bromodichloromethane	BRL	U	µg/kg dry	46.7	2.8	50	"	"	"	"	"
75-25-2	Bromoform	BRL	U	µg/kg dry	46.7	8.4	50	"	"	"	"	"
74-83-9	Bromomethane	BRL	U	µg/kg dry	93.4	9.3	50	"	"	"	"	"
78-93-3	2-Butanone (MEK)	285	J	µg/kg dry	467	33.2	50	"	"	"	"	"
104-51-8	n-Butylbenzene	BRL	U	µg/kg dry	46.7	4.2	50	"	"	"	"	"
135-98-8	sec-Butylbenzene	BRL	U	µg/kg dry	46.7	5.6	50	"	"	"	"	"
98-06-6	tert-Butylbenzene	BRL	U	µg/kg dry	46.7	4.2	50	"	"	"	"	"
75-15-0	Carbon disulfide	BRL	U	µg/kg dry	234	4.2	50	"	"	"	"	"
56-23-5	Carbon tetrachloride	BRL	U	µg/kg dry	46.7	4.7	50	"	"	"	"	"
108-90-7	Chlorobenzene	BRL	U	µg/kg dry	46.7	6.1	50	"	"	"	"	"
75-00-3	Chloroethane	BRL	U	µg/kg dry	93.4	10.3	50	"	"	"	"	"
67-66-3	Chloroform	BRL	U	µg/kg dry	46.7	3.7	50	"	"	"	"	"
74-87-3	Chloromethane	BRL	U	µg/kg dry	93.4	4.2	50	"	"	"	"	"
95-49-8	2-Chlorotoluene	BRL	U	µg/kg dry	46.7	4.7	50	"	"	"	"	"
106-43-4	4-Chlorotoluene	BRL	U	µg/kg dry	46.7	5.6	50	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloropropane	BRL	U	µg/kg dry	93.4	10.7	50	"	"	"	"	"
124-48-1	Dibromochloromethane	BRL	U	µg/kg dry	46.7	7.0	50	"	"	"	"	"
106-93-4	1,2-Dibromoethane (EDB)	BRL	U	µg/kg dry	46.7	3.3	50	"	"	"	"	"
74-95-3	Dibromomethane	BRL	U	µg/kg dry	46.7	4.7	50	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL	U	µg/kg dry	46.7	10.7	50	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL	U	µg/kg dry	46.7	4.7	50	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL	U	µg/kg dry	46.7	6.5	50	"	"	"	"	"
75-71-8	Dichlorodifluoromethane (Freon12)	BRL	U	µg/kg dry	93.4	6.1	50	"	"	"	"	"
75-34-3	1,1-Dichloroethane	BRL	U	µg/kg dry	46.7	3.3	50	"	"	"	"	"
107-06-2	1,2-Dichloroethane	BRL	U	µg/kg dry	46.7	4.2	50	"	"	"	"	"
75-35-4	1,1-Dichloroethene	BRL	U	µg/kg dry	46.7	3.7	50	"	"	"	"	"
156-59-2	cis-1,2-Dichloroethene	BRL	U	µg/kg dry	46.7	3.3	50	"	"	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL	U	µg/kg dry	46.7	4.7	50	"	"	"	"	"
78-87-5	1,2-Dichloropropane	BRL	U	µg/kg dry	46.7	4.2	50	"	"	"	"	"
142-28-9	1,3-Dichloropropane	BRL	U	µg/kg dry	46.7	4.2	50	"	"	"	"	"
594-20-7	2,2-Dichloropropane	BRL	U	µg/kg dry	46.7	34.6	50	"	"	"	"	"
563-58-6	1,1-Dichloropropene	BRL	U	µg/kg dry	46.7	6.1	50	"	"	"	"	"
10061-01-5	cis-1,3-Dichloropropene	BRL	U	µg/kg dry	46.7	5.6	50	"	"	"	"	"
10061-02-6	trans-1,3-Dichloropropene	BRL	U	µg/kg dry	46.7	4.2	50	"	"	"	"	"
100-41-4	Ethylbenzene	BRL	U	µg/kg dry	46.7	5.6	50	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL	U	µg/kg dry	46.7	7.5	50	"	"	"	"	"
591-78-6	2-Hexanone (MBK)	BRL	U	µg/kg dry	467	6.1	50	"	"	"	"	"
98-82-8	Isopropylbenzene	BRL	U	µg/kg dry	46.7	6.1	50	"	"	"	"	"
99-87-6	4-Isopropyltoluene	BRL	U	µg/kg dry	46.7	5.6	50	"	"	"	"	"
1634-04-4	Methyl tert-butyl ether	BRL	U	µg/kg dry	46.7	4.7	50	"	"	"	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	U	µg/kg dry	467	5.1	50	"	"	"	"	"
75-09-2	Methylene chloride	BRL	U	µg/kg dry	467	22.4	50	"	"	"	"	"
91-20-3	Naphthalene	BRL	U	µg/kg dry	46.7	8.4	50	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-29 SA70868-11	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds												
Volatile Organic Compounds												
Prepared by method SW846 5030 Soil (high level)						Initial weight: 20.53 g						
103-65-1	n-Propylbenzene	BRL	U	µg/kg dry	46.7	6.5	50	SW 846 8260B	16-Nov-07	16-Nov-07	7111382	adu
100-42-5	Styrene	BRL	U	µg/kg dry	46.7	43.0	50	"	"	"	"	"
630-20-6	1,1,1,2-Tetrachloroethane	BRL	U	µg/kg dry	46.7	7.9	50	"	"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	BRL	U	µg/kg dry	46.7	7.5	50	"	"	"	"	"
127-18-4	Tetrachloroethene	BRL	U	µg/kg dry	46.7	2.8	50	"	"	"	"	"
108-88-3	Toluene	BRL	U	µg/kg dry	46.7	7.5	50	"	"	"	"	"
87-61-6	1,2,3-Trichlorobenzene	BRL	U	µg/kg dry	46.7	6.1	50	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL	U	µg/kg dry	46.7	3.7	50	"	"	"	"	"
71-55-6	1,1,1-Trichloroethane	BRL	U	µg/kg dry	46.7	5.6	50	"	"	"	"	"
79-00-5	1,1,2-Trichloroethane	BRL	U	µg/kg dry	46.7	3.3	50	"	"	"	"	"
79-01-6	Trichloroethene	BRL	U	µg/kg dry	46.7	5.1	50	"	"	"	"	"
75-69-4	Trichlorofluoromethane (Freon 11)	BRL	U	µg/kg dry	46.7	7.5	50	"	"	"	"	"
96-18-4	1,2,3-Trichloropropane	BRL	U	µg/kg dry	46.7	4.7	50	"	"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	BRL	U	µg/kg dry	46.7	5.6	50	"	"	"	"	"
108-67-8	1,3,5-Trimethylbenzene	BRL	U	µg/kg dry	46.7	5.6	50	"	"	"	"	"
75-01-4	Vinyl chloride	BRL	U	µg/kg dry	46.7	5.6	50	"	"	"	"	"
1330-20-7	m,p-Xylene	BRL	U	µg/kg dry	93.4	10.7	50	"	"	"	"	"
95-47-6	o-Xylene	BRL	U	µg/kg dry	46.7	8.4	50	"	"	"	"	"
109-99-9	Tetrahydrofuran	BRL	U	µg/kg dry	467	19.2	50	"	"	"	"	"
60-29-7	Ethyl ether	BRL	U	µg/kg dry	46.7	8.4	50	"	"	"	"	"
994-05-8	Tert-amyl methyl ether	BRL	U	µg/kg dry	46.7	5.1	50	"	"	"	"	"
637-92-3	Ethyl tert-butyl ether	BRL	U	µg/kg dry	46.7	2.3	50	"	"	"	"	"
108-20-3	Di-isopropyl ether	BRL	U	µg/kg dry	46.7	4.7	50	"	"	"	"	"
75-65-0	Tert-Butanol / butyl alcohol	BRL	U	µg/kg dry	467	346	50	"	"	"	"	"
123-91-1	1,4-Dioxane	BRL	U	µg/kg dry	934	227	50	"	"	"	"	"
110-57-6	trans-1,4-Dichloro-2-butene	BRL	U	µg/kg dry	234	117	50	"	"	"	"	"
64-17-5	Ethanol	BRL	U	µg/kg dry	23400	4160	50	"	"	"	"	"
Surrogate recoveries:												
460-00-4	*4-Bromofluorobenzene*	*103*		*70-130 %*				"	"	"	"	"
2037-26-5	*Toluene-d8*	*101*		*70-130 %*				"	"	"	"	"
17060-07-0	*1,2-Dichloroethane-d4*	*99*		*70-130 %*				"	"	"	"	"
1868-53-7	*Dibromofluoromethane*	*91*		*70-130 %*				"	"	"	"	"
Semivolatile Organic Compounds by GCMS												
PAHs by SW846 8270C												
Prepared by method SW846 3550B												
83-32-9	Acenaphthene	BRL	U	µg/kg dry	144	0.130	1	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
208-96-8	Acenaphthylene	BRL	U	µg/kg dry	144	0.162	1	"	"	"	"	"
120-12-7	Anthracene	BRL	U	µg/kg dry	144	0.162	1	"	"	"	"	"
56-55-3	Benzo (a) anthracene	BRL	U	µg/kg dry	144	0.346	1	"	"	"	"	"
50-32-8	Benzo (a) pyrene	BRL	U	µg/kg dry	144	0.184	1	"	"	"	"	"
205-99-2	Benzo (b) fluoranthene	BRL	U	µg/kg dry	144	0.713	1	"	"	"	"	"
191-24-2	Benzo (g,h,i) perylene	BRL	U	µg/kg dry	144	0.151	1	"	"	"	"	"
207-08-9	Benzo (k) fluoranthene	BRL	U	µg/kg dry	144	0.216	1	"	"	"	"	"
218-01-9	Chrysene	BRL	U	µg/kg dry	144	0.0756	1	"	"	"	"	"
53-70-3	Dibenzo (a,h) anthracene	BRL	U	µg/kg dry	144	0.0864	1	"	"	"	"	"
206-44-0	Fluoranthene	BRL	U	µg/kg dry	144	0.130	1	"	"	"	"	"
86-73-7	Fluorene	BRL	U	µg/kg dry	144	0.130	1	"	"	"	"	"
193-39-5	Indeno (1,2,3-cd) pyrene	BRL	U	µg/kg dry	144	0.248	1	"	"	"	"	"
90-12-0	1-Methylnaphthalene	BRL	U	µg/kg dry	144	0.119	1	"	"	"	"	"
91-57-6	2-Methylnaphthalene	BRL	U	µg/kg dry	144	0.119	1	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-29 SA70868-11	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS												
PAHs by SW846 8270C												
Prepared by method SW846 3550B												
91-20-3	Naphthalene	BRL	U	µg/kg dry	144	0.205	1	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
85-01-8	Phenanthrene	BRL	U	µg/kg dry	144	0.248	1	"	"	"	"	"
129-00-0	Pyrene	BRL	U	µg/kg dry	144	0.378	1	"	"	"	"	"
Surrogate recoveries:												
321-60-8	*2-Fluorobiphenyl*	*92*		*30-130 %*				"	"	"	"	"
1718-51-0	*Terphenyl-dl4*	*79*		*30-130 %*				"	"	"	"	"
Total Metals by EPA 6000/7000 Series Methods												
7439-97-6	Mercury	BRL	U	mg/kg dry	0.0305	0.0073	1	SW846 7471A	16-Nov-07	19-Nov-07	7111330	CRM
Total Metals by EPA 200 Series Methods												
7440-22-4	Silver	BRL	U	mg/kg dry	1.67	0.389	1	EPA 200.7	16-Nov-07	21-Nov-07	7111328	SA
7440-38-2	Arsenic	BRL	U	mg/kg dry	1.67	0.256	1	"	"	"	"	"
7440-39-3	Barium	8.09		mg/kg dry	1.11	0.187	1	"	"	"	"	"
7440-41-7	Beryllium	0.267	J	mg/kg dry	0.556	0.123	1	"	"	"	"	"
7440-43-9	Cadmium	0.117	J	mg/kg dry	0.556	0.0189	1	"	"	"	"	"
7440-47-3	Chromium	3.13		mg/kg dry	1.11	0.321	1	"	"	"	"	"
7440-50-8	Copper	BRL	U	mg/kg dry	1.11	0.216	1	"	"	"	"	"
7439-96-5	Manganese	168		mg/kg dry	1.11	0.311	1	"	"	"	"	"
7440-02-0	Nickel	1.58		mg/kg dry	1.11	0.109	1	"	"	"	"	"
7439-92-1	Lead	0.612	J	mg/kg dry	1.67	0.173	1	"	"	"	"	"
7440-36-0	Antimony	BRL	U	mg/kg dry	3.34	0.406	1	"	"	"	"	"
7782-49-2	Selenium	BRL	U	mg/kg dry	1.67	0.359	1	"	"	"	"	"
7440-28-0	Thallium	1.56	J	mg/kg dry	3.34	0.521	1	"	"	"	"	"
7440-62-2	Vanadium	5.47		mg/kg dry	1.67	0.825	1	"	"	"	"	"
7440-66-6	Zinc	11.9		mg/kg dry	1.11	0.406	1	"	"	"	"	"
General Chemistry Parameters												
	% Solids	89.5		%			1	SM2540 G Mod.	16-Nov-07	16-Nov-07	7111397	DG

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-30 SA70868-12	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds												
	VOC Extraction	Field extracted		N/A			1	VOC Soil Extraction	12-Nov-07	12-Nov-07	7111029	DG
Volatile Organic Compounds												
Prepared by method SW846 5030 Soil (high level)						Initial weight: 22.84 g						
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon	BRL	U	µg/kg dry	52.8	21.6	50	SW 846 8260B	16-Nov-07	16-Nov-07	7111382	adu
67-64-1	Acetone	BRL	U	µg/kg dry	528	463	50	"	"	"	"	"
107-13-1	Acrylonitrile	BRL	U	µg/kg dry	52.8	42.8	50	"	"	"	"	"
71-43-2	Benzene	BRL	U	µg/kg dry	52.8	5.8	50	"	"	"	"	"
108-86-1	Bromobenzene	BRL	U	µg/kg dry	52.8	8.4	50	"	"	"	"	"
74-97-5	Bromochloromethane	BRL	U	µg/kg dry	52.8	4.8	50	"	"	"	"	"
75-27-4	Bromodichloromethane	BRL	U	µg/kg dry	52.8	3.2	50	"	"	"	"	"
75-25-2	Bromoform	BRL	U	µg/kg dry	52.8	9.5	50	"	"	"	"	"
74-83-9	Bromomethane	BRL	U	µg/kg dry	106	10.6	50	"	"	"	"	"
78-93-3	2-Butanone (MEK)	316	J	µg/kg dry	528	37.5	50	"	"	"	"	"
104-51-8	n-Butylbenzene	BRL	U	µg/kg dry	52.8	4.8	50	"	"	"	"	"
135-98-8	sec-Butylbenzene	BRL	U	µg/kg dry	52.8	6.3	50	"	"	"	"	"
98-06-6	tert-Butylbenzene	BRL	U	µg/kg dry	52.8	4.8	50	"	"	"	"	"
75-15-0	Carbon disulfide	BRL	U	µg/kg dry	264	4.8	50	"	"	"	"	"
56-23-5	Carbon tetrachloride	BRL	U	µg/kg dry	52.8	5.3	50	"	"	"	"	"
108-90-7	Chlorobenzene	BRL	U	µg/kg dry	52.8	6.9	50	"	"	"	"	"
75-00-3	Chloroethane	BRL	U	µg/kg dry	106	11.6	50	"	"	"	"	"
67-66-3	Chloroform	BRL	U	µg/kg dry	52.8	4.2	50	"	"	"	"	"
74-87-3	Chloromethane	BRL	U	µg/kg dry	106	4.8	50	"	"	"	"	"
95-49-8	2-Chlorotoluene	BRL	U	µg/kg dry	52.8	5.3	50	"	"	"	"	"
106-43-4	4-Chlorotoluene	BRL	U	µg/kg dry	52.8	6.3	50	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloropropane	BRL	U	µg/kg dry	106	12.1	50	"	"	"	"	"
124-48-1	Dibromochloromethane	BRL	U	µg/kg dry	52.8	7.9	50	"	"	"	"	"
106-93-4	1,2-Dibromoethane (EDB)	BRL	U	µg/kg dry	52.8	3.7	50	"	"	"	"	"
74-95-3	Dibromomethane	BRL	U	µg/kg dry	52.8	5.3	50	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL	U	µg/kg dry	52.8	12.1	50	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL	U	µg/kg dry	52.8	5.3	50	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL	U	µg/kg dry	52.8	7.4	50	"	"	"	"	"
75-71-8	Dichlorodifluoromethane (Freon12)	BRL	U	µg/kg dry	106	6.9	50	"	"	"	"	"
75-34-3	1,1-Dichloroethane	BRL	U	µg/kg dry	52.8	3.7	50	"	"	"	"	"
107-06-2	1,2-Dichloroethane	BRL	U	µg/kg dry	52.8	4.8	50	"	"	"	"	"
75-35-4	1,1-Dichloroethene	BRL	U	µg/kg dry	52.8	4.2	50	"	"	"	"	"
156-59-2	cis-1,2-Dichloroethene	BRL	U	µg/kg dry	52.8	3.7	50	"	"	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL	U	µg/kg dry	52.8	5.3	50	"	"	"	"	"
78-87-5	1,2-Dichloropropane	BRL	U	µg/kg dry	52.8	4.8	50	"	"	"	"	"
142-28-9	1,3-Dichloropropane	BRL	U	µg/kg dry	52.8	4.8	50	"	"	"	"	"
594-20-7	2,2-Dichloropropane	BRL	U	µg/kg dry	52.8	39.1	50	"	"	"	"	"
563-58-6	1,1-Dichloropropene	BRL	U	µg/kg dry	52.8	6.9	50	"	"	"	"	"
10061-01-5	cis-1,3-Dichloropropene	BRL	U	µg/kg dry	52.8	6.3	50	"	"	"	"	"
10061-02-6	trans-1,3-Dichloropropene	BRL	U	µg/kg dry	52.8	4.8	50	"	"	"	"	"
100-41-4	Ethylbenzene	BRL	U	µg/kg dry	52.8	6.3	50	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL	U	µg/kg dry	52.8	8.4	50	"	"	"	"	"
591-78-6	2-Hexanone (MBK)	BRL	U	µg/kg dry	528	6.9	50	"	"	"	"	"
98-82-8	Isopropylbenzene	BRL	U	µg/kg dry	52.8	6.9	50	"	"	"	"	"
99-87-6	4-Isopropyltoluene	BRL	U	µg/kg dry	52.8	6.3	50	"	"	"	"	"
1634-04-4	Methyl tert-butyl ether	BRL	U	µg/kg dry	52.8	5.3	50	"	"	"	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	U	µg/kg dry	528	5.8	50	"	"	"	"	"
75-09-2	Methylene chloride	BRL	U	µg/kg dry	528	25.3	50	"	"	"	"	"
91-20-3	Naphthalene	BRL	U	µg/kg dry	52.8	9.5	50	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-30 SA70868-12	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds												
Volatile Organic Compounds						Initial weight: 22.84 g						
Prepared by method SW846 5030 Soil (high level)												
103-65-1	n-Propylbenzene	BRL	U	µg/kg dry	52.8	7.4	50	SW 846 8260B	16-Nov-07	16-Nov-07	7111382	adu
100-42-5	Styrene	BRL	U	µg/kg dry	52.8	48.6	50	"	"	"	"	"
630-20-6	1,1,1,2-Tetrachloroethane	BRL	U	µg/kg dry	52.8	9.0	50	"	"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	BRL	U	µg/kg dry	52.8	8.4	50	"	"	"	"	"
127-18-4	Tetrachloroethene	BRL	U	µg/kg dry	52.8	3.2	50	"	"	"	"	"
108-88-3	Toluene	BRL	U	µg/kg dry	52.8	8.4	50	"	"	"	"	"
87-61-6	1,2,3-Trichlorobenzene	BRL	U	µg/kg dry	52.8	6.9	50	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL	U	µg/kg dry	52.8	4.2	50	"	"	"	"	"
71-55-6	1,1,1-Trichloroethane	BRL	U	µg/kg dry	52.8	6.3	50	"	"	"	"	"
79-00-5	1,1,2-Trichloroethane	BRL	U	µg/kg dry	52.8	3.7	50	"	"	"	"	"
79-01-6	Trichloroethene	BRL	U	µg/kg dry	52.8	5.8	50	"	"	"	"	"
75-69-4	Trichlorofluoromethane (Freon 11)	BRL	U	µg/kg dry	52.8	8.4	50	"	"	"	"	"
96-18-4	1,2,3-Trichloropropane	BRL	U	µg/kg dry	52.8	5.3	50	"	"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	BRL	U	µg/kg dry	52.8	6.3	50	"	"	"	"	"
108-67-8	1,3,5-Trimethylbenzene	BRL	U	µg/kg dry	52.8	6.3	50	"	"	"	"	"
75-01-4	Vinyl chloride	BRL	U	µg/kg dry	52.8	6.3	50	"	"	"	"	"
1330-20-7	m,p-Xylene	BRL	U	µg/kg dry	106	12.1	50	"	"	"	"	"
95-47-6	o-Xylene	BRL	U	µg/kg dry	52.8	9.5	50	"	"	"	"	"
109-99-9	Tetrahydrofuran	BRL	U	µg/kg dry	528	21.6	50	"	"	"	"	"
60-29-7	Ethyl ether	BRL	U	µg/kg dry	52.8	9.5	50	"	"	"	"	"
994-05-8	Tert-amyl methyl ether	BRL	U	µg/kg dry	52.8	5.8	50	"	"	"	"	"
637-92-3	Ethyl tert-butyl ether	BRL	U	µg/kg dry	52.8	2.6	50	"	"	"	"	"
108-20-3	Di-isopropyl ether	BRL	U	µg/kg dry	52.8	5.3	50	"	"	"	"	"
75-65-0	Tert-Butanol / butyl alcohol	BRL	U	µg/kg dry	528	391	50	"	"	"	"	"
123-91-1	1,4-Dioxane	BRL	U	µg/kg dry	1060	257	50	"	"	"	"	"
110-57-6	trans-1,4-Dichloro-2-butene	BRL	U	µg/kg dry	264	132	50	"	"	"	"	"
64-17-5	Ethanol	BRL	U	µg/kg dry	26400	4710	50	"	"	"	"	"
Surrogate recoveries:												
460-00-4	*4-Bromofluorobenzene*	*100*		*70-130 %*				"	"	"	"	"
2037-26-5	*Toluene-d8*	*102*		*70-130 %*				"	"	"	"	"
17060-07-0	*1,2-Dichloroethane-d4*	*102*		*70-130 %*				"	"	"	"	"
1868-53-7	*Dibromofluoromethane*	*93*		*70-130 %*				"	"	"	"	"
Semivolatile Organic Compounds by GCMS												
PAHs by SW846 8270C												
Prepared by method SW846 3550B												
83-32-9	Acenaphthene	BRL	U	µg/kg dry	163	0.147	1	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
208-96-8	Acenaphthylene	BRL	U	µg/kg dry	163	0.184	1	"	"	"	"	"
120-12-7	Anthracene	BRL	U	µg/kg dry	163	0.184	1	"	"	"	"	"
56-55-3	Benzo (a) anthracene	BRL	U	µg/kg dry	163	0.392	1	"	"	"	"	"
50-32-8	Benzo (a) pyrene	BRL	U	µg/kg dry	163	0.208	1	"	"	"	"	"
205-99-2	Benzo (b) fluoranthene	BRL	U	µg/kg dry	163	0.809	1	"	"	"	"	"
191-24-2	Benzo (g,h,i) perylene	BRL	U	µg/kg dry	163	0.172	1	"	"	"	"	"
207-08-9	Benzo (k) fluoranthene	BRL	U	µg/kg dry	163	0.245	1	"	"	"	"	"
218-01-9	Chrysene	BRL	U	µg/kg dry	163	0.0858	1	"	"	"	"	"
53-70-3	Dibenzo (a,h) anthracene	BRL	U	µg/kg dry	163	0.0980	1	"	"	"	"	"
206-44-0	Fluoranthene	BRL	U	µg/kg dry	163	0.147	1	"	"	"	"	"
86-73-7	Fluorene	BRL	U	µg/kg dry	163	0.147	1	"	"	"	"	"
193-39-5	Indeno (1,2,3-cd) pyrene	BRL	U	µg/kg dry	163	0.282	1	"	"	"	"	"
90-12-0	1-Methylnaphthalene	BRL	U	µg/kg dry	163	0.135	1	"	"	"	"	"
91-57-6	2-Methylnaphthalene	BRL	U	µg/kg dry	163	0.135	1	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-30 SA70868-12	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS												
PAHs by SW846 8270C												
Prepared by method SW846 3550B												
91-20-3	Naphthalene	BRL	U	µg/kg dry	163	0.233	1	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
85-01-8	Phenanthrene	BRL	U	µg/kg dry	163	0.282	1	"	"	"	"	"
129-00-0	Pyrene	BRL	U	µg/kg dry	163	0.429	1	"	"	"	"	"
Surrogate recoveries:												
321-60-8	*2-Fluorobiphenyl*	*77*		*30-130 %*				"	"	"	"	"
1718-51-0	*Terphenyl-dl4*	*85*		*30-130 %*				"	"	"	"	"
Total Metals by EPA 6000/7000 Series Methods												
7439-97-6	Mercury	0.0355		mg/kg dry	0.0332	0.0079	1	SW846 7471A	16-Nov-07	19-Nov-07	7111330	CRM
Total Metals by EPA 200 Series Methods												
7440-22-4	Silver	BRL	U	mg/kg dry	1.60	0.373	1	EPA 200.7	16-Nov-07	21-Nov-07	7111328	SA
7440-38-2	Arsenic	1.19	J	mg/kg dry	1.60	0.245	1	"	"	"	"	"
7440-41-7	Beryllium	0.261	J	mg/kg dry	0.533	0.118	1	"	"	"	"	"
7440-43-9	Cadmium	0.613		mg/kg dry	0.533	0.0181	1	"	"	"	"	"
7440-47-3	Chromium	67.2		mg/kg dry	1.07	0.308	1	"	"	"	"	"
7440-50-8	Copper	32.0		mg/kg dry	1.07	0.207	1	"	"	"	"	"
7440-02-0	Nickel	4.43		mg/kg dry	1.07	0.104	1	"	"	"	"	"
7439-92-1	Lead	140		mg/kg dry	1.60	0.166	1	"	"	"	"	"
7440-36-0	Antimony	BRL	U	mg/kg dry	3.20	0.389	1	"	"	"	"	"
7782-49-2	Selenium	0.448	J	mg/kg dry	1.60	0.344	1	"	"	"	"	"
7440-28-0	Thallium	0.863	J	mg/kg dry	3.20	0.500	1	"	"	"	"	"
7440-66-6	Zinc	68.5		mg/kg dry	1.07	0.389	1	"	"	"	"	"
General Chemistry Parameters												
	% Solids	80.6		%			1	SM2540 G Mod.	16-Nov-07	16-Nov-07	7111397	DG

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-31 SA70868-13	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds												
	VOC Extraction	Field extracted		N/A			1	VOC Soil Extraction	12-Nov-07	12-Nov-07	7111029	DG
Volatile Organic Compounds						Initial weight: 19.06 g						
Prepared by method SW846 5030 Soil (high level)												
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon	BRL	U	µg/kg dry	69.6	28.5	50	SW 846 8260B	16-Nov-07	16-Nov-07	7111382	adu
67-64-1	Acetone	BRL	U	µg/kg dry	696	610	50	"	"	"	"	"
107-13-1	Acrylonitrile	BRL	U	µg/kg dry	69.6	56.4	50	"	"	"	"	"
71-43-2	Benzene	BRL	U	µg/kg dry	69.6	7.7	50	"	"	"	"	"
108-86-1	Bromobenzene	BRL	U	µg/kg dry	69.6	11.1	50	"	"	"	"	"
74-97-5	Bromochloromethane	BRL	U	µg/kg dry	69.6	6.3	50	"	"	"	"	"
75-27-4	Bromodichloromethane	BRL	U	µg/kg dry	69.6	4.2	50	"	"	"	"	"
75-25-2	Bromoform	BRL	U	µg/kg dry	69.6	12.5	50	"	"	"	"	"
74-83-9	Bromomethane	BRL	U	µg/kg dry	139	13.9	50	"	"	"	"	"
78-93-3	2-Butanone (MEK)	406	J	µg/kg dry	696	49.4	50	"	"	"	"	"
104-51-8	n-Butylbenzene	BRL	U	µg/kg dry	69.6	6.3	50	"	"	"	"	"
135-98-8	sec-Butylbenzene	BRL	U	µg/kg dry	69.6	8.3	50	"	"	"	"	"
98-06-6	tert-Butylbenzene	BRL	U	µg/kg dry	69.6	6.3	50	"	"	"	"	"
75-15-0	Carbon disulfide	BRL	U	µg/kg dry	348	6.3	50	"	"	"	"	"
56-23-5	Carbon tetrachloride	BRL	U	µg/kg dry	69.6	7.0	50	"	"	"	"	"
108-90-7	Chlorobenzene	BRL	U	µg/kg dry	69.6	9.0	50	"	"	"	"	"
75-00-3	Chloroethane	BRL	U	µg/kg dry	139	15.3	50	"	"	"	"	"
67-66-3	Chloroform	BRL	U	µg/kg dry	69.6	5.6	50	"	"	"	"	"
74-87-3	Chloromethane	BRL	U	µg/kg dry	139	6.3	50	"	"	"	"	"
95-49-8	2-Chlorotoluene	BRL	U	µg/kg dry	69.6	7.0	50	"	"	"	"	"
106-43-4	4-Chlorotoluene	BRL	U	µg/kg dry	69.6	8.3	50	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloropropane	BRL	U	µg/kg dry	139	16.0	50	"	"	"	"	"
124-48-1	Dibromochloromethane	BRL	U	µg/kg dry	69.6	10.4	50	"	"	"	"	"
106-93-4	1,2-Dibromoethane (EDB)	BRL	U	µg/kg dry	69.6	4.9	50	"	"	"	"	"
74-95-3	Dibromomethane	BRL	U	µg/kg dry	69.6	7.0	50	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL	U	µg/kg dry	69.6	16.0	50	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL	U	µg/kg dry	69.6	7.0	50	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL	U	µg/kg dry	69.6	9.7	50	"	"	"	"	"
75-71-8	Dichlorodifluoromethane (Freon12)	BRL	U	µg/kg dry	139	9.0	50	"	"	"	"	"
75-34-3	1,1-Dichloroethane	BRL	U	µg/kg dry	69.6	4.9	50	"	"	"	"	"
107-06-2	1,2-Dichloroethane	BRL	U	µg/kg dry	69.6	6.3	50	"	"	"	"	"
75-35-4	1,1-Dichloroethene	BRL	U	µg/kg dry	69.6	5.6	50	"	"	"	"	"
156-59-2	cis-1,2-Dichloroethene	BRL	U	µg/kg dry	69.6	4.9	50	"	"	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL	U	µg/kg dry	69.6	7.0	50	"	"	"	"	"
78-87-5	1,2-Dichloropropane	BRL	U	µg/kg dry	69.6	6.3	50	"	"	"	"	"
142-28-9	1,3-Dichloropropane	BRL	U	µg/kg dry	69.6	6.3	50	"	"	"	"	"
594-20-7	2,2-Dichloropropane	BRL	U	µg/kg dry	69.6	51.5	50	"	"	"	"	"
563-58-6	1,1-Dichloropropene	BRL	U	µg/kg dry	69.6	9.0	50	"	"	"	"	"
10061-01-5	cis-1,3-Dichloropropene	BRL	U	µg/kg dry	69.6	8.3	50	"	"	"	"	"
10061-02-6	trans-1,3-Dichloropropene	BRL	U	µg/kg dry	69.6	6.3	50	"	"	"	"	"
100-41-4	Ethylbenzene	BRL	U	µg/kg dry	69.6	8.3	50	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL	U	µg/kg dry	69.6	11.1	50	"	"	"	"	"
591-78-6	2-Hexanone (MBK)	BRL	U	µg/kg dry	696	9.0	50	"	"	"	"	"
98-82-8	Isopropylbenzene	BRL	U	µg/kg dry	69.6	9.0	50	"	"	"	"	"
99-87-6	4-Isopropyltoluene	BRL	U	µg/kg dry	69.6	8.3	50	"	"	"	"	"
1634-04-4	Methyl tert-butyl ether	BRL	U	µg/kg dry	69.6	7.0	50	"	"	"	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	U	µg/kg dry	696	7.7	50	"	"	"	"	"
75-09-2	Methylene chloride	BRL	U	µg/kg dry	696	33.4	50	"	"	"	"	"
91-20-3	Naphthalene	BRL	U	µg/kg dry	69.6	12.5	50	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-31 SA70868-13	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds												
Volatile Organic Compounds							Initial weight: 19.06 g					
Prepared by method SW846 5030 Soil (high level)												
103-65-1	n-Propylbenzene	BRL	U	µg/kg dry	69.6	9.7	50	SW 846 8260B	16-Nov-07	16-Nov-07	7111382	adu
100-42-5	Styrene	BRL	U	µg/kg dry	69.6	64.0	50	"	"	"	"	"
630-20-6	1,1,1,2-Tetrachloroethane	BRL	U	µg/kg dry	69.6	11.8	50	"	"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	BRL	U	µg/kg dry	69.6	11.1	50	"	"	"	"	"
127-18-4	Tetrachloroethene	BRL	U	µg/kg dry	69.6	4.2	50	"	"	"	"	"
108-88-3	Toluene	BRL	U	µg/kg dry	69.6	11.1	50	"	"	"	"	"
87-61-6	1,2,3-Trichlorobenzene	BRL	U	µg/kg dry	69.6	9.0	50	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL	U	µg/kg dry	69.6	5.6	50	"	"	"	"	"
71-55-6	1,1,1-Trichloroethane	BRL	U	µg/kg dry	69.6	8.3	50	"	"	"	"	"
79-00-5	1,1,2-Trichloroethane	BRL	U	µg/kg dry	69.6	4.9	50	"	"	"	"	"
79-01-6	Trichloroethene	BRL	U	µg/kg dry	69.6	7.7	50	"	"	"	"	"
75-69-4	Trichlorofluoromethane (Freon 11)	BRL	U	µg/kg dry	69.6	11.1	50	"	"	"	"	"
96-18-4	1,2,3-Trichloropropane	BRL	U	µg/kg dry	69.6	7.0	50	"	"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	BRL	U	µg/kg dry	69.6	8.3	50	"	"	"	"	"
108-67-8	1,3,5-Trimethylbenzene	BRL	U	µg/kg dry	69.6	8.3	50	"	"	"	"	"
75-01-4	Vinyl chloride	BRL	U	µg/kg dry	69.6	8.3	50	"	"	"	"	"
1330-20-7	m,p-Xylene	BRL	U	µg/kg dry	139	16.0	50	"	"	"	"	"
95-47-6	o-Xylene	BRL	U	µg/kg dry	69.6	12.5	50	"	"	"	"	"
109-99-9	Tetrahydrofuran	BRL	U	µg/kg dry	696	28.5	50	"	"	"	"	"
60-29-7	Ethyl ether	BRL	U	µg/kg dry	69.6	12.5	50	"	"	"	"	"
994-05-8	Tert-amyl methyl ether	BRL	U	µg/kg dry	69.6	7.7	50	"	"	"	"	"
637-92-3	Ethyl tert-butyl ether	BRL	U	µg/kg dry	69.6	3.5	50	"	"	"	"	"
108-20-3	Di-isopropyl ether	BRL	U	µg/kg dry	69.6	7.0	50	"	"	"	"	"
75-65-0	Tert-Butanol / butyl alcohol	BRL	U	µg/kg dry	696	516	50	"	"	"	"	"
123-91-1	1,4-Dioxane	BRL	U	µg/kg dry	1390	339	50	"	"	"	"	"
110-57-6	trans-1,4-Dichloro-2-butene	BRL	U	µg/kg dry	348	174	50	"	"	"	"	"
64-17-5	Ethanol	BRL	U	µg/kg dry	34800	6200	50	"	"	"	"	"
Surrogate recoveries:												
460-00-4	*4-Bromofluorobenzene*	*104*		*70-130 %*				"	"	"	"	"
2037-26-5	*Toluene-d8*	*102*		*70-130 %*				"	"	"	"	"
17060-07-0	*1,2-Dichloroethane-d4*	*104*		*70-130 %*				"	"	"	"	"
1868-53-7	*Dibromofluoromethane*	*93*		*70-130 %*				"	"	"	"	"
Semivolatile Organic Compounds by GCMS												
PAHs by SW846 8270C												
Prepared by method SW846 3550B												
83-32-9	Acenaphthene	BRL	U	µg/kg dry	175	0.158	1	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
208-96-8	Acenaphthylene	BRL	U	µg/kg dry	175	0.197	1	"	"	"	"	"
120-12-7	Anthracene	BRL	U	µg/kg dry	175	0.197	1	"	"	"	"	"
56-55-3	Benzo (a) anthracene	BRL	U	µg/kg dry	175	0.421	1	"	"	"	"	"
50-32-8	Benzo (a) pyrene	89.4	J	µg/kg dry	175	0.223	1	"	"	"	"	"
205-99-2	Benzo (b) fluoranthene	89.4	J	µg/kg dry	175	0.868	1	"	"	"	"	"
191-24-2	Benzo (g,h,i) perylene	BRL	U	µg/kg dry	175	0.184	1	"	"	"	"	"
207-08-9	Benzo (k) fluoranthene	94.7	J	µg/kg dry	175	0.263	1	"	"	"	"	"
218-01-9	Chrysene	92.9	J	µg/kg dry	175	0.0920	1	"	"	"	"	"
53-70-3	Dibenzo (a,h) anthracene	BRL	U	µg/kg dry	175	0.105	1	"	"	"	"	"
206-44-0	Fluoranthene	184		µg/kg dry	175	0.158	1	"	"	"	"	"
86-73-7	Fluorene	BRL	U	µg/kg dry	175	0.158	1	"	"	"	"	"
193-39-5	Indeno (1,2,3-cd) pyrene	BRL	U	µg/kg dry	175	0.302	1	"	"	"	"	"
90-12-0	1-Methylnaphthalene	BRL	U	µg/kg dry	175	0.145	1	"	"	"	"	"
91-57-6	2-Methylnaphthalene	BRL	U	µg/kg dry	175	0.145	1	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-31 SA70868-13	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS												
PAHs by SW846 8270C												
Prepared by method SW846 3550B												
91-20-3	Naphthalene	BRL	U	µg/kg dry	175	0.250	1	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
85-01-8	Phenanthrene	103	J	µg/kg dry	175	0.302	1	"	"	"	"	"
129-00-0	Pyrene	131	J	µg/kg dry	175	0.460	1	"	"	"	"	"
Surrogate recoveries:												
321-60-8	*2-Fluorobiphenyl*	*77*		*30-130 %*				"	"	"	"	"
1718-51-0	*Terphenyl-dl4*	*83*		*30-130 %*				"	"	"	"	"
Total Metals by EPA 6000/7000 Series Methods												
7439-97-6	Mercury	0.100		mg/kg dry	0.0360	0.0086	1	SW846 7471A	16-Nov-07	19-Nov-07	7111330	CRM
Total Metals by EPA 200 Series Methods												
7440-22-4	Silver	BRL	U	mg/kg dry	1.80	0.420	1	EPA 200.7	16-Nov-07	21-Nov-07	7111328	SA
7440-38-2	Arsenic	BRL	U	mg/kg dry	1.80	0.276	1	"	"	"	"	"
7440-41-7	Beryllium	0.462	J	mg/kg dry	0.600	0.133	1	"	"	"	"	"
7440-43-9	Cadmium	0.330	J	mg/kg dry	0.600	0.0204	1	"	"	"	"	"
7440-47-3	Chromium	9.96		mg/kg dry	1.20	0.347	1	"	"	"	"	"
7440-50-8	Copper	5.82		mg/kg dry	1.20	0.233	1	"	"	"	"	"
7440-02-0	Nickel	1.92		mg/kg dry	1.20	0.118	1	"	"	"	"	"
7439-92-1	Lead	14.8		mg/kg dry	1.80	0.187	1	"	"	"	"	"
7440-36-0	Antimony	BRL	U	mg/kg dry	3.60	0.438	1	"	"	"	"	"
7782-49-2	Selenium	0.456	J	mg/kg dry	1.80	0.388	1	"	"	"	"	"
7440-28-0	Thallium	0.924	J	mg/kg dry	3.60	0.563	1	"	"	"	"	"
7440-66-6	Zinc	81.4		mg/kg dry	1.20	0.438	1	"	"	"	"	"
General Chemistry Parameters												
	% Solids	74.7		%			1	SM2540 G Mod.	16-Nov-07	16-Nov-07	7111397	DG

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-32 SA70868-14	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Batch*	*Analyst*
SPLP Metals by EPA 1312 & 6000/7000 Series Methods												
	SPLP Extraction	Completed		N/A			1	SW846 1312	14-Nov-07	14-Nov-07	7111227	DG
7439-92-1	Lead	0.0102	J	mg/l	0.0150	0.0050	1	SW846 1312/6010B	15-Nov-07	18-Nov-07	7111473	HB

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-33 SA70868-15	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Batch*	*Analyst*
SPLP Metals by EPA 1312 & 6000/7000 Series Methods												
	SPLP Extraction	Completed		N/A			1	SW846 1312	14-Nov-07	14-Nov-07	7111227	DG
7439-92-1	Lead	0.0201		mg/l	0.0150	0.0050	1	SW846 1312/6010B	15-Nov-07	18-Nov-07	7111473	HB

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111331 - SW846 5030 Soil (high level)										
Blank (7111331-BLK1)										
Prepared & Analyzed: 15-Nov-07										
1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL	U	µg/kg wet	1.0						
Acetone	BRL	U	µg/kg wet	10.0						
Acrylonitrile	BRL	U	µg/kg wet	1.0						
Benzene	BRL	U	µg/kg wet	1.0						
Bromobenzene	BRL	U	µg/kg wet	1.0						
Bromochloromethane	BRL	U	µg/kg wet	1.0						
Bromodichloromethane	BRL	U	µg/kg wet	1.0						
Bromoform	BRL	U	µg/kg wet	1.0						
Bromomethane	BRL	U	µg/kg wet	2.0						
2-Butanone (MEK)	BRL	U	µg/kg wet	10.0						
n-Butylbenzene	BRL	U	µg/kg wet	1.0						
sec-Butylbenzene	BRL	U	µg/kg wet	1.0						
tert-Butylbenzene	BRL	U	µg/kg wet	1.0						
Carbon disulfide	BRL	U	µg/kg wet	5.0						
Carbon tetrachloride	BRL	U	µg/kg wet	1.0						
Chlorobenzene	BRL	U	µg/kg wet	1.0						
Chloroethane	BRL	U	µg/kg wet	2.0						
Chloroform	BRL	U	µg/kg wet	1.0						
Chloromethane	BRL	U	µg/kg wet	2.0						
2-Chlorotoluene	BRL	U	µg/kg wet	1.0						
4-Chlorotoluene	BRL	U	µg/kg wet	1.0						
1,2-Dibromo-3-chloropropane	BRL	U	µg/kg wet	2.0						
Dibromochloromethane	BRL	U	µg/kg wet	1.0						
1,2-Dibromoethane (EDB)	BRL	U	µg/kg wet	1.0						
Dibromomethane	BRL	U	µg/kg wet	1.0						
1,2-Dichlorobenzene	BRL	U	µg/kg wet	1.0						
1,3-Dichlorobenzene	BRL	U	µg/kg wet	1.0						
1,4-Dichlorobenzene	BRL	U	µg/kg wet	1.0						
Dichlorodifluoromethane (Freon12)	BRL	U	µg/kg wet	2.0						
1,1-Dichloroethane	BRL	U	µg/kg wet	1.0						
1,2-Dichloroethane	BRL	U	µg/kg wet	1.0						
1,1-Dichloroethene	BRL	U	µg/kg wet	1.0						
cis-1,2-Dichloroethene	BRL	U	µg/kg wet	1.0						
trans-1,2-Dichloroethene	BRL	U	µg/kg wet	1.0						
1,2-Dichloropropane	BRL	U	µg/kg wet	1.0						
1,3-Dichloropropane	BRL	U	µg/kg wet	1.0						
2,2-Dichloropropane	BRL	U	µg/kg wet	1.0						
1,1-Dichloropropene	BRL	U	µg/kg wet	1.0						
cis-1,3-Dichloropropene	BRL	U	µg/kg wet	1.0						
trans-1,3-Dichloropropene	BRL	U	µg/kg wet	1.0						
Ethylbenzene	BRL	U	µg/kg wet	1.0						
Hexachlorobutadiene	BRL	U	µg/kg wet	1.0						
2-Hexanone (MBK)	BRL	U	µg/kg wet	10.0						
Isopropylbenzene	BRL	U	µg/kg wet	1.0						
4-Isopropyltoluene	BRL	U	µg/kg wet	1.0						
Methyl tert-butyl ether	BRL	U	µg/kg wet	1.0						
4-Methyl-2-pentanone (MIBK)	BRL	U	µg/kg wet	10.0						
Methylene chloride	BRL	U	µg/kg wet	10.0						
Naphthalene	BRL	U	µg/kg wet	1.0						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111331 - SW846 5030 Soil (high level)										
Blank (7111331-BLK1)										
Prepared & Analyzed: 15-Nov-07										
n-Propylbenzene	BRL	U	µg/kg wet	1.0						
Styrene	BRL	U	µg/kg wet	1.0						
1,1,1,2-Tetrachloroethane	BRL	U	µg/kg wet	1.0						
1,1,2,2-Tetrachloroethane	BRL	U	µg/kg wet	1.0						
Tetrachloroethene	BRL	U	µg/kg wet	1.0						
Toluene	BRL	U	µg/kg wet	1.0						
1,2,3-Trichlorobenzene	BRL	U	µg/kg wet	1.0						
1,2,4-Trichlorobenzene	BRL	U	µg/kg wet	1.0						
1,1,1-Trichloroethane	BRL	U	µg/kg wet	1.0						
1,1,2-Trichloroethane	BRL	U	µg/kg wet	1.0						
Trichloroethene	BRL	U	µg/kg wet	1.0						
Trichlorofluoromethane (Freon 11)	BRL	U	µg/kg wet	1.0						
1,2,3-Trichloropropane	BRL	U	µg/kg wet	1.0						
1,2,4-Trimethylbenzene	BRL	U	µg/kg wet	1.0						
1,3,5-Trimethylbenzene	BRL	U	µg/kg wet	1.0						
Vinyl chloride	BRL	U	µg/kg wet	1.0						
m,p-Xylene	BRL	U	µg/kg wet	2.0						
o-Xylene	BRL	U	µg/kg wet	1.0						
Tetrahydrofuran	BRL	U	µg/kg wet	10.0						
Ethyl ether	BRL	U	µg/kg wet	1.0						
Tert-amyl methyl ether	BRL	U	µg/kg wet	1.0						
Ethyl tert-butyl ether	BRL	U	µg/kg wet	1.0						
Di-isopropyl ether	BRL	U	µg/kg wet	1.0						
Tert-Butanol / butyl alcohol	BRL	U	µg/kg wet	10.0						
1,4-Dioxane	BRL	U	µg/kg wet	20.0						
trans-1,4-Dichloro-2-butene	BRL	U	µg/kg wet	5.0						
Ethanol	BRL	U	µg/kg wet	500						
Surrogate: 4-Bromofluorobenzene	*30.6*		µg/kg wet		*30.0*		*102*	*70-130*		
Surrogate: Toluene-d8	*30.8*		µg/kg wet		*30.0*		*103*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*31.0*		µg/kg wet		*30.0*		*103*	*70-130*		
Surrogate: Dibromofluoromethane	*28.6*		µg/kg wet		*30.0*		*95*	*70-130*		
LCS (7111331-BS1)										
Prepared & Analyzed: 15-Nov-07										
1,1,2-Trichlorotrifluoroethane (Freon 113)	17.1		µg/kg wet		20.0		86	70-130		
Acetone	18.1		µg/kg wet		20.0		90	0-177		
Acrylonitrile	19.8		µg/kg wet		20.0		99	70-130		
Benzene	20.1		µg/kg wet		20.0		101	70-130		
Bromobenzene	22.0		µg/kg wet		20.0		110	70-130		
Bromochloromethane	21.8		µg/kg wet		20.0		109	70-130		
Bromodichloromethane	20.2		µg/kg wet		20.0		101	70-130		
Bromoform	18.3		µg/kg wet		20.0		92	70-130		
Bromomethane	23.4		µg/kg wet		20.0		117	61.3-136		
2-Butanone (MEK)	19.2		µg/kg wet		20.0		96	20.6-137		
n-Butylbenzene	15.7		µg/kg wet		20.0		79	70-130		
sec-Butylbenzene	19.2		µg/kg wet		20.0		96	70-130		
tert-Butylbenzene	20.4		µg/kg wet		20.0		102	70-130		
Carbon disulfide	14.5		µg/kg wet		20.0		73	70-130		
Carbon tetrachloride	17.1		µg/kg wet		20.0		86	70-130		
Chlorobenzene	21.2		µg/kg wet		20.0		106	70-130		
Chloroethane	16.6		µg/kg wet		20.0		83	64.6-134		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111331 - SW846 5030 Soil (high level)										
LCS (7111331-BS1)										
Prepared & Analyzed: 15-Nov-07										
Chloroform	20.8		µg/kg wet		20.0		104	70-130		
Chloromethane	19.2		µg/kg wet		20.0		96	70-130		
2-Chlorotoluene	21.1		µg/kg wet		20.0		106	70-130		
4-Chlorotoluene	20.4		µg/kg wet		20.0		102	70-130		
1,2-Dibromo-3-chloropropane	17.0		µg/kg wet		20.0		85	70-130		
Dibromochloromethane	18.6		µg/kg wet		20.0		93	70-137		
1,2-Dibromoethane (EDB)	21.6		µg/kg wet		20.0		108	70-130		
Dibromomethane	21.8		µg/kg wet		20.0		109	70-130		
1,2-Dichlorobenzene	21.0		µg/kg wet		20.0		105	70-130		
1,3-Dichlorobenzene	21.2		µg/kg wet		20.0		106	70-130		
1,4-Dichlorobenzene	19.6		µg/kg wet		20.0		98	70-130		
Dichlorodifluoromethane (Freon12)	17.1		µg/kg wet		20.0		85	29.9-190		
1,1-Dichloroethane	20.6		µg/kg wet		20.0		103	70-130		
1,2-Dichloroethane	20.5		µg/kg wet		20.0		102	70-130		
1,1-Dichloroethene	17.2		µg/kg wet		20.0		86	70-130		
cis-1,2-Dichloroethene	20.9		µg/kg wet		20.0		104	70-130		
trans-1,2-Dichloroethene	19.0		µg/kg wet		20.0		95	70-130		
1,2-Dichloropropane	20.6		µg/kg wet		20.0		103	70-130		
1,3-Dichloropropane	21.2		µg/kg wet		20.0		106	70-130		
2,2-Dichloropropane	18.3		µg/kg wet		20.0		92	70-130		
1,1-Dichloropropene	17.6		µg/kg wet		20.0		88	70-130		
cis-1,3-Dichloropropene	19.3		µg/kg wet		20.0		97	70-130		
trans-1,3-Dichloropropene	21.5		µg/kg wet		20.0		107	70-130		
Ethylbenzene	20.8		µg/kg wet		20.0		104	70-130		
Hexachlorobutadiene	16.8		µg/kg wet		20.0		84	60.6-135		
2-Hexanone (MBK)	18.2		µg/kg wet		20.0		91	70-130		
Isopropylbenzene	19.8		µg/kg wet		20.0		99	70-130		
4-Isopropyltoluene	18.5		µg/kg wet		20.0		92	70-130		
Methyl tert-butyl ether	21.4		µg/kg wet		20.0		107	70-130		
4-Methyl-2-pentanone (MIBK)	19.0		µg/kg wet		20.0		95	46-139		
Methylene chloride	18.8		µg/kg wet		20.0		94	70-130		
Naphthalene	19.8		µg/kg wet		20.0		99	70-130		
n-Propylbenzene	19.8		µg/kg wet		20.0		99	70-130		
Styrene	21.4		µg/kg wet		20.0		107	70-130		
1,1,1,2-Tetrachloroethane	20.6		µg/kg wet		20.0		103	70-130		
1,1,2,2-Tetrachloroethane	21.6		µg/kg wet		20.0		108	70-130		
Tetrachloroethene	19.5		µg/kg wet		20.0		98	70-130		
Toluene	19.8		µg/kg wet		20.0		99	70-130		
1,2,3-Trichlorobenzene	18.2		µg/kg wet		20.0		91	70-130		
1,2,4-Trichlorobenzene	16.8		µg/kg wet		20.0		84	70-130		
1,1,1-Trichloroethane	19.0		µg/kg wet		20.0		95	70-130		
1,1,2-Trichloroethane	21.8		µg/kg wet		20.0		109	70-130		
Trichloroethene	18.9		µg/kg wet		20.0		94	70-130		
Trichlorofluoromethane (Freon 11)	15.9		µg/kg wet		20.0		79	56.6-150		
1,2,3-Trichloropropane	24.6		µg/kg wet		20.0		123	70-130		
1,2,4-Trimethylbenzene	20.2		µg/kg wet		20.0		101	70-130		
1,3,5-Trimethylbenzene	20.6		µg/kg wet		20.0		103	70-130		
Vinyl chloride	18.0		µg/kg wet		20.0		90	70-130		
m,p-Xylene	41.3		µg/kg wet		40.0		103	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111331 - SW846 5030 Soil (high level)										
LCS (7111331-BS1)										
Prepared & Analyzed: 15-Nov-07										
o-Xylene	21.8		µg/kg wet		20.0		109	70-130		
Tetrahydrofuran	19.5		µg/kg wet		20.0		98	70-130		
Ethyl ether	20.0		µg/kg wet		20.0		100	64.1-136		
Tert-amyl methyl ether	20.0		µg/kg wet		20.0		100	70-130		
Ethyl tert-butyl ether	21.5		µg/kg wet		20.0		107	70-130		
Di-isopropyl ether	19.0		µg/kg wet		20.0		95	70-130		
Tert-Butanol / butyl alcohol	195		µg/kg wet		200		97	70-130		
1,4-Dioxane	216		µg/kg wet		200		108	34.8-156		
trans-1,4-Dichloro-2-butene	15.6		µg/kg wet		20.0		78	70-130		
Ethanol	365		µg/kg wet		400		91	70-130		
Surrogate: 4-Bromofluorobenzene	*31.3*		µg/kg wet		*30.0*		*104*	*70-130*		
Surrogate: Toluene-d8	*30.1*		µg/kg wet		*30.0*		*100*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*29.8*		µg/kg wet		*30.0*		*100*	*70-130*		
Surrogate: Dibromofluoromethane	*29.7*		µg/kg wet		*30.0*		*99*	*70-130*		
LCS Dup (7111331-BSD1)										
Prepared & Analyzed: 15-Nov-07										
1,1,2-Trichlorotrifluoroethane (Freon 113)	16.4		µg/kg wet		20.0		82	70-130	4	25
Acetone	19.1		µg/kg wet		20.0		96	0-177	6	50
Acrylonitrile	20.6		µg/kg wet		20.0		103	70-130	4	25
Benzene	20.4		µg/kg wet		20.0		102	70-130	1	25
Bromobenzene	22.2		µg/kg wet		20.0		111	70-130	1	25
Bromochloromethane	22.2		µg/kg wet		20.0		111	70-130	2	25
Bromodichloromethane	20.1		µg/kg wet		20.0		100	70-130	0.6	25
Bromoform	18.8		µg/kg wet		20.0		94	70-130	2	25
Bromomethane	23.4		µg/kg wet		20.0		117	61.3-136	0.04	50
2-Butanone (MEK)	18.7		µg/kg wet		20.0		94	20.6-137	2	50
n-Butylbenzene	15.1		µg/kg wet		20.0		76	70-130	4	25
sec-Butylbenzene	19.1		µg/kg wet		20.0		96	70-130	0.7	25
tert-Butylbenzene	20.1		µg/kg wet		20.0		100	70-130	1	25
Carbon disulfide	14.8		µg/kg wet		20.0		74	70-130	2	25
Carbon tetrachloride	17.3		µg/kg wet		20.0		87	70-130	1	25
Chlorobenzene	21.2		µg/kg wet		20.0		106	70-130	0.1	25
Chloroethane	16.5		µg/kg wet		20.0		83	64.6-134	0.5	50
Chloroform	21.1		µg/kg wet		20.0		106	70-130	2	25
Chloromethane	19.3		µg/kg wet		20.0		96	70-130	0.3	25
2-Chlorotoluene	20.7		µg/kg wet		20.0		104	70-130	2	25
4-Chlorotoluene	20.3		µg/kg wet		20.0		102	70-130	0.2	25
1,2-Dibromo-3-chloropropane	17.4		µg/kg wet		20.0		87	70-130	2	25
Dibromochloromethane	18.8		µg/kg wet		20.0		94	70-137	1	50
1,2-Dibromoethane (EDB)	22.2		µg/kg wet		20.0		111	70-130	3	25
Dibromomethane	21.7		µg/kg wet		20.0		108	70-130	0.6	25
1,2-Dichlorobenzene	20.9		µg/kg wet		20.0		105	70-130	0.3	25
1,3-Dichlorobenzene	21.1		µg/kg wet		20.0		106	70-130	0.3	25
1,4-Dichlorobenzene	19.5		µg/kg wet		20.0		98	70-130	0.3	25
Dichlorodifluoromethane (Freon12)	16.3		µg/kg wet		20.0		82	29.9-190	4	50
1,1-Dichloroethane	20.5		µg/kg wet		20.0		103	70-130	0.2	25
1,2-Dichloroethane	20.6		µg/kg wet		20.0		103	70-130	0.8	25
1,1-Dichloroethene	17.1		µg/kg wet		20.0		85	70-130	0.5	25
cis-1,2-Dichloroethene	21.2		µg/kg wet		20.0		106	70-130	1	25
trans-1,2-Dichloroethene	19.0		µg/kg wet		20.0		95	70-130	0.05	25

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111331 - SW846 5030 Soil (high level)										
LCS Dup (7111331-BSD1)										
Prepared & Analyzed: 15-Nov-07										
1,2-Dichloropropane	20.0		µg/kg wet		20.0		100	70-130	3	25
1,3-Dichloropropane	21.5		µg/kg wet		20.0		107	70-130	1	25
2,2-Dichloropropane	18.5		µg/kg wet		20.0		92	70-130	0.9	25
1,1-Dichloropropene	17.4		µg/kg wet		20.0		87	70-130	1	25
cis-1,3-Dichloropropene	19.5		µg/kg wet		20.0		98	70-130	0.9	25
trans-1,3-Dichloropropene	22.1		µg/kg wet		20.0		111	70-130	3	25
Ethylbenzene	20.7		µg/kg wet		20.0		103	70-130	0.7	25
Hexachlorobutadiene	16.6		µg/kg wet		20.0		83	60.6-135	1	50
2-Hexanone (MBK)	18.9		µg/kg wet		20.0		95	70-130	4	25
Isopropylbenzene	19.6		µg/kg wet		20.0		98	70-130	1	25
4-Isopropyltoluene	18.3		µg/kg wet		20.0		92	70-130	1	25
Methyl tert-butyl ether	21.9		µg/kg wet		20.0		109	70-130	2	25
4-Methyl-2-pentanone (MIBK)	19.3		µg/kg wet		20.0		96	46-139	2	50
Methylene chloride	18.6		µg/kg wet		20.0		93	70-130	1	25
Naphthalene	19.2		µg/kg wet		20.0		96	70-130	3	25
n-Propylbenzene	19.4		µg/kg wet		20.0		97	70-130	2	25
Styrene	20.8		µg/kg wet		20.0		104	70-130	3	25
1,1,1,2-Tetrachloroethane	21.1		µg/kg wet		20.0		105	70-130	2	25
1,1,2,2-Tetrachloroethane	21.8		µg/kg wet		20.0		109	70-130	1	25
Tetrachloroethene	19.1		µg/kg wet		20.0		96	70-130	2	25
Toluene	19.9		µg/kg wet		20.0		100	70-130	0.5	25
1,2,3-Trichlorobenzene	17.4		µg/kg wet		20.0		87	70-130	5	25
1,2,4-Trichlorobenzene	16.2		µg/kg wet		20.0		81	70-130	4	25
1,1,1-Trichloroethane	19.0		µg/kg wet		20.0		95	70-130	0.2	25
1,1,2-Trichloroethane	21.9		µg/kg wet		20.0		109	70-130	0.5	25
Trichloroethene	19.0		µg/kg wet		20.0		95	70-130	0.7	25
Trichlorofluoromethane (Freon 11)	15.8		µg/kg wet		20.0		79	56.6-150	0.6	50
1,2,3-Trichloropropane	24.7		µg/kg wet		20.0		124	70-130	0.4	25
1,2,4-Trimethylbenzene	19.9		µg/kg wet		20.0		100	70-130	1	25
1,3,5-Trimethylbenzene	20.5		µg/kg wet		20.0		102	70-130	0.6	25
Vinyl chloride	17.5		µg/kg wet		20.0		87	70-130	3	25
m,p-Xylene	41.0		µg/kg wet		40.0		102	70-130	0.9	25
o-Xylene	21.4		µg/kg wet		20.0		107	70-130	2	25
Tetrahydrofuran	20.0		µg/kg wet		20.0		100	70-130	3	25
Ethyl ether	20.5		µg/kg wet		20.0		102	64.1-136	2	50
Tert-amyl methyl ether	20.1		µg/kg wet		20.0		100	70-130	0.3	25
Ethyl tert-butyl ether	21.8		µg/kg wet		20.0		109	70-130	1	25
Di-isopropyl ether	19.1		µg/kg wet		20.0		95	70-130	0.5	25
Tert-Butanol / butyl alcohol	189		µg/kg wet		200		95	70-130	3	25
1,4-Dioxane	209		µg/kg wet		200		104	34.8-156	4	25
trans-1,4-Dichloro-2-butene	16.0		µg/kg wet		20.0		80	70-130	3	25
Ethanol	374		µg/kg wet		400		94	70-130	3	30
Surrogate: 4-Bromofluorobenzene	*31.1*		µg/kg wet		*30.0*		*104*	*70-130*		
Surrogate: Toluene-d8	*30.1*		µg/kg wet		*30.0*		*100*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*30.8*		µg/kg wet		*30.0*		*103*	*70-130*		
Surrogate: Dibromofluoromethane	*30.3*		µg/kg wet		*30.0*		*101*	*70-130*		
Matrix Spike (7111331-MS1)	Source: SA70825-01									
Prepared & Analyzed: 15-Nov-07										
Benzene	20.9		µg/kg dry		20.0	BRL	105	70-130		
Chlorobenzene	23.5		µg/kg dry		20.0	BRL	118	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111331 - SW846 5030 Soil (high level)										
Matrix Spike (7111331-MS1) **Source: SA70825-01**										
Prepared & Analyzed: 15-Nov-07										
1,1-Dichloroethene	17.2		µg/kg dry		20.0	BRL	86	70-130		
Toluene	21.8		µg/kg dry		20.0	BRL	109	70-130		
Trichloroethene	19.9		µg/kg dry		20.0	BRL	99	70-130		
Surrogate: 4-Bromofluorobenzene	*31.4*		µg/kg dry		*30.0*		*105*	*70-130*		
Surrogate: Toluene-d8	*30.3*		µg/kg dry		*30.0*		*101*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*29.5*		µg/kg dry		*30.0*		*98*	*70-130*		
Surrogate: Dibromofluoromethane	*29.4*		µg/kg dry		*30.0*		*98*	*70-130*		
Matrix Spike Dup (7111331-MSD1) **Source: SA70825-01**										
Prepared & Analyzed: 15-Nov-07										
Benzene	20.3		µg/kg dry		20.0	BRL	102	70-130	3	30
Chlorobenzene	22.9		µg/kg dry		20.0	BRL	114	70-130	3	30
1,1-Dichloroethene	16.3		µg/kg dry		20.0	BRL	81	70-130	6	30
Toluene	21.2		µg/kg dry		20.0	BRL	106	70-130	3	30
Trichloroethene	19.6		µg/kg dry		20.0	BRL	98	70-130	2	30
Surrogate: 4-Bromofluorobenzene	*31.3*		µg/kg dry		*30.0*		*104*	*70-130*		
Surrogate: Toluene-d8	*30.5*		µg/kg dry		*30.0*		*102*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*29.2*		µg/kg dry		*30.0*		*97*	*70-130*		
Surrogate: Dibromofluoromethane	*29.3*		µg/kg dry		*30.0*		*98*	*70-130*		
Batch 7111382 - SW846 5030 Soil (high level)										
Blank (7111382-BLK1)										
Prepared & Analyzed: 16-Nov-07										
1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL	U	µg/kg wet	1.0						
Acetone	BRL	U	µg/kg wet	10.0						
Acrylonitrile	BRL	U	µg/kg wet	1.0						
Benzene	BRL	U	µg/kg wet	1.0						
Bromobenzene	BRL	U	µg/kg wet	1.0						
Bromochloromethane	BRL	U	µg/kg wet	1.0						
Bromodichloromethane	BRL	U	µg/kg wet	1.0						
Bromoform	BRL	U	µg/kg wet	1.0						
Bromomethane	BRL	U	µg/kg wet	2.0						
2-Butanone (MEK)	BRL	U	µg/kg wet	10.0						
n-Butylbenzene	BRL	U	µg/kg wet	1.0						
sec-Butylbenzene	BRL	U	µg/kg wet	1.0						
tert-Butylbenzene	BRL	U	µg/kg wet	1.0						
Carbon disulfide	BRL	U	µg/kg wet	5.0						
Carbon tetrachloride	BRL	U	µg/kg wet	1.0						
Chlorobenzene	BRL	U	µg/kg wet	1.0						
Chloroethane	BRL	U	µg/kg wet	2.0						
Chloroform	BRL	U	µg/kg wet	1.0						
Chloromethane	BRL	U	µg/kg wet	2.0						
2-Chlorotoluene	BRL	U	µg/kg wet	1.0						
4-Chlorotoluene	BRL	U	µg/kg wet	1.0						
1,2-Dibromo-3-chloropropane	BRL	U	µg/kg wet	2.0						
Dibromochloromethane	BRL	U	µg/kg wet	1.0						
1,2-Dibromoethane (EDB)	BRL	U	µg/kg wet	1.0						
Dibromomethane	BRL	U	µg/kg wet	1.0						
1,2-Dichlorobenzene	BRL	U	µg/kg wet	1.0						
1,3-Dichlorobenzene	BRL	U	µg/kg wet	1.0						
1,4-Dichlorobenzene	BRL	U	µg/kg wet	1.0						
Dichlorodifluoromethane (Freon12)	BRL	U	µg/kg wet	2.0						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111382 - SW846 5030 Soil (high level)										
Blank (7111382-BLK1)										
Prepared & Analyzed: 16-Nov-07										
1,1-Dichloroethane	BRL	U	µg/kg wet	1.0						
1,2-Dichloroethane	BRL	U	µg/kg wet	1.0						
1,1-Dichloroethene	BRL	U	µg/kg wet	1.0						
cis-1,2-Dichloroethene	BRL	U	µg/kg wet	1.0						
trans-1,2-Dichloroethene	BRL	U	µg/kg wet	1.0						
1,2-Dichloropropane	BRL	U	µg/kg wet	1.0						
1,3-Dichloropropane	BRL	U	µg/kg wet	1.0						
2,2-Dichloropropane	BRL	U	µg/kg wet	1.0						
1,1-Dichloropropene	BRL	U	µg/kg wet	1.0						
cis-1,3-Dichloropropene	BRL	U	µg/kg wet	1.0						
trans-1,3-Dichloropropene	BRL	U	µg/kg wet	1.0						
Ethylbenzene	BRL	U	µg/kg wet	1.0						
Hexachlorobutadiene	BRL	U	µg/kg wet	1.0						
2-Hexanone (MBK)	BRL	U	µg/kg wet	10.0						
Isopropylbenzene	BRL	U	µg/kg wet	1.0						
4-Isopropyltoluene	BRL	U	µg/kg wet	1.0						
Methyl tert-butyl ether	BRL	U	µg/kg wet	1.0						
4-Methyl-2-pentanone (MIBK)	BRL	U	µg/kg wet	10.0						
Methylene chloride	BRL	U	µg/kg wet	10.0						
Naphthalene	BRL	U	µg/kg wet	1.0						
n-Propylbenzene	BRL	U	µg/kg wet	1.0						
Styrene	BRL	U	µg/kg wet	1.0						
1,1,1,2-Tetrachloroethane	BRL	U	µg/kg wet	1.0						
1,1,2,2-Tetrachloroethane	BRL	U	µg/kg wet	1.0						
Tetrachloroethene	BRL	U	µg/kg wet	1.0						
Toluene	BRL	U	µg/kg wet	1.0						
1,2,3-Trichlorobenzene	BRL	U	µg/kg wet	1.0						
1,2,4-Trichlorobenzene	BRL	U	µg/kg wet	1.0						
1,1,1-Trichloroethane	BRL	U	µg/kg wet	1.0						
1,1,2-Trichloroethane	BRL	U	µg/kg wet	1.0						
Trichloroethene	BRL	U	µg/kg wet	1.0						
Trichlorofluoromethane (Freon 11)	BRL	U	µg/kg wet	1.0						
1,2,3-Trichloropropane	BRL	U	µg/kg wet	1.0						
1,2,4-Trimethylbenzene	BRL	U	µg/kg wet	1.0						
1,3,5-Trimethylbenzene	BRL	U	µg/kg wet	1.0						
Vinyl chloride	BRL	U	µg/kg wet	1.0						
m,p-Xylene	BRL	U	µg/kg wet	2.0						
o-Xylene	BRL	U	µg/kg wet	1.0						
Tetrahydrofuran	BRL	U	µg/kg wet	10.0						
Ethyl ether	BRL	U	µg/kg wet	1.0						
Tert-amyl methyl ether	BRL	U	µg/kg wet	1.0						
Ethyl tert-butyl ether	BRL	U	µg/kg wet	1.0						
Di-isopropyl ether	BRL	U	µg/kg wet	1.0						
Tert-Butanol / butyl alcohol	BRL	U	µg/kg wet	10.0						
1,4-Dioxane	BRL	U	µg/kg wet	20.0						
trans-1,4-Dichloro-2-butene	BRL	U	µg/kg wet	5.0						
Ethanol	BRL	U	µg/kg wet	500						
Surrogate: 4-Bromofluorobenzene	*31.0*		µg/kg wet		*30.0*		*103*	*70-130*		
Surrogate: Toluene-d8	*30.3*		µg/kg wet		*30.0*		*101*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*30.7*		µg/kg wet		*30.0*		*102*	*70-130*		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111382 - SW846 5030 Soil (high level)										
Blank (7111382-BLK1)										
Prepared & Analyzed: 16-Nov-07										
Surrogate: Dibromofluoromethane	*28.8*		µg/kg wet		*30.0*		*96*	*70-130*		
LCS (7111382-BS1)										
Prepared & Analyzed: 16-Nov-07										
1,1,2-Trichlorotrifluoroethane (Freon 113)	21.2		µg/kg wet		20.0		106	70-130		
Acetone	28.2		µg/kg wet		20.0		141	24.9-167		
Acrylonitrile	20.4		µg/kg wet		20.0		102	70-130		
Benzene	22.0		µg/kg wet		20.0		110	70-130		
Bromobenzene	23.5		µg/kg wet		20.0		118	70-130		
Bromochloromethane	22.4		µg/kg wet		20.0		112	70-130		
Bromodichloromethane	21.0		µg/kg wet		20.0		105	70-130		
Bromoform	19.1		µg/kg wet		20.0		96	70-130		
Bromomethane	24.9		µg/kg wet		20.0		125	57.4-139		
2-Butanone (MEK)	23.7		µg/kg wet		20.0		118	46.9-141		
n-Butylbenzene	19.1		µg/kg wet		20.0		96	70-130		
sec-Butylbenzene	22.0		µg/kg wet		20.0		110	70-130		
tert-Butylbenzene	22.4		µg/kg wet		20.0		112	70-130		
Carbon disulfide	17.1		µg/kg wet		20.0		85	70-130		
Carbon tetrachloride	20.4		µg/kg wet		20.0		102	70-130		
Chlorobenzene	22.5		µg/kg wet		20.0		112	70-130		
Chloroethane	19.2		µg/kg wet		20.0		96	60.5-131		
Chloroform	22.1		µg/kg wet		20.0		111	70-130		
Chloromethane	22.7		µg/kg wet		20.0		113	70-130		
2-Chlorotoluene	23.4		µg/kg wet		20.0		117	70-130		
4-Chlorotoluene	22.2		µg/kg wet		20.0		111	70-130		
1,2-Dibromo-3-chloropropane	18.5		µg/kg wet		20.0		93	70-130		
Dibromochloromethane	19.3		µg/kg wet		20.0		96	70-130		
1,2-Dibromoethane (EDB)	22.6		µg/kg wet		20.0		113	70-130		
Dibromomethane	21.9		µg/kg wet		20.0		110	70-130		
1,2-Dichlorobenzene	21.7		µg/kg wet		20.0		109	70-130		
1,3-Dichlorobenzene	22.9		µg/kg wet		20.0		115	70-130		
1,4-Dichlorobenzene	20.9		µg/kg wet		20.0		104	70-130		
Dichlorodifluoromethane (Freon12)	23.9		µg/kg wet		20.0		119	47.2-175		
1,1-Dichloroethane	22.2		µg/kg wet		20.0		111	70-130		
1,2-Dichloroethane	21.1		µg/kg wet		20.0		106	70-130		
1,1-Dichloroethene	20.4		µg/kg wet		20.0		102	70-130		
cis-1,2-Dichloroethene	23.0		µg/kg wet		20.0		115	70-130		
trans-1,2-Dichloroethene	21.4		µg/kg wet		20.0		107	70-130		
1,2-Dichloropropane	21.6		µg/kg wet		20.0		108	70-130		
1,3-Dichloropropane	22.3		µg/kg wet		20.0		111	70-130		
2,2-Dichloropropane	22.9		µg/kg wet		20.0		114	70-130		
1,1-Dichloropropene	20.7		µg/kg wet		20.0		103	70-130		
cis-1,3-Dichloropropene	20.7		µg/kg wet		20.0		103	70-130		
trans-1,3-Dichloropropene	23.2		µg/kg wet		20.0		116	70-130		
Ethylbenzene	22.8		µg/kg wet		20.0		114	70-130		
Hexachlorobutadiene	19.0		µg/kg wet		20.0		95	62.4-142		
2-Hexanone (MBK)	22.2		µg/kg wet		20.0		111	70-130		
Isopropylbenzene	21.6		µg/kg wet		20.0		108	70-130		
4-Isopropyltoluene	21.2		µg/kg wet		20.0		106	70-130		
Methyl tert-butyl ether	22.4		µg/kg wet		20.0		112	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111382 - SW846 5030 Soil (high level)										
LCS (7111382-BS1)										
Prepared & Analyzed: 16-Nov-07										
4-Methyl-2-pentanone (MIBK)	20.9		µg/kg wet		20.0		105	70-135		
Methylene chloride	20.3		µg/kg wet		20.0		101	70-130		
Naphthalene	21.1		µg/kg wet		20.0		105	70-130		
n-Propylbenzene	21.7		µg/kg wet		20.0		109	70-130		
Styrene	23.6		µg/kg wet		20.0		118	70-130		
1,1,1,2-Tetrachloroethane	22.1		µg/kg wet		20.0		111	70-130		
1,1,2,2-Tetrachloroethane	22.7		µg/kg wet		20.0		114	70-130		
Tetrachloroethene	21.8		µg/kg wet		20.0		109	70-130		
Toluene	21.8		µg/kg wet		20.0		109	70-130		
1,2,3-Trichlorobenzene	20.8		µg/kg wet		20.0		104	70-130		
1,2,4-Trichlorobenzene	18.8		µg/kg wet		20.0		94	70-130		
1,1,1-Trichloroethane	21.5		µg/kg wet		20.0		108	70-130		
1,1,2-Trichloroethane	22.5		µg/kg wet		20.0		112	70-130		
Trichloroethene	21.3		µg/kg wet		20.0		106	70-130		
Trichlorofluoromethane (Freon 11)	20.3		µg/kg wet		20.0		101	58.4-143		
1,2,3-Trichloropropane	25.3		µg/kg wet		20.0		126	70-130		
1,2,4-Trimethylbenzene	22.3		µg/kg wet		20.0		111	70-130		
1,3,5-Trimethylbenzene	22.4		µg/kg wet		20.0		112	70-130		
Vinyl chloride	21.4		µg/kg wet		20.0		107	70-130		
m,p-Xylene	45.3		µg/kg wet		40.0		113	70-130		
o-Xylene	23.0		µg/kg wet		20.0		115	70-130		
Tetrahydrofuran	21.3		µg/kg wet		20.0		107	70-130		
Ethyl ether	20.6		µg/kg wet		20.0		103	70-130		
Tert-amyl methyl ether	20.6		µg/kg wet		20.0		103	70-130		
Ethyl tert-butyl ether	22.6		µg/kg wet		20.0		113	70-130		
Di-isopropyl ether	20.0		µg/kg wet		20.0		100	70-130		
Tert-Butanol / butyl alcohol	220		µg/kg wet		200		110	70-130		
1,4-Dioxane	231		µg/kg wet		200		116	54.5-152		
trans-1,4-Dichloro-2-butene	16.8		µg/kg wet		20.0		84	70-130		
Ethanol	416		µg/kg wet		400		104	70-130		
Surrogate: 4-Bromofluorobenzene	*31.2*		µg/kg wet		*30.0*		*104*	*70-130*		
Surrogate: Toluene-d8	*30.1*		µg/kg wet		*30.0*		*100*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*30.0*		µg/kg wet		*30.0*		*100*	*70-130*		
Surrogate: Dibromofluoromethane	*29.7*		µg/kg wet		*30.0*		*99*	*70-130*		
LCS Dup (7111382-BSD1)										
Prepared & Analyzed: 16-Nov-07										
1,1,2-Trichlorotrifluoroethane (Freon 113)	22.2		µg/kg wet		20.0		111	70-130	4	25
Acetone	24.6		µg/kg wet		20.0		123	24.9-167	13	50
Acrylonitrile	21.2		µg/kg wet		20.0		106	70-130	4	25
Benzene	21.7		µg/kg wet		20.0		108	70-130	1	25
Bromobenzene	23.4		µg/kg wet		20.0		117	70-130	0.6	25
Bromochloromethane	23.2		µg/kg wet		20.0		116	70-130	3	25
Bromodichloromethane	21.8		µg/kg wet		20.0		109	70-130	3	25
Bromoform	19.9		µg/kg wet		20.0		99	70-130	4	25
Bromomethane	22.9		µg/kg wet		20.0		115	57.4-139	8	50
2-Butanone (MEK)	22.2		µg/kg wet		20.0		111	46.9-141	7	50
n-Butylbenzene	18.7		µg/kg wet		20.0		94	70-130	2	25
sec-Butylbenzene	21.7		µg/kg wet		20.0		109	70-130	1	25
tert-Butylbenzene	22.4		µg/kg wet		20.0		112	70-130	0.4	25
Carbon disulfide	16.8		µg/kg wet		20.0		84	70-130	1	25

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111382 - SW846 5030 Soil (high level)										
LCS Dup (7111382-BSD1)										
Prepared & Analyzed: 16-Nov-07										
Carbon tetrachloride	20.2		µg/kg wet		20.0		101	70-130	0.7	25
Chlorobenzene	22.6		µg/kg wet		20.0		113	70-130	0.7	25
Chloroethane	18.5		µg/kg wet		20.0		93	60.5-131	4	50
Chloroform	22.1		µg/kg wet		20.0		110	70-130	0.3	25
Chloromethane	22.3		µg/kg wet		20.0		112	70-130	2	25
2-Chlorotoluene	23.2		µg/kg wet		20.0		116	70-130	0.9	25
4-Chlorotoluene	22.1		µg/kg wet		20.0		110	70-130	0.7	25
1,2-Dibromo-3-chloropropane	18.3		µg/kg wet		20.0		92	70-130	1	25
Dibromochloromethane	19.3		µg/kg wet		20.0		97	70-130	0.05	50
1,2-Dibromoethane (EDB)	22.8		µg/kg wet		20.0		114	70-130	0.5	25
Dibromomethane	23.0		µg/kg wet		20.0		115	70-130	5	25
1,2-Dichlorobenzene	21.8		µg/kg wet		20.0		109	70-130	0.2	25
1,3-Dichlorobenzene	23.1		µg/kg wet		20.0		115	70-130	0.7	25
1,4-Dichlorobenzene	20.8		µg/kg wet		20.0		104	70-130	0.7	25
Dichlorodifluoromethane (Freon12)	25.4		µg/kg wet		20.0		127	47.2-175	6	50
1,1-Dichloroethane	21.5		µg/kg wet		20.0		108	70-130	3	25
1,2-Dichloroethane	21.3		µg/kg wet		20.0		107	70-130	1	25
1,1-Dichloroethene	19.7		µg/kg wet		20.0		98	70-130	3	25
cis-1,2-Dichloroethene	22.5		µg/kg wet		20.0		112	70-130	3	25
trans-1,2-Dichloroethene	20.9		µg/kg wet		20.0		105	70-130	2	25
1,2-Dichloropropane	21.6		µg/kg wet		20.0		108	70-130	0.3	25
1,3-Dichloropropane	22.4		µg/kg wet		20.0		112	70-130	0.7	25
2,2-Dichloropropane	22.0		µg/kg wet		20.0		110	70-130	4	25
1,1-Dichloropropene	20.1		µg/kg wet		20.0		100	70-130	3	25
cis-1,3-Dichloropropene	21.1		µg/kg wet		20.0		106	70-130	2	25
trans-1,3-Dichloropropene	23.6		µg/kg wet		20.0		118	70-130	2	25
Ethylbenzene	22.2		µg/kg wet		20.0		111	70-130	2	25
Hexachlorobutadiene	19.2		µg/kg wet		20.0		96	62.4-142	1	50
2-Hexanone (MBK)	20.9		µg/kg wet		20.0		104	70-130	6	25
Isopropylbenzene	21.2		µg/kg wet		20.0		106	70-130	2	25
4-Isopropyltoluene	20.7		µg/kg wet		20.0		103	70-130	3	25
Methyl tert-butyl ether	22.8		µg/kg wet		20.0		114	70-130	2	25
4-Methyl-2-pentanone (MIBK)	21.4		µg/kg wet		20.0		107	70-135	2	50
Methylene chloride	20.7		µg/kg wet		20.0		103	70-130	2	25
Naphthalene	21.9		µg/kg wet		20.0		110	70-130	4	25
n-Propylbenzene	21.2		µg/kg wet		20.0		106	70-130	2	25
Styrene	23.6		µg/kg wet		20.0		118	70-130	0.4	25
1,1,1,2-Tetrachloroethane	21.8		µg/kg wet		20.0		109	70-130	1	25
1,1,2,2-Tetrachloroethane	23.1		µg/kg wet		20.0		116	70-130	2	25
Tetrachloroethene	21.4		µg/kg wet		20.0		107	70-130	2	25
Toluene	21.3		µg/kg wet		20.0		107	70-130	2	25
1,2,3-Trichlorobenzene	21.3		µg/kg wet		20.0		106	70-130	3	25
1,2,4-Trichlorobenzene	19.0		µg/kg wet		20.0		95	70-130	1	25
1,1,1-Trichloroethane	21.5		µg/kg wet		20.0		107	70-130	0.4	25
1,1,2-Trichloroethane	22.6		µg/kg wet		20.0		113	70-130	0.8	25
Trichloroethene	20.7		µg/kg wet		20.0		104	70-130	3	25
Trichlorofluoromethane (Freon 11)	20.3		µg/kg wet		20.0		101	58.4-143	0.05	50
1,2,3-Trichloropropane	26.1		µg/kg wet		20.0		130	70-130	3	25
1,2,4-Trimethylbenzene	22.4		µg/kg wet		20.0		112	70-130	0.4	25

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111382 - SW846 5030 Soil (high level)										
LCS Dup (7111382-BSD1)										
Prepared & Analyzed: 16-Nov-07										
1,3,5-Trimethylbenzene	22.2		µg/kg wet		20.0		111	70-130	1	25
Vinyl chloride	21.4		µg/kg wet		20.0		107	70-130	0.05	25
m,p-Xylene	44.4		µg/kg wet		40.0		111	70-130	2	25
o-Xylene	22.9		µg/kg wet		20.0		114	70-130	0.7	25
Tetrahydrofuran	22.1		µg/kg wet		20.0		110	70-130	4	25
Ethyl ether	21.2		µg/kg wet		20.0		106	70-130	3	50
Tert-amyl methyl ether	20.9		µg/kg wet		20.0		105	70-130	1	25
Ethyl tert-butyl ether	22.9		µg/kg wet		20.0		115	70-130	1	25
Di-isopropyl ether	20.2		µg/kg wet		20.0		101	70-130	0.8	25
Tert-Butanol / butyl alcohol	219		µg/kg wet		200		110	70-130	0.5	25
1,4-Dioxane	249		µg/kg wet		200		124	54.5-152	7	25
trans-1,4-Dichloro-2-butene	17.4		µg/kg wet		20.0		87	70-130	4	25
Ethanol	428		µg/kg wet		400		107	70-130	3	30
Surrogate: 4-Bromofluorobenzene	*31.4*		µg/kg wet		*30.0*		*105*	*70-130*		
Surrogate: Toluene-d8	*30.1*		µg/kg wet		*30.0*		*100*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*30.1*		µg/kg wet		*30.0*		*100*	*70-130*		
Surrogate: Dibromofluoromethane	*30.2*		µg/kg wet		*30.0*		*101*	*70-130*		
Matrix Spike (7111382-MS1) **Source: SA70868-08RE1**										
Prepared & Analyzed: 16-Nov-07										
Benzene	18.0		µg/kg dry		20.0	BRL	90	70-130		
Chlorobenzene	21.7		µg/kg dry		20.0	BRL	108	70-130		
1,1-Dichloroethene	13.1	QM7	µg/kg dry		20.0	BRL	66	70-130		
Toluene	21.1		µg/kg dry		20.0	3.0	90	70-130		
Trichloroethene	17.4		µg/kg dry		20.0	BRL	87	70-130		
Surrogate: 4-Bromofluorobenzene	*31.9*		µg/kg dry		*30.0*		*106*	*70-130*		
Surrogate: Toluene-d8	*30.4*		µg/kg dry		*30.0*		*101*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*30.0*		µg/kg dry		*30.0*		*100*	*70-130*		
Surrogate: Dibromofluoromethane	*29.0*		µg/kg dry		*30.0*		*97*	*70-130*		
Matrix Spike Dup (7111382-MSD1) **Source: SA70868-08RE1**										
Prepared & Analyzed: 16-Nov-07										
Benzene	19.1		µg/kg dry		20.0	BRL	96	70-130	6	30
Chlorobenzene	22.7		µg/kg dry		20.0	BRL	114	70-130	5	30
1,1-Dichloroethene	14.6		µg/kg dry		20.0	BRL	73	70-130	11	30
Toluene	22.4		µg/kg dry		20.0	3.0	97	70-130	7	30
Trichloroethene	18.6		µg/kg dry		20.0	BRL	93	70-130	6	30
Surrogate: 4-Bromofluorobenzene	*31.7*		µg/kg dry		*30.0*		*106*	*70-130*		
Surrogate: Toluene-d8	*30.6*		µg/kg dry		*30.0*		*102*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*29.7*		µg/kg dry		*30.0*		*99*	*70-130*		
Surrogate: Dibromofluoromethane	*28.7*		µg/kg dry		*30.0*		*96*	*70-130*		
Batch 7111480 - SW846 5030 Soil (high level)										
Blank (7111480-BLK1)										
Prepared & Analyzed: 18-Nov-07										
1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL	U	µg/kg wet	1.0						
Acetone	BRL	U	µg/kg wet	10.0						
Acrylonitrile	BRL	U	µg/kg wet	1.0						
Benzene	BRL	U	µg/kg wet	1.0						
Bromobenzene	BRL	U	µg/kg wet	1.0						
Bromochloromethane	BRL	U	µg/kg wet	1.0						
Bromodichloromethane	BRL	U	µg/kg wet	1.0						
Bromoform	BRL	U	µg/kg wet	1.0						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111480 - SW846 5030 Soil (high level)										
Blank (7111480-BLK1)										
Prepared & Analyzed: 18-Nov-07										
Bromomethane	BRL	U	µg/kg wet	2.0						
2-Butanone (MEK)	BRL	U	µg/kg wet	10.0						
n-Butylbenzene	BRL	U	µg/kg wet	1.0						
sec-Butylbenzene	BRL	U	µg/kg wet	1.0						
tert-Butylbenzene	BRL	U	µg/kg wet	1.0						
Carbon disulfide	BRL	U	µg/kg wet	5.0						
Carbon tetrachloride	BRL	U	µg/kg wet	1.0						
Chlorobenzene	BRL	U	µg/kg wet	1.0						
Chloroethane	BRL	U	µg/kg wet	2.0						
Chloroform	BRL	U	µg/kg wet	1.0						
Chloromethane	BRL	U	µg/kg wet	2.0						
2-Chlorotoluene	BRL	U	µg/kg wet	1.0						
4-Chlorotoluene	BRL	U	µg/kg wet	1.0						
1,2-Dibromo-3-chloropropane	BRL	U	µg/kg wet	2.0						
Dibromochloromethane	BRL	U	µg/kg wet	1.0						
1,2-Dibromoethane (EDB)	BRL	U	µg/kg wet	1.0						
Dibromomethane	BRL	U	µg/kg wet	1.0						
1,2-Dichlorobenzene	BRL	U	µg/kg wet	1.0						
1,3-Dichlorobenzene	BRL	U	µg/kg wet	1.0						
1,4-Dichlorobenzene	BRL	U	µg/kg wet	1.0						
Dichlorodifluoromethane (Freon12)	BRL	U	µg/kg wet	2.0						
1,1-Dichloroethane	BRL	U	µg/kg wet	1.0						
1,2-Dichloroethane	BRL	U	µg/kg wet	1.0						
1,1-Dichloroethene	BRL	U	µg/kg wet	1.0						
cis-1,2-Dichloroethene	BRL	U	µg/kg wet	1.0						
trans-1,2-Dichloroethene	BRL	U	µg/kg wet	1.0						
1,2-Dichloropropane	BRL	U	µg/kg wet	1.0						
1,3-Dichloropropane	BRL	U	µg/kg wet	1.0						
2,2-Dichloropropane	BRL	U	µg/kg wet	1.0						
1,1-Dichloropropene	BRL	U	µg/kg wet	1.0						
cis-1,3-Dichloropropene	BRL	U	µg/kg wet	1.0						
trans-1,3-Dichloropropene	BRL	U	µg/kg wet	1.0						
Ethylbenzene	BRL	U	µg/kg wet	1.0						
Hexachlorobutadiene	BRL	U	µg/kg wet	1.0						
2-Hexanone (MBK)	BRL	U	µg/kg wet	10.0						
Isopropylbenzene	BRL	U	µg/kg wet	1.0						
4-Isopropyltoluene	BRL	U	µg/kg wet	1.0						
Methyl tert-butyl ether	BRL	U	µg/kg wet	1.0						
4-Methyl-2-pentanone (MIBK)	BRL	U	µg/kg wet	10.0						
Methylene chloride	BRL	U	µg/kg wet	10.0						
Naphthalene	BRL	U	µg/kg wet	1.0						
n-Propylbenzene	BRL	U	µg/kg wet	1.0						
Styrene	BRL	U	µg/kg wet	1.0						
1,1,1,2-Tetrachloroethane	BRL	U	µg/kg wet	1.0						
1,1,2,2-Tetrachloroethane	BRL	U	µg/kg wet	1.0						
Tetrachloroethene	BRL	U	µg/kg wet	1.0						
Toluene	BRL	U	µg/kg wet	1.0						
1,2,3-Trichlorobenzene	BRL	U	µg/kg wet	1.0						
1,2,4-Trichlorobenzene	BRL	U	µg/kg wet	1.0						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111480 - SW846 5030 Soil (high level)										
Blank (7111480-BLK1)										
Prepared & Analyzed: 18-Nov-07										
1,1,1-Trichloroethane	BRL	U	µg/kg wet	1.0						
1,1,2-Trichloroethane	BRL	U	µg/kg wet	1.0						
Trichloroethene	BRL	U	µg/kg wet	1.0						
Trichlorofluoromethane (Freon 11)	BRL	U	µg/kg wet	1.0						
1,2,3-Trichloropropane	BRL	U	µg/kg wet	1.0						
1,2,4-Trimethylbenzene	BRL	U	µg/kg wet	1.0						
1,3,5-Trimethylbenzene	BRL	U	µg/kg wet	1.0						
Vinyl chloride	BRL	U	µg/kg wet	1.0						
m,p-Xylene	BRL	U	µg/kg wet	2.0						
o-Xylene	BRL	U	µg/kg wet	1.0						
Tetrahydrofuran	BRL	U	µg/kg wet	10.0						
Ethyl ether	BRL	U	µg/kg wet	1.0						
Tert-amyl methyl ether	BRL	U	µg/kg wet	1.0						
Ethyl tert-butyl ether	BRL	U	µg/kg wet	1.0						
Di-isopropyl ether	BRL	U	µg/kg wet	1.0						
Tert-Butanol / butyl alcohol	BRL	U	µg/kg wet	10.0						
1,4-Dioxane	BRL	U	µg/kg wet	20.0						
trans-1,4-Dichloro-2-butene	BRL	U	µg/kg wet	5.0						
Ethanol	BRL	U	µg/kg wet	500						
Surrogate: 4-Bromofluorobenzene	*30.2*		µg/kg wet		*30.0*		*101*	*70-130*		
Surrogate: Toluene-d8	*30.4*		µg/kg wet		*30.0*		*101*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*29.9*		µg/kg wet		*30.0*		*100*	*70-130*		
Surrogate: Dibromofluoromethane	*29.0*		µg/kg wet		*30.0*		*97*	*70-130*		
LCS (7111480-BS1)										
Prepared & Analyzed: 18-Nov-07										
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.0		µg/kg wet		20.0		100	70-130		
Acetone	18.4		µg/kg wet		20.0		92	24.9-167		
Acrylonitrile	17.4		µg/kg wet		20.0		87	70-130		
Benzene	19.7		µg/kg wet		20.0		98	70-130		
Bromobenzene	21.7		µg/kg wet		20.0		109	70-130		
Bromochloromethane	20.7		µg/kg wet		20.0		103	70-130		
Bromodichloromethane	20.6		µg/kg wet		20.0		103	70-130		
Bromoform	20.8		µg/kg wet		20.0		104	70-130		
Bromomethane	22.4		µg/kg wet		20.0		112	57.4-139		
2-Butanone (MEK)	17.1		µg/kg wet		20.0		86	46.9-141		
n-Butylbenzene	15.4		µg/kg wet		20.0		77	70-130		
sec-Butylbenzene	18.6		µg/kg wet		20.0		93	70-130		
tert-Butylbenzene	19.2		µg/kg wet		20.0		96	70-130		
Carbon disulfide	16.4		µg/kg wet		20.0		82	70-130		
Carbon tetrachloride	20.3		µg/kg wet		20.0		102	70-130		
Chlorobenzene	20.8		µg/kg wet		20.0		104	70-130		
Chloroethane	17.0		µg/kg wet		20.0		85	60.5-131		
Chloroform	20.2		µg/kg wet		20.0		101	70-130		
Chloromethane	18.1		µg/kg wet		20.0		91	70-130		
2-Chlorotoluene	21.6		µg/kg wet		20.0		108	70-130		
4-Chlorotoluene	20.5		µg/kg wet		20.0		103	70-130		
1,2-Dibromo-3-chloropropane	18.2		µg/kg wet		20.0		91	70-130		
Dibromochloromethane	20.0		µg/kg wet		20.0		100	70-130		
1,2-Dibromoethane (EDB)	20.6		µg/kg wet		20.0		103	70-130		
Dibromomethane	20.5		µg/kg wet		20.0		102	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111480 - SW846 5030 Soil (high level)										
LCS (7111480-BS1)										
Prepared & Analyzed: 18-Nov-07										
1,2-Dichlorobenzene	20.3		µg/kg wet		20.0		101	70-130		
1,3-Dichlorobenzene	21.0		µg/kg wet		20.0		105	70-130		
1,4-Dichlorobenzene	19.5		µg/kg wet		20.0		98	70-130		
Dichlorodifluoromethane (Freon12)	19.2		µg/kg wet		20.0		96	47.2-175		
1,1-Dichloroethane	20.2		µg/kg wet		20.0		101	70-130		
1,2-Dichloroethane	18.7		µg/kg wet		20.0		93	70-130		
1,1-Dichloroethene	18.3		µg/kg wet		20.0		92	70-130		
cis-1,2-Dichloroethene	20.6		µg/kg wet		20.0		103	70-130		
trans-1,2-Dichloroethene	19.4		µg/kg wet		20.0		97	70-130		
1,2-Dichloropropane	19.6		µg/kg wet		20.0		98	70-130		
1,3-Dichloropropane	19.8		µg/kg wet		20.0		99	70-130		
2,2-Dichloropropane	22.0		µg/kg wet		20.0		110	70-130		
1,1-Dichloropropene	18.6		µg/kg wet		20.0		93	70-130		
cis-1,3-Dichloropropene	20.9		µg/kg wet		20.0		104	70-130		
trans-1,3-Dichloropropene	22.8		µg/kg wet		20.0		114	70-130		
Ethylbenzene	20.8		µg/kg wet		20.0		104	70-130		
Hexachlorobutadiene	16.5		µg/kg wet		20.0		83	62.4-142		
2-Hexanone (MBK)	17.2		µg/kg wet		20.0		86	70-130		
Isopropylbenzene	19.8		µg/kg wet		20.0		99	70-130		
4-Isopropyltoluene	17.9		µg/kg wet		20.0		89	70-130		
Methyl tert-butyl ether	19.8		µg/kg wet		20.0		99	70-130		
4-Methyl-2-pentanone (MIBK)	17.4		µg/kg wet		20.0		87	70-135		
Methylene chloride	18.5		µg/kg wet		20.0		92	70-130		
Naphthalene	18.4		µg/kg wet		20.0		92	70-130		
n-Propylbenzene	18.9		µg/kg wet		20.0		94	70-130		
Styrene	22.4		µg/kg wet		20.0		112	70-130		
1,1,1,2-Tetrachloroethane	22.5		µg/kg wet		20.0		112	70-130		
1,1,2,2-Tetrachloroethane	20.2		µg/kg wet		20.0		101	70-130		
Tetrachloroethene	20.3		µg/kg wet		20.0		102	70-130		
Toluene	19.8		µg/kg wet		20.0		99	70-130		
1,2,3-Trichlorobenzene	16.8		µg/kg wet		20.0		84	70-130		
1,2,4-Trichlorobenzene	15.6		µg/kg wet		20.0		78	70-130		
1,1,1-Trichloroethane	20.3		µg/kg wet		20.0		101	70-130		
1,1,2-Trichloroethane	20.0		µg/kg wet		20.0		100	70-130		
Trichloroethene	19.0		µg/kg wet		20.0		95	70-130		
Trichlorofluoromethane (Freon 11)	17.9		µg/kg wet		20.0		90	58.4-143		
1,2,3-Trichloropropane	22.1		µg/kg wet		20.0		110	70-130		
1,2,4-Trimethylbenzene	19.2		µg/kg wet		20.0		96	70-130		
1,3,5-Trimethylbenzene	20.0		µg/kg wet		20.0		100	70-130		
Vinyl chloride	18.4		µg/kg wet		20.0		92	70-130		
m,p-Xylene	41.3		µg/kg wet		40.0		103	70-130		
o-Xylene	21.1		µg/kg wet		20.0		106	70-130		
Tetrahydrofuran	17.8		µg/kg wet		20.0		89	70-130		
Ethyl ether	18.2		µg/kg wet		20.0		91	70-130		
Tert-amyl methyl ether	18.0		µg/kg wet		20.0		90	70-130		
Ethyl tert-butyl ether	20.1		µg/kg wet		20.0		101	70-130		
Di-isopropyl ether	18.0		µg/kg wet		20.0		90	70-130		
Tert-Butanol / butyl alcohol	174		µg/kg wet		200		87	70-130		
1,4-Dioxane	199		µg/kg wet		200		99	54.5-152		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111480 - SW846 5030 Soil (high level)										
LCS (7111480-BS1)										
Prepared & Analyzed: 18-Nov-07										
trans-1,4-Dichloro-2-butene	17.3		µg/kg wet		20.0		86	70-130		
Ethanol	347		µg/kg wet		400		87	70-130		
Surrogate: 4-Bromofluorobenzene	*30.9*		µg/kg wet		*30.0*		*103*	*70-130*		
Surrogate: Toluene-d8	*30.4*		µg/kg wet		*30.0*		*101*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*28.7*		µg/kg wet		*30.0*		*96*	*70-130*		
Surrogate: Dibromofluoromethane	*29.9*		µg/kg wet		*30.0*		*100*	*70-130*		
LCS Dup (7111480-BSD1)										
Prepared & Analyzed: 18-Nov-07										
1,1,2-Trichlorotrifluoroethane (Freon 113)	21.3		µg/kg wet		20.0		107	70-130	7	25
Acetone	18.1		µg/kg wet		20.0		90	24.9-167	2	50
Acrylonitrile	19.2		µg/kg wet		20.0		96	70-130	10	25
Benzene	20.2		µg/kg wet		20.0		101	70-130	2	25
Bromobenzene	21.1		µg/kg wet		20.0		106	70-130	3	25
Bromochloromethane	21.3		µg/kg wet		20.0		106	70-130	3	25
Bromodichloromethane	21.5		µg/kg wet		20.0		107	70-130	4	25
Bromoform	20.8		µg/kg wet		20.0		104	70-130	0.2	25
Bromomethane	23.7		µg/kg wet		20.0		118	57.4-139	6	50
2-Butanone (MEK)	18.4		µg/kg wet		20.0		92	46.9-141	7	50
n-Butylbenzene	13.7	QC1	µg/kg wet		20.0		69	70-130	11	25
sec-Butylbenzene	17.6		µg/kg wet		20.0		88	70-130	5	25
tert-Butylbenzene	18.4		µg/kg wet		20.0		92	70-130	4	25
Carbon disulfide	16.1		µg/kg wet		20.0		80	70-130	2	25
Carbon tetrachloride	20.3		µg/kg wet		20.0		102	70-130	0	25
Chlorobenzene	20.6		µg/kg wet		20.0		103	70-130	1	25
Chloroethane	16.7		µg/kg wet		20.0		83	60.5-131	2	50
Chloroform	20.6		µg/kg wet		20.0		103	70-130	2	25
Chloromethane	18.1		µg/kg wet		20.0		90	70-130	0.2	25
2-Chlorotoluene	21.3		µg/kg wet		20.0		106	70-130	2	25
4-Chlorotoluene	19.9		µg/kg wet		20.0		99	70-130	3	25
1,2-Dibromo-3-chloropropane	17.1		µg/kg wet		20.0		85	70-130	6	25
Dibromochloromethane	20.7		µg/kg wet		20.0		103	70-130	3	50
1,2-Dibromoethane (EDB)	21.6		µg/kg wet		20.0		108	70-130	5	25
Dibromomethane	21.1		µg/kg wet		20.0		106	70-130	3	25
1,2-Dichlorobenzene	19.2		µg/kg wet		20.0		96	70-130	6	25
1,3-Dichlorobenzene	20.6		µg/kg wet		20.0		103	70-130	2	25
1,4-Dichlorobenzene	18.4		µg/kg wet		20.0		92	70-130	6	25
Dichlorodifluoromethane (Freon12)	19.7		µg/kg wet		20.0		99	47.2-175	3	50
1,1-Dichloroethane	20.0		µg/kg wet		20.0		100	70-130	0.9	25
1,2-Dichloroethane	19.6		µg/kg wet		20.0		98	70-130	5	25
1,1-Dichloroethene	18.2		µg/kg wet		20.0		91	70-130	0.7	25
cis-1,2-Dichloroethene	21.2		µg/kg wet		20.0		106	70-130	3	25
trans-1,2-Dichloroethene	19.4		µg/kg wet		20.0		97	70-130	0.05	25
1,2-Dichloropropane	19.6		µg/kg wet		20.0		98	70-130	0.2	25
1,3-Dichloropropane	20.7		µg/kg wet		20.0		104	70-130	4	25
2,2-Dichloropropane	21.9		µg/kg wet		20.0		110	70-130	0.1	25
1,1-Dichloropropene	19.1		µg/kg wet		20.0		96	70-130	3	25
cis-1,3-Dichloropropene	20.9		µg/kg wet		20.0		104	70-130	0.1	25
trans-1,3-Dichloropropene	23.1		µg/kg wet		20.0		116	70-130	1	25
Ethylbenzene	20.2		µg/kg wet		20.0		101	70-130	3	25
Hexachlorobutadiene	15.4		µg/kg wet		20.0		77	62.4-142	7	50

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111480 - SW846 5030 Soil (high level)										
LCS Dup (7111480-BSD1)										
Prepared & Analyzed: 18-Nov-07										
2-Hexanone (MBK)	18.2		µg/kg wet		20.0		91	70-130	5	25
Isopropylbenzene	19.3		µg/kg wet		20.0		96	70-130	3	25
4-Isopropyltoluene	16.3		µg/kg wet		20.0		81	70-130	9	25
Methyl tert-butyl ether	20.8		µg/kg wet		20.0		104	70-130	5	25
4-Methyl-2-pentanone (MIBK)	18.5		µg/kg wet		20.0		93	70-135	6	50
Methylene chloride	18.9		µg/kg wet		20.0		94	70-130	2	25
Naphthalene	17.2		µg/kg wet		20.0		86	70-130	6	25
n-Propylbenzene	18.3		µg/kg wet		20.0		91	70-130	3	25
Styrene	21.9		µg/kg wet		20.0		110	70-130	2	25
1,1,1,2-Tetrachloroethane	21.3		µg/kg wet		20.0		107	70-130	5	25
1,1,2,2-Tetrachloroethane	20.3		µg/kg wet		20.0		101	70-130	0.3	25
Tetrachloroethene	20.5		µg/kg wet		20.0		103	70-130	1	25
Toluene	20.3		µg/kg wet		20.0		102	70-130	2	25
1,2,3-Trichlorobenzene	15.3		µg/kg wet		20.0		76	70-130	9	25
1,2,4-Trichlorobenzene	14.1		µg/kg wet		20.0		71	70-130	10	25
1,1,1-Trichloroethane	20.5		µg/kg wet		20.0		102	70-130	1	25
1,1,2-Trichloroethane	21.2		µg/kg wet		20.0		106	70-130	6	25
Trichloroethene	19.2		µg/kg wet		20.0		96	70-130	1	25
Trichlorofluoromethane (Freon 11)	18.6		µg/kg wet		20.0		93	58.4-143	4	50
1,2,3-Trichloropropane	22.2		µg/kg wet		20.0		111	70-130	0.5	25
1,2,4-Trimethylbenzene	18.4		µg/kg wet		20.0		92	70-130	4	25
1,3,5-Trimethylbenzene	19.3		µg/kg wet		20.0		97	70-130	3	25
Vinyl chloride	18.4		µg/kg wet		20.0		92	70-130	0.4	25
m,p-Xylene	40.4		µg/kg wet		40.0		101	70-130	2	25
o-Xylene	20.7		µg/kg wet		20.0		103	70-130	2	25
Tetrahydrofuran	18.6		µg/kg wet		20.0		93	70-130	4	25
Ethyl ether	19.6		µg/kg wet		20.0		98	70-130	8	50
Tert-amyl methyl ether	18.7		µg/kg wet		20.0		94	70-130	4	25
Ethyl tert-butyl ether	20.9		µg/kg wet		20.0		105	70-130	4	25
Di-isopropyl ether	18.6		µg/kg wet		20.0		93	70-130	3	25
Tert-Butanol / butyl alcohol	192		µg/kg wet		200		96	70-130	10	25
1,4-Dioxane	201		µg/kg wet		200		101	54.5-152	1	25
trans-1,4-Dichloro-2-butene	17.4		µg/kg wet		20.0		87	70-130	0.7	25
Ethanol	359		µg/kg wet		400		90	70-130	3	30
Surrogate: 4-Bromofluorobenzene	*32.1*		µg/kg wet		*30.0*		*107*	*70-130*		
Surrogate: Toluene-d8	*30.7*		µg/kg wet		*30.0*		*102*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*29.3*		µg/kg wet		*30.0*		*98*	*70-130*		
Surrogate: Dibromofluoromethane	*30.3*		µg/kg wet		*30.0*		*101*	*70-130*		
Matrix Spike (7111480-MS1)	**Source: SA70868-08**									
Prepared & Analyzed: 18-Nov-07										
Benzene	23.7		µg/kg dry		20.0	BRL	118	70-130		
Chlorobenzene	24.8		µg/kg dry		20.0	BRL	124	70-130		
1,1-Dichloroethene	22.8		µg/kg dry		20.0	BRL	114	70-130		
Toluene	26.8		µg/kg dry		20.0	3.2	118	70-130		
Trichloroethene	22.6		µg/kg dry		20.0	BRL	113	70-130		
Surrogate: 4-Bromofluorobenzene	*30.8*		µg/kg dry		*30.0*		*103*	*70-130*		
Surrogate: Toluene-d8	*31.0*		µg/kg dry		*30.0*		*103*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*28.4*		µg/kg dry		*30.0*		*95*	*70-130*		
Surrogate: Dibromofluoromethane	*29.1*		µg/kg dry		*30.0*		*97*	*70-130*		
Matrix Spike Dup (7111480-MSD1)	**Source: SA70868-08**									

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111480 - SW846 5030 Soil (high level)										
Prepared & Analyzed: 18-Nov-07										
Benzene	24.3		µg/kg dry		20.0	BRL	121	70-130	3	30
Chlorobenzene	25.0		µg/kg dry		20.0	BRL	125	70-130	0.8	30
1,1-Dichloroethene	22.3		µg/kg dry		20.0	BRL	112	70-130	2	30
Toluene	26.8		µg/kg dry		20.0	3.2	118	70-130	0.04	30
Trichloroethene	23.3		µg/kg dry		20.0	BRL	117	70-130	3	30
Surrogate: 4-Bromofluorobenzene	*31.9*		µg/kg dry		*30.0*		*106*	*70-130*		
Surrogate: Toluene-d8	*30.4*		µg/kg dry		*30.0*		*101*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*29.2*		µg/kg dry		*30.0*		*97*	*70-130*		
Surrogate: Dibromofluoromethane	*29.0*		µg/kg dry		*30.0*		*97*	*70-130*		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111248 - SW846 3550B										
Blank (7111248-BLK1)										
Prepared: 15-Nov-07 Analyzed: 16-Nov-07										
Acenaphthene	BRL	U	µg/kg wet	33.2						
Acenaphthene	BRL	U	µg/kg wet	165						
Acenaphthylene	BRL	U	µg/kg wet	165						
Acenaphthylene	BRL	U	µg/kg wet	33.2						
Aniline	BRL	U	µg/kg wet	165						
Anthracene	BRL	U	µg/kg wet	33.2						
Anthracene	BRL	U	µg/kg wet	165						
Atrazine	BRL	U	µg/kg wet	165						
Azobenzene/Diphenyldiazine	BRL	U	µg/kg wet	165						
Benzidine	BRL	U	µg/kg wet	165						
Benzo (a) anthracene	BRL	U	µg/kg wet	33.2						
Benzo (a) anthracene	BRL	U	µg/kg wet	165						
Benzo (a) pyrene	BRL	U	µg/kg wet	165						
Benzo (a) pyrene	BRL	U	µg/kg wet	33.2						
Benzo (b) fluoranthene	BRL	U	µg/kg wet	165						
Benzo (b) fluoranthene	BRL	U	µg/kg wet	33.2						
Benzo (g,h,i) perylene	BRL	U	µg/kg wet	165						
Benzo (g,h,i) perylene	BRL	U	µg/kg wet	33.2						
Benzo (k) fluoranthene	BRL	U	µg/kg wet	33.2						
Benzo (k) fluoranthene	BRL	U	µg/kg wet	165						
Benzoic acid	BRL	U	µg/kg wet	165						
Benzyl alcohol	BRL	U	µg/kg wet	165						
Bis(2-chloroethoxy)methane	BRL	U	µg/kg wet	165						
Bis(2-chloroethyl)ether	BRL	U	µg/kg wet	165						
Bis(2-chloroisopropyl)ether	BRL	U	µg/kg wet	165						
Bis(2-ethylhexyl)phthalate	BRL	U	µg/kg wet	165						
4-Bromophenyl phenyl ether	BRL	U	µg/kg wet	165						
Butyl benzyl phthalate	BRL	U	µg/kg wet	165						
Carbazole	BRL	U	µg/kg wet	165						
4-Chloro-3-methylphenol	BRL	U	µg/kg wet	165						
4-Chloroaniline	BRL	U	µg/kg wet	165						
2-Chloronaphthalene	BRL	U	µg/kg wet	165						
2-Chlorophenol	BRL	U	µg/kg wet	165						
4-Chlorophenyl phenyl ether	BRL	U	µg/kg wet	165						
Chrysene	BRL	U	µg/kg wet	33.2						
Chrysene	BRL	U	µg/kg wet	165						
Dibenzo (a,h) anthracene	BRL	U	µg/kg wet	33.2						
Dibenzo (a,h) anthracene	BRL	U	µg/kg wet	165						
Dibenzofuran	BRL	U	µg/kg wet	165						
1,2-Dichlorobenzene	BRL	U	µg/kg wet	165						
1,3-Dichlorobenzene	BRL	U	µg/kg wet	165						
1,4-Dichlorobenzene	BRL	U	µg/kg wet	165						
3,3´-Dichlorobenzidine	BRL	U	µg/kg wet	165						
2,4-Dichlorophenol	BRL	U	µg/kg wet	165						
Diethyl phthalate	BRL	U	µg/kg wet	165						
Dimethyl phthalate	BRL	U	µg/kg wet	165						
2,4-Dimethylphenol	BRL	U	µg/kg wet	165						
Di-n-butyl phthalate	BRL	U	µg/kg wet	165						
4,6-Dinitro-2-methylphenol	BRL	U	µg/kg wet	165						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111248 - SW846 3550B										
Blank (7111248-BLK1)										
Prepared: 15-Nov-07 Analyzed: 16-Nov-07										
2,4-Dinitrophenol	BRL	U	µg/kg wet	165						
2,4-Dinitrotoluene	BRL	U	µg/kg wet	165						
2,6-Dinitrotoluene	BRL	U	µg/kg wet	165						
Di-n-octyl phthalate	BRL	U	µg/kg wet	165						
Fluoranthene	BRL	U	µg/kg wet	165						
Fluoranthene	BRL	U	µg/kg wet	33.2						
Fluorene	BRL	U	µg/kg wet	165						
Fluorene	BRL	U	µg/kg wet	33.2						
Hexachlorobenzene	BRL	U	µg/kg wet	165						
Hexachlorobutadiene	BRL	U	µg/kg wet	165						
Hexachlorocyclopentadiene	BRL	U	µg/kg wet	165						
Hexachloroethane	BRL	U	µg/kg wet	165						
Indeno (1,2,3-cd) pyrene	BRL	U	µg/kg wet	33.2						
Indeno (1,2,3-cd) pyrene	BRL	U	µg/kg wet	165						
1-Methylnaphthalene	BRL	U	µg/kg wet	33.2						
1-Methylnaphthalene	BRL	U	µg/kg wet	165						
Isophorone	BRL	U	µg/kg wet	165						
2-Methylnaphthalene	BRL	U	µg/kg wet	33.2						
2-Methylnaphthalene	BRL	U	µg/kg wet	165						
2-Methylphenol	BRL	U	µg/kg wet	165						
3,4-Methylphenol	BRL	U	µg/kg wet	165						
Naphthalene	BRL	U	µg/kg wet	33.2						
Naphthalene	BRL	U	µg/kg wet	165						
2-Nitroaniline	BRL	U	µg/kg wet	165						
3-Nitroaniline	BRL	U	µg/kg wet	165						
4-Nitroaniline	BRL	U	µg/kg wet	660						
Nitrobenzene	BRL	U	µg/kg wet	165						
2-Nitrophenol	BRL	U	µg/kg wet	165						
4-Nitrophenol	BRL	U	µg/kg wet	660						
N-Nitrosodimethylamine	BRL	U	µg/kg wet	165						
N-Nitrosodi-n-propylamine	BRL	U	µg/kg wet	165						
N-Nitrosodiphenylamine	BRL	U	µg/kg wet	165						
Pentachlorophenol	BRL	U	µg/kg wet	165						
Phenanthrene	BRL	U	µg/kg wet	165						
Phenanthrene	BRL	U	µg/kg wet	33.2						
Phenol	BRL	U	µg/kg wet	165						
Pyrene	BRL	U	µg/kg wet	33.2						
Pyrene	BRL	U	µg/kg wet	165						
Pyridine	BRL	U	µg/kg wet	165						
1,2,4-Trichlorobenzene	BRL	U	µg/kg wet	165						
2,4,5-Trichlorophenol	BRL	U	µg/kg wet	165						
2,4,6-Trichlorophenol	BRL	U	µg/kg wet	165						
Pentachloronitrobenzene	BRL	U	µg/kg wet	165						
1,2,4,5-Tetrachlorobenzene	BRL	U	µg/kg wet	165						
Surrogate: 2-Fluorobiphenyl	*1110*		µg/kg wet		*1670*		*67*	*30-130*		
Surrogate: Terphenyl-dl4	*1160*		µg/kg wet		*1670*		*70*	*30-130*		
Surrogate: 2-Fluorobiphenyl	*1110*		µg/kg wet		*1670*		*67*	*30-130*		
Surrogate: 2-Fluorophenol	*1120*		µg/kg wet		*1670*		*67*	*15-110*		
Surrogate: Nitrobenzene-d5	*1070*		µg/kg wet		*1670*		*64*	*30-130*		
Surrogate: Phenol-d5	*929*		µg/kg wet		*1670*		*56*	*15-110*		
Surrogate: Terphenyl-dl4	*1160*		µg/kg wet		*1670*		*70*	*30-130*		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111248 - SW846 3550B										
Blank (7111248-BLK1)										
Prepared: 15-Nov-07 Analyzed: 16-Nov-07										
Surrogate: 2,4,6-Tribromophenol	*1220*		µg/kg wet		*1670*		*73*	*15-110*		
LCS (7111248-BS1)										
Prepared: 15-Nov-07 Analyzed: 16-Nov-07										
Acenaphthene	1190		µg/kg wet	33.2	1670		72	40-140		
Acenaphthene	1190		µg/kg wet	165	1670		72	40-130		
Acenaphthylene	1200		µg/kg wet	33.2	1670		72	40-140		
Acenaphthylene	1200		µg/kg wet	165	1670		72	40-130		
Aniline	761		µg/kg wet	165	1670		46	40-130		
Anthracene	1230		µg/kg wet	165	1670		74	40-130		
Anthracene	1230		µg/kg wet	33.2	1670		74	40-140		
Atrazine	1300		µg/kg wet	165	1670		78	40-130		
Azobenzene/Diphenyldiazine	1140		µg/kg wet	165	1670		68	40-130		
Benzidine	56.3	J	µg/kg wet	165	1670		3	0-178		
Benzo (a) anthracene	1270		µg/kg wet	165	1670		76	40-130		
Benzo (a) anthracene	1270		µg/kg wet	33.2	1670		76	40-140		
Benzo (a) pyrene	1240		µg/kg wet	33.2	1670		75	40-140		
Benzo (a) pyrene	1240		µg/kg wet	165	1670		75	40-130		
Benzo (b) fluoranthene	1200		µg/kg wet	165	1670		72	40-130		
Benzo (b) fluoranthene	1200		µg/kg wet	33.2	1670		72	40-140		
Benzo (g,h,i) perylene	1040		µg/kg wet	165	1670		62	40-130		
Benzo (g,h,i) perylene	1040		µg/kg wet	33.2	1670		62	40-140		
Benzo (k) fluoranthene	1280		µg/kg wet	165	1670		77	40-130		
Benzo (k) fluoranthene	1280		µg/kg wet	33.2	1670		77	40-140		
Benzoic acid	922		µg/kg wet	165	1670		55	0-130		
Benzyl alcohol	1140		µg/kg wet	165	1670		68	40-130		
Bis(2-chloroethoxy)methane	1240		µg/kg wet	165	1670		74	40-130		
Bis(2-chloroethyl)ether	1200		µg/kg wet	165	1670		72	40-130		
Bis(2-chloroisopropyl)ether	988		µg/kg wet	165	1670		59	40-130		
Bis(2-ethylhexyl)phthalate	1410		µg/kg wet	165	1670		85	40-130		
4-Bromophenyl phenyl ether	1250		µg/kg wet	165	1670		75	40-130		
Butyl benzyl phthalate	1360		µg/kg wet	165	1670		81	40-130		
Carbazole	1240		µg/kg wet	165	1670		74	40-130		
4-Chloro-3-methylphenol	1250		µg/kg wet	165	1670		75	40-130		
4-Chloroaniline	1060		µg/kg wet	165	1670		63	40-130		
2-Chloronaphthalene	1180		µg/kg wet	165	1670		71	40-130		
2-Chlorophenol	1170		µg/kg wet	165	1670		70	40-130		
4-Chlorophenyl phenyl ether	1260		µg/kg wet	165	1670		76	40-130		
Chrysene	1230		µg/kg wet	33.2	1670		74	40-140		
Chrysene	1230		µg/kg wet	165	1670		74	40-130		
Dibenzo (a,h) anthracene	1120		µg/kg wet	33.2	1670		67	40-140		
Dibenzo (a,h) anthracene	1120		µg/kg wet	165	1670		67	40-130		
Dibenzofuran	1200		µg/kg wet	165	1670		72	40-130		
1,2-Dichlorobenzene	1100		µg/kg wet	165	1670		66	40-130		
1,3-Dichlorobenzene	1090		µg/kg wet	165	1670		65	40-130		
1,4-Dichlorobenzene	1120		µg/kg wet	165	1670		67	40-130		
3,3´-Dichlorobenzidine	1220		µg/kg wet	165	1670		73	40-130		
2,4-Dichlorophenol	1250		µg/kg wet	165	1670		75	40-130		
Diethyl phthalate	1260		µg/kg wet	165	1670		75	40-130		
Dimethyl phthalate	1200		µg/kg wet	165	1670		72	40-130		

Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111248 - SW846 3550B										
LCS (7111248-BS1)										
Prepared: 15-Nov-07 Analyzed: 16-Nov-07										
2,4-Dimethylphenol	1190		µg/kg wet	165	1670		71	40-130		
Di-n-butyl phthalate	1270		µg/kg wet	165	1670		76	40-130		
4,6-Dinitro-2-methylphenol	1050		µg/kg wet	165	1670		63	40-130		
2,4-Dinitrophenol	990		µg/kg wet	165	1670		59	40-130		
2,4-Dinitrotoluene	1320		µg/kg wet	165	1670		79	40-130		
2,6-Dinitrotoluene	1340		µg/kg wet	165	1670		80	40-130		
Di-n-octyl phthalate	1560		µg/kg wet	165	1670		94	40-130		
Fluoranthene	1230		µg/kg wet	33.2	1670		74	40-140		
Fluoranthene	1230		µg/kg wet	165	1670		74	40-130		
Fluorene	1200		µg/kg wet	165	1670		72	40-130		
Fluorene	1200		µg/kg wet	33.2	1670		72	40-140		
Hexachlorobenzene	1210		µg/kg wet	165	1670		73	40-130		
Hexachlorobutadiene	1180		µg/kg wet	165	1670		71	40-130		
Hexachlorocyclopentadiene	752		µg/kg wet	165	1670		45	40-130		
Hexachloroethane	1010		µg/kg wet	165	1670		61	40-130		
Indeno (1,2,3-cd) pyrene	1040		µg/kg wet	33.2	1670		62	40-140		
Indeno (1,2,3-cd) pyrene	1040		µg/kg wet	165	1670		62	40-130		
1-Methylnaphthalene	1200		µg/kg wet	165	1670		72	40-140		
1-Methylnaphthalene	1200		µg/kg wet	33.2	1670		72	40-140		
Isophorone	1140		µg/kg wet	165	1670		68	40-130		
2-Methylnaphthalene	1180		µg/kg wet	165	1670		71	40-130		
2-Methylnaphthalene	1180		µg/kg wet	33.2	1670		71	40-140		
2-Methylphenol	1100		µg/kg wet	165	1670		66	40-130		
3,4-Methylphenol	1080		µg/kg wet	165	1670		65	40-130		
Naphthalene	1170		µg/kg wet	165	1670		70	40-130		
Naphthalene	1170		µg/kg wet	33.2	1670		70	40-140		
2-Nitroaniline	1260		µg/kg wet	165	1670		76	40-130		
3-Nitroaniline	1100		µg/kg wet	165	1670		66	40-130		
4-Nitroaniline	1200		µg/kg wet	660	1670		72	40-130		
Nitrobenzene	1150		µg/kg wet	165	1670		69	40-130		
2-Nitrophenol	1450		µg/kg wet	165	1670		87	40-130		
4-Nitrophenol	1340		µg/kg wet	660	1670		81	40-130		
N-Nitrosodimethylamine	1740		µg/kg wet	165	1670		104	40-130		
N-Nitrosodi-n-propylamine	1040		µg/kg wet	165	1670		62	40-130		
N-Nitrosodiphenylamine	1360		µg/kg wet	165	1670		81	40-130		
Pentachlorophenol	1450		µg/kg wet	165	1670		87	40-130		
Phenanthrene	1210		µg/kg wet	33.2	1670		73	40-140		
Phenanthrene	1210		µg/kg wet	165	1670		73	40-130		
Phenol	1190		µg/kg wet	165	1670		72	40-130		
Pyrene	1290		µg/kg wet	165	1670		77	40-130		
Pyrene	1290		µg/kg wet	33.2	1670		77	40-140		
Pyridine	396	QC2	µg/kg wet	165	1670		24	40-130		
1,2,4-Trichlorobenzene	1190		µg/kg wet	165	1670		71	40-130		
2,4,5-Trichlorophenol	1280		µg/kg wet	165	1670		77	40-130		
2,4,6-Trichlorophenol	1180		µg/kg wet	165	1670		71	40-130		
Pentachloronitrobenzene	1160		µg/kg wet	165	1670		69	40-140		
1,2,4,5-Tetrachlorobenzene	1240		µg/kg wet	165	1670		74	40-140		
Surrogate: 2-Fluorobiphenyl	*1070*		µg/kg wet		*1670*		*64*	*30-130*		
Surrogate: Terphenyl-dl4	*1180*		µg/kg wet		*1670*		*71*	*30-130*		
Surrogate: 2-Fluorobiphenyl	*1070*		µg/kg wet		*1670*		*64*	*30-130*		

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Development and Evaluation of Consensus-Based Sediment Quality Guidelines for Freshwater Ecosystems

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Abstract. Numerical sediment quality guidelines (SQGs) for freshwater ecosystems have previously been developed using a variety of approaches. Each approach has certain advantages and limitations which in¯uence their application in the sediment quality assessment process. In an effort to focus on the agreement among these various published SQGs, consensus-based SQGs were developed for 28 chemicals of concern in freshwater sediments (*i.e.*, metals, polycyclic aromatic hydrocarbons, polychlorinated biphenyls, and pesticides). For each contaminant of concern, two SQGs were developed from the published SQGs, including a threshold effect concentration (TEC) and a probable effect concentration (PEC). The resultant SQGs for each chemical were evaluated for reliability using matching sediment chemistry and toxicity data from ®eld studies conducted throughout the United States. The results of this evaluation indicated that most of the TECs (*i.e.*, 21 of 28) provide an accurate basis for predicting the absence of sediment toxicity. Similarly, most of the PECs (*i.e.*, 16 of 28) provide an accurate basis for predicting sediment toxicity. Mean PEC quotients were calculated to evaluate the combined effects of multiple contaminants in sediment. Results of the evaluation indicate that the incidence of toxicity is highly correlated to the mean PEC quotient (R^2 5 0.98 for 347 samples). It was concluded that the consensus-based SQGs provide a reliable basis for assessing sediment quality conditions in freshwater ecosystems.

Numerical sediment quality guidelines (SQGs; including sediment quality criteria, sediment quality objectives, and sediment quality standards) have been developed by various federal, state, and provincial agencies in North America for both freshwater and marine ecosystems. Such SQGs have been used in numerous applications, including designing monitoring programs, interpreting historical data, evaluating the need for detailed sediment quality assessments, assessing the quality of prospective dredged materials, conducting remedial investigations and ecological risk assessments, and developing sediment quality remediation objectives (Long and MacDonald 1998). Numerical SQGs have also been used by many scientists and managers to identify contaminants of concern in aquatic ecosystems and to rank areas of concern on a regional or national basis (*e.g.*, US EPA 1997a). It is apparent, therefore, that numerical SQGs, when used in combination with other tools, such as sediment toxicity tests, represent a useful approach for assessing the quality of freshwater and marine sediments (MacDonald *et al.* 1992; US EPA 1992, 1996a, 1997a; Adams *et al.* 1992; Ingersoll *et al.* 1996, 1997).

The SQGs that are currently being used in North America have been developed using a variety of approaches. The approaches that have been selected by individual jurisdictions depend on the receptors that are to be considered (*e.g.*, sediment-dwelling organisms, wildlife, or humans), the degree of protection that is to be afforded, the geographic area to which the values are intended to apply (*e.g.*, site-speci®c, regional, or national), and their intended uses (*e.g.*, screening tools, remediation objectives, identifying toxic and not-toxic samples, bioaccumulation assessment). Guidelines for assessing sediment quality relative to the potential for adverse effects on sediment-dwelling organisms in freshwater systems have been derived using a combination of theoretical and empirical approaches, primarily including the equilibrium partitioning approach (EqPA; Di Toro *et al.* 1991; NYSDEC 1994; US EPA 1997a), screening level concentration approach (SLCA; Persaud *et al.* 1993), effects range approach (ERA; Long and Morgan 1991; Ingersoll *et al.* 1996), effects level approach (ELA; Smith *et al.* 1996; Ingersoll *et al.* 1996), and apparent effects threshold approach (AETA; Cubbage *et al.* 1997). Application of these methods has resulted in the derivation of numerical SQGs for many chemicals of potential concern in freshwater sediments.

Selection of the most appropriate SQGs for speci®c applications can be a daunting task for sediment assessors. This task is particularly challenging because limited guidance is currently available on the recommended uses of the various SQGs. In addition, the numerical SQGs for any particular substance can differ by several orders of magnitude, depending on the derivation procedure and intended use. The SQG selection process is further complicated due to uncertainties regarding

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the bioavailability of sediment-associated contaminants, the effects of covarying chemicals and chemical mixtures, and the ecological relevance of the guidelines (MacDonald *et al.* 2000). It is not surprising, therefore, that controversies have occurred over the proper use of these sediment quality assessment tools.

This paper represents the third in a series that is intended to address some of the difficulties associated with the assessment of sediment quality conditions using various numerical SQGs. The first paper was focused on resolving the "mixture paradox" that is associated with the application of empirically derived SQGs for individual PAHs. In this case, the paradox was resolved by developing consensus SQGs for SPAHs (*i.e.*, total PAHs; Swartz 1999). The second paper was directed at the development and evaluation of consensus-based sediment effect concentrations for total PCBs, which provided a basis for resolving a similar mixture paradox for that group of contaminants using empirically derived SQGs (MacDonald *et al.* 2000). The results of these investigations demonstrated that consensus-based SQGs provide a unifying synthesis of the existing guidelines, reflect causal rather than correlative effects, and account for the effects of contaminant mixtures in sediment (Swartz 1999).

The purpose of this third paper is to further address uncertainties associated with the application of numerical SQGs by providing a unifying synthesis of the published SQGs for freshwater sediments. To this end, the published SQGs for 28 chemical substances were assembled and classified into two categories in accordance with their original narrative intent. These published SQGs were then used to develop two consensus-based SQGs for each contaminant, including a threshold effect concentration (TEC; below which adverse effects are not expected to occur) and a probable effect concentration (PEC; above which adverse effects are expected to occur more often than not). An evaluation of resultant consensus-based SQGs was conducted to provide a basis for determining the ability of these tools to predict the presence, absence, and frequency of sediment toxicity in field-collected sediments from various locations across the United States.

Materials and Methods

Derivation of the Consensus-Based SQGs

A stepwise approach was used to develop the consensus-based SQGs for common contaminants of concern in freshwater sediments. As a first step, the published SQGs that have been derived by various investigators for assessing the quality of freshwater sediments were collated. Next, the SQGs obtained from all sources were evaluated to determine their applicability to this study. To facilitate this evaluation, the supporting documentation for each of the SQGs was reviewed. The collated SQGs were further considered for use in this study if: (1) the methods that were used to derive the SQGs were readily apparent; (2) the SQGs were based on empirical data that related contaminant concentrations to harmful effects on sediment-dwelling organisms or were intended to be predictive of effects on sediment-dwelling organisms (*i.e.*, not simply an indicator of background contamination); and (3) the SQGs had been derived on a *de novo* basis (*i.e.*, not simply adopted from another jurisdiction or source). It was not the intent of this paper to collate bioaccumulation-based SQGs.

The SQGs that were expressed on an organic carbon–normalized basis were converted to dry weight–normalized values at 1% organic carbon (MacDonald *et al.* 1994, 1996; US EPA 1997a). The dry weight–normalized SQGs were utilized because the results of previous studies have shown that they predicted sediment toxicity as well or better than organic carbon–normalized SQGs in field-collected sediments (Barrick *et al.* 1988; Long *et al.* 1995; Ingersoll *et al.* 1996; US EPA 1996a; MacDonald 1997).

The effects-based SQGs that met the selection criteria were then grouped to facilitate the derivation of consensus-based SQGs (Swartz 1999). Specifically, the previously published SQGs for the protection of sediment-dwelling organisms in freshwater ecosystems were grouped into two categories according to their original narrative intent, including TECs and PECs. The TECs were intended to identify contaminant concentrations below which harmful effects on sediment-dwelling organisms were not expected. TECs include threshold effect levels (TELs; Smith *et al.* 1996; US EPA 1996a), effect range low values (ERLs; Long and Morgan 1991), lowest effect levels (LELs; Persaud *et al.* 1993), minimal effect thresholds (METs; EC and MENVIQ 1992), and sediment quality advisory levels (SQALs; US EPA 1997a). The PECs were intended to identify contaminant concentrations above which harmful effects on sediment-dwelling organisms were expected to occur frequently (MacDonald *et al.* 1996; Swartz 1999). PECs include probable effect levels (PELs; Smith *et al.* 1996; US EPA 1996a), effect range median values (ERMs; Long and Morgan 1991); severe effect levels (SELs; Persaud *et al.* 1993), and toxic effect thresholds (TETs; EC and MENVIQ 1992; Table 1).

Following classification of the published SQGs, consensus-based TECs were calculated by determining the geometric mean of the SQGs that were included in this category (Table 2). Likewise, consensus-based PECs were calculated by determining the geometric mean of the PEC-type values (Table 3). The geometric mean, rather than the arithmetic mean or median, was calculated because it provides an estimate of central tendency that is not unduly affected by extreme values and because the distributions of the SQGs were not known (MacDonald *et al.* 2000). Consensus-based TECs or PECs were calculated only if three of more published SQGs were available for a chemical substance or group of substances.

Evaluation of the SQGs

The consensus-based SQGs were critically evaluated to determine if they would provide effective tools for assessing sediment quality conditions in freshwater ecosystems. Specifically, the reliability of the individual or combined consensus-based TECs and PECs for assessing sediment quality conditions was evaluated by determining their predictive ability. In this study, predictive ability is defined as the ability of the various SQGs to correctly classify field-collected sediments as toxic or not toxic, based on the measured concentrations of chemical contaminants. The predictive ability of the SQGs was evaluated using a three-step process.

In the first step of the SQG evaluation process, matching sediment chemistry and biological effects data were compiled for various freshwater locations in the United States. Because the data sets were generated for a wide variety of purposes, each study was evaluated to assure the quality of the data used for evaluating the predictive ability of the SQGs (Long *et al.* 1998; Ingersoll and MacDonald 1999). As a result of this evaluation, data from the following freshwater locations were identified for use in this paper: Grand Calumet River and Indiana Harbor Canal, IN (Hoke *et al.* 1993; Giesy *et al.* 1993; Burton 1994; Dorkin 1994); Indiana Harbor, IN (US EPA 1993a, 1996a, 1996b); Buffalo River, NY (US EPA 1993c, 1996a); Saginaw River, MI (US EPA 1993b, 1996a); Clark Fork River, MT (USFWS 1993); Milltown Reservoir, MT (USFWS 1993); Lower Columbia River, WA (Johnson and Norton 1988); Lower Fox River and Green Bay, WI (Call *et al.* 1991); Potomac River, DC (Schlekat *et al.* 1994; Wade *et al.* 1994; Velinsky *et al.* 1994); Trinity River, TX (Dickson *et al.* 1989; US EPA 1996a); Upper Mississippi River, MN to MO (US EPA 1996a, 1997b);

Table 1. Descriptions of the published freshwater SQGs that have been developed using various approaches

Type of SQG	Acronym	Approach	Description	Reference
Threshold effect concentration SQGs				
Lowest effect level	LEL	SLCA	Sediments are considered to be clean to marginally polluted. No effects on the majority of sediment-dwelling organisms are expected below this concentration.	Persaud *et al.* (1993)
Threshold effect level	TEL	WEA	Represents the concentration below which adverse effects are expected to occur only rarely.	Smith *et al.* (1996)
Effect range–low	ERL	WEA	Represents the chemical concentration below which adverse effects would be rarely observed.	Long and Morgan (1991)
Threshold effect level for *Hyalella azteca* in 28-day tests	TEL-HA28	WEA	Represents the concentration below which adverse effects on survival or growth of the amphipod *Hyalella azteca* are expected to occur only rarely (in 28-day tests).	US EPA (1996a); Ingersoll *et al.* (1996)
Minimal effect threshold	MET	SLCA	Sediments are considered to be clean to marginally polluted. No effects on the majority of sediment-dwelling organisms are expected below this concentration.	EC and MENVIQ (1992)
Chronic equilibrium partitioning threshold	SQAL	EqPA	Represents the concentration in sediments that is predicted to be associated with concentrations in the interstitial water below a chronic water quality criterion. Adverse effects on sediment-dwelling organisms are predicted to occur only rarely below this concentration.	Bolton *et al.* (1985); Zarba (1992); US EPA (1997a)
Probable effect concentration SQGs				
Severe effect level	SEL	SLCA	Sediments are considered to be heavily polluted. Adverse effects on the majority of sediment-dwelling organisms are expected when this concentration is exceeded.	Persaud *et al.* (1993)
Probable effect level	PEL	WEA	Represents the concentration above which adverse effects are expected to occur frequently.	Smith *et al.* (1996)
Effect range–median	ERM	WEA	Represents the chemical concentration above which adverse effects would frequently occur.	Long and Morgan (1991)
Probable effect level for *Hyalella azteca* in 28-day tests	PEL-HA28	WEA	Represents the concentration above which adverse effects on survival or growth of the amphipod *Hyalella azteca* are expected to occur frequently (in 28-day tests).	US EPA (1996a); Ingersoll *et al.* (1996)
Toxic effect threshold	TET	SLCA	Sediments are considered to be heavily polluted. Adverse effects on sediment-dwelling organisms are expected when this concentration is exceeded.	EC and MENVIQ (1992)

and Waukegan Harbor, IL (US EPA 1996a; Kemble *et al.* 1999). These studies provided 17 data sets (347 sediment samples) with which to evaluate the predictive ability of the SQGs. These studies also represented a broad range in both sediment toxicity and contamination; roughly 50% of these samples were found to be toxic based on the results of the various toxicity tests (the raw data from these studies are summarized in Ingersoll and MacDonald 1999).

In the second step of the evaluation, the measured concentration of each substance in each sediment sample was compared to the corresponding SQG for that substance. Sediment samples were predicted to be not toxic if the measured concentrations of a chemical substance were lower than the corresponding TEC. Similarly, samples were predicted to be toxic if the corresponding PECs were exceeded in field-collected sediments. Samples with contaminant concentrations between the TEC and PEC were neither predicted to be toxic nor nontoxic (*i.e.*, the individual SQGs are not intended to provide guidance within this range of concentrations). The comparisons of measured concentrations to the SQGs were conducted for each of the 28 chemicals of concern for which SQGs were developed.

In the third step of the evaluation, the accuracy of each prediction

Table 2. Sediment quality guidelines for metals in freshwater ecosystems that re¯ect TECs (*i.e.*, below which harmful effects are unlikely to be observed)

	Threshold Effect Concentrations						
Substance	TEL	LEL	MET	ERL	TEL-HA28	SQAL	Consensus-Based TEC
Metals (in mg/kg DW)							
Arsenic	5.9	6	7	33	11	NG	9.79
Cadmium	0.596	0.6	0.9	5	0.58	NG	0.99
Chromium	37.3	26	55	80	36	NG	43.4
Copper	35.7	16	28	70	28	NG	31.6
Lead	35	31	42	35	37	NG	35.8
Mercury	0.174	0.2	0.2	0.15	NG	NG	0.18
Nickel	18	16	35	30	20	NG	22.7
Zinc	123	120	150	120	98	NG	121
Polycyclic aromatic hydrocarbons (in mg/kg DW)							
Anthracene	NG	220	NG	85	10	NG	57.2
Fluorene	NG	190	NG	35	10	540	77.4
Naphthalene	NG	NG	400	340	15	470	176
Phenanthrene	41.9	560	400	225	19	1,800	204
Benz[a]anthracene	31.7	320	400	230	16	NG	108
Benzo(a)pyrene	31.9	370	500	400	32	NG	150
Chrysene	57.1	340	600	400	27	NG	166
Dibenz[a,h]anthracene	NG	60	NG	60	10	NG	33.0
Fluoranthene	111	750	600	600	31	6,200	423
Pyrene	53	490	700	350	44	NG	195
Total PAHs	NG	4,000	NG	4,000	260	NG	1,610
Polychlorinated biphenyls (in mg/kg DW)							
Total PCBs	34.1	70	200	50	32	NG	59.8
Organochlorine pesticides (in mg/kg DW)							
Chlordane	4.5	7	7	0.5	NG	NG	3.24
Dieldrin	2.85	2	2	0.02	NG	110	1.90
Sum DDD	3.54	8	10	2	NG	NG	4.88
Sum DDE	1.42	5	7	2	NG	NG	3.16
Sum DDT	NG	8	9	1	NG	NG	4.16
Total DDTs	7	7	NG	3	NG	NG	5.28
Endrin	2.67	3	8	0.02	NG	42	2.22
Heptachlor epoxide	0.6	5	5	NG	NG	NG	2.47
Lindane (gamma-BHC)	0.94	3	3	NG	NG	3.7	2.37

TEL 5 Threshold effect level; dry weight (Smith *et al.* 1996)
LEL 5 Lowest effect level, dry weight (Persaud *et al.* 1993)
MET 5 Minimal effect threshold; dry weight (EC and MENVIQ 1992)
ERL 5 Effect range low; dry weight (Long and Morgan 1991)
TEL-HA28 5 Threshold effect level for Hyalella azteca; 28 day test; dry weight (US EPA 1996a)
SQAL 5 Sediment quality advisory levels; dry weight at 1% OC (US EPA 1997a)
NG 5 No guideline

was evaluated by determining if the sediment sample actually was toxic to one or more aquatic organisms, as indicated by the results of various sediment toxicity tests (Ingersoll and MacDonald 1999). The following responses of aquatic organisms to contaminant challenges (*i.e.*, toxicity test endpoints) were used as indicators of toxicity in this assessment (*i.e.*, sediment samples were designated as toxic if one or more of the following endpoints were signi®cantly different from the responses observed in reference or control sediments), including amphipod (*Hyalella azteca*) survival, growth, or reproduction; may¯y (*Hexagenia limbata*) survival or growth; midge (*Chironomus tentans* or *Chironomus riparius*) survival or growth; midge deformities; oligochaete (*Lumbriculus variegatus*) survival; daphnid (*Ceriodaphnia dubia*) survival; and bacterial (*Photobacterium phosphoreum*) luminescence (*i.e.*, Microtox). In contrast, sediment samples were designated as nontoxic if they did not cause a signi®cant response in at least one of these test endpoints. In this study, predictive ability was calculated as the ratio of the number of samples that were correctly classi®ed as toxic or nontoxic to the total number of samples that were predicted to be toxic or nontoxic using the various SQGs (predictive ability was expressed as a percentage).

The criteria for evaluating the reliability of the consensus-based PECs were adapted from Long *et al.* (1998). These criteria are intended to re¯ect the narrative intent of each type of SQG (*i.e.*, sediment toxicity should be observed only rarely below the TEC and should be frequently observed above the PEC). Speci®cally, the individual TECs were considered to provide a reliable basis for assessing the quality of freshwater sediments if more than 75% of the sediment samples were correctly predicted to be not toxic. Similarly, the individual PEC for each substance was considered to be reliable if greater than 75% of the sediment samples were correctly predicted to toxic using the PEC. Therefore, the target levels of both false positives (*i.e.*, samples incorrectly classi®ed as toxic) and false negatives (*i.e.*, samples incorrectly classi®ed as not toxic) was 25% using the TEC and PEC. To assure that the results of the predictive ability evaluation were

Table 3. Sediment quality guidelines for metals in freshwater ecosystems that re¯ect PECs (*i.e.*, above which harmful effects are likely to be observed)

	Probable Effect Concentrations					
Substance	PEL	SEL	TET	ERM	PEL-HA28	Consensus-Based PEC
Metals (in mg/kg DW)						
Arsenic	17	33	17	85	48	33.0
Cadmium	3.53	10	3	9	3.2	4.98
Chromium	90	110	100	145	120	111
Copper	197	110	86	390	100	149
Lead	91.3	250	170	110	82	128
Mercury	0.486	2	1	1.3	NG	1.06
Nickel	36	75	61	50	33	48.6
Zinc	315	820	540	270	540	459
Polycyclic aromatic hydrocarbons (in mg/kg DW)						
Anthracene	NG	3,700	NG	960	170	845
Fluorene	NG	1,600	NG	640	150	536
Naphthalene	NG	NG	600	2,100	140	561
Phenanthrene	515	9,500	800	1,380	410	1,170
Benz[a]anthracene	385	14,800	500	1,600	280	1,050
Benzo(a)pyrene	782	14,400	700	2,500	320	1,450
Chrysene	862	4,600	800	2,800	410	1,290
Fluoranthene	2,355	10,200	2,000	3,600	320	2,230
Pyrene	875	8,500	1,000	2,200	490	1,520
Total PAHs	NG	100,000	NG	35,000	3,400	22,800
Polychlorinated biphenyls (in mg/kg DW)						
Total PCBs	277	5,300	1,000	400	240	676
Organochlorine pesticides (in mg/kg DW)						
Chlordane	8.9	60	30	6	NG	17.6
Dieldrin	6.67	910	300	8	NG	61.8
Sum DDD	8.51	60	60	20	NG	28.0
Sum DDE	6.75	190	50	15	NG	31.3
Sum DDT	NG	710	50	7	NG	62.9
Total DDTs	4,450	120	NG	350	NG	572
Endrin	62.4	1,300	500	45	NG	207
Heptachlor Epoxide	2.74	50	30	NG	NG	16.0
Lindane (gamma-BHC)	1.38	10	9	NG	NG	4.99

PEL 5 Probable effect level; dry weight (Smith *et al.* 1996)
SEL 5 Severe effect level, dry weight (Persaud *et al.* 1993)
TET 5 Toxic effect threshold; dry weight (EC and MENVIQ 1992)
ERM 5 Effect range median; dry weight (Long and Morgan 1991)
PEL-HA28 5 Probable effect level for *Hyalella azteca*; 28-day test; dry weight (US EPA 1996a)
NG 5 No guideline

not unduly in¯uenced by the number of sediment samples available to conduct the evaluation of predictive ability, the various SQGs were considered to be reliable only if a minimum of 20 samples were included in the predictive ability evaluation (CCME 1995).

The initial evaluation of predictive ability was focused on determining the ability of each SQG when applied alone to classify samples correctly as toxic or nontoxic. Because ®eld-collected sediments typically contain complex mixtures of contaminants, the predictability of these sediment quality assessment tools is likely to increase when the SQGs are used together to classify these sediments. For this reason, a second evaluation of the predictive ability of the SQGs was conducted to determine the incidence of effects above and below various mean PEC quotients (*i.e.*, 0.1, 0.5, 1.0, and 1.5). In this evaluation, mean PEC quotients were calculated using the methods of Long *et al.* (1998; *i.e.*, for each sediment sample, the average of the ratios of the concentration of each contaminant to its corresponding PEC was calculated for each sample), with only the PECs that were found to be reliable used in these calculations. The PEC for total PAHs (*i.e.*, instead of the PECs for the individual PAHs) was used in the calculation to avoid double counting of the PAH concentration data.

Results and Discussion

Derivation of Consensus-Based SQGs

A variety of approaches have been developed to support the derivation of numerical SQGs for the protection of sediment-dwelling organisms in the United States and Canada. MacDonald (1994), Ingersoll and MacDonald (1999), and MacDonald *et al.* (2000) provided reviews of the various approaches to SQG development, including descriptions of the derivation methods, the advantages and limitations of the resultant SQGs, and their recommended uses. This information,

along with the supporting documentation that was obtained with the published SQGs, was used to evaluate the relevance of the various SQGs in this investigation.

Subsequently, the narrative descriptions of the various SQGs were used to classify the SQGs into appropriate categories (*i.e.*, TECs or PECs; Table 1). The results of this classi®cation process indicated that six sets of SQGs were appropriate for deriving consensus-based TECs for the contaminants of concern in freshwater sediments, including: (1) TELs (Smith *et al.* 1996); (2) LELs (Persaud *et al.* 1993); (3) METs (EC and MENVIQ 1992); (4) ERLs (Long and Morgan 1991); (5) TELs for *H. azteca* in 28-day toxicity tests (US EPA 1996a; Ingersoll *et al.* 1996); and (6) SQALs (US EPA 1997a).

Several other SQGs were also considered for deriving consensus TECs, but they were not included for the following reasons. First, none of the SQGs that have been developed using data on the effects on sediment-associated contaminants in marine sediments only were used to derive TECs. However, the ERLs that were derived using both freshwater and marine data were included (*i.e.*, Long and Morgan 1991). Second, the ERLs that were developed by the US EPA (1996a) were not utilized because they were developed from the same data that were used to derive the TELs (*i.e.*, from several areas of concern in the Great Lakes). In addition, simultaneously extracted metals±acid volatile sul®de (SEM-AVS)±based SQGs were not used because they could not be applied without simultaneous measurements of SEM and AVS concentrations (Di Toro *et al.* 1990). None of the SQGs that were derived using the sediment background approach were used because they were not effects-based. Finally, no bioaccumulation-based SQGs were used to calculate the consensus-based TECs. The published SQGs that corresponded to TECs for metals, PAHs, PCBs, and organochlorine pesticides are presented in Table 2.

Based on the results of the initial evaluation, ®ve sets of SQGs were determined to be appropriate for calculating consensus-based PECs for the contaminants of concern in freshwater sediments, including: (1) probable effect levels (PELs; Smith *et al.* 1996); (2) severe effect levels (SELs; (Persaud *et al.* 1993); (3) toxic effect thresholds (TETs; EC and MENVIQ 1992); (4) effect range median values (ERMs; Long and Morgan 1991); and (5) PELs for *H. azteca* in 28-day toxicity tests (US EPA 1996a; Ingersoll *et al.* 1996).

While several other SQGs were considered for deriving the consensus-based PECs, they were not included for the following reasons. To maximize the applicability of the resultant guidelines to freshwater systems, none of the SQGs that were developed for assessing the quality of marine sediments were used to derive the freshwater PECs. As was the case for the TECs, the ERMs that were derived using both freshwater and marine data (*i.e.*, Long and Morgan 1991) were included, however. The ERMs that were derived using data from various areas of concern in the Great Lakes (*i.e.*, US EPA 1996a) were not included to avoid duplicate representation of these data in the consensus-based PECs. In addition, none of the SEM-AVS±based SQGs were not used in this evaluation. Furthermore, none of the AET or related values (*e.g.*, NECs from Ingersoll *et al.* 1996; PAETs from Cubbage *et al.* 1997) were used because they were not considered to represent toxicity thresholds (rather, they represent contaminant concentrations above which harmful biological effects always occur). The published SQGs that corresponded to PECs for metals, PAHs, PCBs, and organochlorine pesticides are presented in Table 3.

For each substance, consensus-based TECs or PECs were derived if three or more acceptable SQGs were available. The consensus-based TECs or PECs were determined by calculating the geometric mean of the published SQGs and rounding to three signi®cant digits. Application of these procedures facilitated the derivation of numerical SQGs for a total of 28 chemical substances, including 8 trace metals, 10 individual PAHs and PAH classes, total PCBs, and 9 organochlorine pesticides and degradation products. The consensus-based SQGs that were derived for the contaminants of concern in freshwater ecosystems are presented in Tables 2 and 3.

Predictive Ability of the Consensus-Based SQGs

Matching sediment chemistry and toxicity data from various locations in the United States were used to evaluate the predictive ability of the consensus-based SQGs in freshwater sediments. Within this independent data set, the overall incidence of toxicity was about 50% (*i.e.*, 172 of the 347 samples evaluated in these studies were identi®ed as being toxic to one or more sediment-dwelling organisms). Therefore, 50% of the samples with contaminant concentrations below the TEC, between the TEC and the PEC, and above PECs would be predicted to be toxic if sediment toxicity was unrelated to sediment chemistry (*i.e.*, based on random chance alone).

The consensus-based TECs are intended to identify the concentrations of sediment-associated contaminants below which adverse effects on sediment-dwelling organisms are not expected to occur. Suf®cient data were available to evaluate the predictive ability of all 28 consensus-based TECs. Based on the results of this assessment, the incidence of sediment toxicity was generally low at contaminant concentrations below the TECs (Table 4). Except for mercury, the predictive ability of the TECs for the trace metals ranged from 72% for chromium to 82% for copper, lead, and zinc. The predictive ability of the TECs for PAHs was similar to that for the trace metals, ranging from 71% to 83%. Among the organochlorine pesticides, the predictive ability of the TECs was highest for chlordane (85%) and lowest for endrin (71%). At 89%, the predictive ability of the TEC for total PCBs was the highest observed among the 28 substances for which SQGs were derived. Overall, the TECs for 21 substances, including four trace metals, eight individual PAHs, total PAHs, total PCBs, and seven organochlorine pesticides, were found to predict accurately the absence of toxicity in freshwater sediments (*i.e.*, predictive ability $75%; $20 samples below the TEC; Table 4). Therefore, the consensus-based TECs generally provide an accurate basis for predicting the absence of toxicity to sediment-dwelling organisms in freshwater sediments.

In contrast to the TECs, the consensus-based PECs are intended to de®ne the concentrations of sediment-associated contaminants above which adverse effects on sediment-dwelling organisms are likely to be observed. Suf®cient data were available to evaluate the PECs for 17 chemical substances, including 7 trace metals, 6 individual PAHs, total PAHs, total PCBs, and 2 organochlorine pesticides (*i.e.*, $20 samples predicted to be toxic). The results of the evaluation of predictive ability demonstrate that the PECs for 16 of the 17 substances meet the criteria for predictive ability that

Table 4. Predictive ability of the consensus-based TECs in freshwater sediments

Substance	Number of Samples Evaluated	Number of Samples Predicted to Be Not Toxic	Number of Samples Observed to Be Not Toxic	Percentage of Samples Correctly Predicted to Be Not Toxic
Metals				
Arsenic	150	58	43	74.1
Cadmium	347	102	82	80.4
Chromium	347	132	95	72.0
Copper	347	158	130	82.3
Lead	347	152	124	81.6
Mercury	79	35	12	34.3
Nickel	347	184	133	72.3
Zinc	347	163	133	81.6
Polycyclic aromatic hydrocarbons				
Anthracene	129	75	62	82.7
Fluorene	129	93	66	71.0
Naphthalene	139	85	64	75.3
Phenanthrene	139	79	65	82.3
Benz(a)anthracene	139	76	63	82.9
Benzo(a)pyrene	139	81	66	81.5
Chrysene	139	80	64	80.0
Dibenz(a,h)anthracene	98	77	56	72.7
Fluoranthene	139	96	72	75.0
Pyrene	139	78	62	79.5
Total PAHs	167	81	66	81.5
Polychlorinated biphenyls				
Total PCBs	120	27	24	88.9
Organochlorine pesticides				
Chlordane	193	101	86	85.1
Dieldrin	180	109	91	83.5
Sum DDD	168	101	81	80.2
Sum DDE	180	105	86	81.9
Sum DDT	96	100	77	77.0
Total DDT	110	92	76	82.6
Endrin	170	126	89	70.6
Heptachlor epoxide	138	90	74	82.2
Lindane	180	121	87	71.9

were established in this study (Table 5). Among the seven individual trace metals, the predictive ability of the PECs ranged from 77% for arsenic to 94% for cadmium. The PECs for six individual PAHs and total PAHs were also demonstrated to be reliable, with predictive abilities ranging from 92% to 100%. The predictive ability of the PEC for total PCBs was 82%. While the PEC for Sum DDE was also found to be an accurate predictor of sediment toxicity (*i.e.*, predictive ability of 97%), the predictive ability of thePECforchlordanewassomewhatlower(*i.e.*,73%).Therefore, the consensus-based PECs for arsenic, cadmium, chromium, copper, lead, nickel, zinc, naphthalene, phenanthrene, benz[a]anthracene, benzo(a)pyrene, chrysene, pyrene, total PAHs, total PCBs, and sum DDE provide an accurate basis for predicting toxicity in freshwater sediments from numerous locations in North America (*i.e.*, predictive ability of $\$75\%$; Table 5). Insuf®cient data were available (*i.e.*, fewer than 20 samples predicted to be toxic) to evaluatethePECsformercury,anthracene,¯uorene,¯uoranthene, dieldrin, sum DDD, sum DDT, total DDT, endrin, heptachlor epoxide, and lindane (Table 5).

The two types of SQGs de®ne three ranges of concentrations for each chemical substance. It is possible to assess the degree of concordance that exists between chemical concentrations and the incidence of sediment toxicity (Table 6; MacDonald *et al.* 1996) by determining the ratio of toxic samples to the total number of samples within each of these three ranges of concentrations for each substance. The results of this evaluation demonstrate that, for most chemical substances (*i.e.*, 20 of 28), there is a consistent and marked increase in the incidence of toxicity to sediment-dwelling organisms with increasing chemical concentrations. For certain substances, such as naphthalene, mercury, chlordane, dieldrin, and sum DDD, a lower PEC may have produced greater concordance between sediment chemistry and the incidence of effects. Insuf®cient data were available to evaluate the degree of concordance for several substances, such as endrin, heptachlor epoxide, and lindane. The positive correlation between contaminant concentrations and sediment toxicity that was observed increases the degree of con®dence that can be placed in the SQGs for most of the substances.

While the SQGs for the individual chemical substances provide reliable tools for assessing sediment quality conditions, predictive ability should be enhanced when used together in assessments of sediment quality. In addition, it would be helpful to consider the magnitude of the exceedances of the SQGs in such assessments. Long *et al.* (1998) developed a procedure for evaluating the biological signi®cance of contaminant mixtures through the application of mean PEC quotients. A three-

Table 5. Predictive ability of the consensus-based PECs in freshwater sediments

Substance	Number of Samples Evaluated	Number of Samples Predicted to Be Toxic	Number of Samples Observed to Be Toxic	Percentage of Samples Correctly Predicted to Be Toxic
Metals				
Arsenic	150	26	20	76.9
Cadmium	347	126	118	93.7
Chromium	347	109	100	91.7
Copper	347	110	101	91.8
Lead	347	125	112	89.6
Mercury	79	4	4	100
Nickel	347	96	87	90.6
Zinc	347	120	108	90.0
Polycyclic aromatic hydrocarbons				
Anthracene	129	13	13	100
Fluorene	129	13	13	100
Naphthalene	139	26	24	92.3
Phenanthrene	139	25	25	100
Benz(a)anthracene	139	20	20	100
Benzo(a)pyrene	139	24	24	100
Chrysene	139	24	23	95.8
Fluoranthene	139	15	15	100
Pyrene	139	28	27	96.4
Total PAHs	167	20	20	100
Polychlorinated biphenyls				
Total PCBs	120	51	42	82.3
Organochlorine pesticides				
Chlordane	193	37	27	73.0
Dieldrin	180	10	10	100
Sum DDD	168	6	5	83.3
Sum DDE	180	30	29	96.7
Sum DDT	96	12	11	91.7
Total DDT	110	10	10	100
Endrin	170	0	0	NA
Heptachlor epoxide	138	8	3	37.5
Lindane	180	17	14	82.4

NA 5 Not applicable

step process is used in the present study to calculate mean PEC quotients. In the ®rst step, the concentration of each substance in each sediment sample is divided by its respective consensus-based PEC. PEC quotients are calculated only for those substances for which reliable PECs were available. Subsequently, the sum of the PEC quotients was calculated for each sediment sample by adding the PEC quotients that were determined for each substance; however, only the PECs that were demonstrated to be reliable were used in the calculation. The summed PEC quotients were then normalized to the number of PEC quotients that are calculated for each sediment sample (*i.e.*, to calculate the mean PEC quotient for each sample; Can®eld *et al.* 1998; Long *et al.* 1998; Kemble *et al.* 1999). This normalization step is conducted to provide comparable indices of contamination among samples for which different numbers of chemical substances were analyzed.

The predictive ability of the PEC quotients, as calculated using the consensus-based SQGs, was also evaluated using data that were assembled to support the predictive ability assessment for the individual PECs. In this evaluation, sediment samples were predicted to be not toxic if mean PEC quotients were , 0.1 or , 0.5. In contrast, sediment samples were predicted to be toxic when mean PEC quotients exceeded 0.5, 1.0, or 1.5. The results of this evaluation indicated that the consensus-based SQGs, when used, together provide an accurate basis for predicting the absence of sediment toxicity (Table 7; Figure 1). Sixty-one sediment samples had mean PEC quotients of , 0.1; six of these samples were toxic to sediment-dwelling organisms (predictive ability 5 90%). Of the 174 samples with mean PEC quotients of , 0.5, only 30 were found to be toxic to sediment-dwelling organisms (predictive ability 5 83%; Table 7).

The consensus-based SQGs also provided an accurate basis for predicting sediment toxicity in sediments that contained mixtures of contaminants. Of the 173 sediment samples with mean PEC quotients of . 0.5 (calculated using the PECs for seven trace metals, the PEC for total PAHs [rather than the PECs for individual PAHs], the PEC for PCBs, and the PEC for sum DDE), 147 (85%) were toxic to sediment-dwelling organisms (Table 7; Figure 1). Similarly, 92% of the sediment samples (132 of 143) with mean PEC quotients of . 1.0 were toxic to one or more species of aquatic organisms. Likewise, 94% of the sediment samples (118 of 125) with mean PEC quotients of greater than 1.5 were found to be toxic, based on the results of various freshwater toxicity tests. Therefore, it is apparent that a mean PEC quotient of 0.5 represents a useful

Table 6. Incidence of toxicity within ranges of contaminant concentrations de®ned by the SQGs

Substance	Number of Samples Evaluated	Incidence of Toxicity (%, number of samples in parentheses)		
		#TEC	TEC-PEC	. PEC
Metals				
Arsenic	150	25.9% (15 of 58)	57.6% (38 of 66)	76.9% (20 of 26)
Cadmium	347	19.6% (20 of 102)	44.6% (29 of 65)	93.7% (118 of 126)
Chromium	347	28% (37 of 132)	64.4% (38 of 59)	91.7% (100 of 109)
Copper	347	17.7% (28 of 158)	64.0% (48 of 75)	91.8% (101 of 110)
Lead	347	18.4% (28 of 152)	53.6% (37 of 69)	89.6% (112 of 125)
Mercury	79	65.7% (23 of 35)	70.0% (28 of 40)	100% (4 of 4)
Nickel	347	27.7% (51 of 184)	62.7% (32 of 51)	90.6% (87 of 96)
Zinc	347	18.4% (30 of 163)	60.9% (39 of 64)	90.0% (108 of 120)
Polycyclic aromatic hydrocarbons				
Anthracene	129	17.3% (13 of 75)	92.9% (26 of 28)	100% (13 of 13)
Fluorene	129	29% (27 of 93)	85.7% (12 of 14)	100% (13 of 13)
Naphthalene	139	24.7% (21 of 85)	94.1% (16 of 17)	92.3% (24 of 26)
Phenanthrene	139	17.7% (14 of 79)	88.2% (30 of 34)	100% (25 of 25)
Benz(a)anthracene	139	17.1% (13 of 76)	70% (14 of 20)	100% (20 of 20)
Benzo(a)pyrene	139	18.5% (15 of 81)	75.7% (28 of 37)	100% (24 of 24)
Chrysene	139	20% (16 of 80)	68.1% (32 of 47)	95.8% (23 of 24)
Fluoranthene	139	25% (24 of 96)	82.5% (33 of 40)	100% (15 of 15)
Pyrene	139	20.5% (16 of 78)	63.0% (29 of 46)	96.4% (27 of 28)
Total PAHs	167	18.5% (15 of 81)	65.1% (43 of 66)	100% (20 of 20)
Polychlorinated biphenyls				
Total PCBs	120	11.1% (3 of 27)	31.0% (9 of 29)	82.3% (42 of 51)
Organochlorine pesticides				
Chlordane	193	14.9% (15 of 101)	75.0% (15 of 20)	73.0% (27 of 37)
Dieldrin	180	16.5% (18 of 109)	95.2% (20 of 21)	100% (10 of 10)
Sum DDD	168	19.8% (20 of 101)	33.3% (1 of 3)	83.3% (5 of 6)
Sum DDE	180	18.1% (19 of 105)	33.3% (1 of 3)	96.7% (29 of 30)
Sum DDT	96	23% (23 of 100)	0.0% (0 of 1)	91.7% (11 of 12)
Total DDT	110	17.4% (16 of 92)	100% (23 of 23)	100% (10 of 10)
Endrin	170	29.4% (37 of 126)	40.0% (4 of 10)	NA% (0 of 0)
Heptachlor epoxide	138	17.8% (16 of 90)	85.0% (17 of 20)	37.5% (3 of 8)
Lindane	180	28.1% (34 of 121)	65.9% (29 of 44)	82.4% (14 of 17)

Table 7. Predictive ability of mean PEC quotients in freshwater sediments

Mean PEC Quotient	Mean PEC Quotients Calculated with Total PAHs Predictive Ability (%)	Mean PEC Quotients Calculated with Individual PAH Predictive Abilities (%)
, 0.1	90.2% (61)	90.2% (61)
, 0.5	82.8% (174)	82.9% (175)
. 0.5	85% (173)	85.4% (172)
. 1.0	93.3% (143)	93.4% (143)
. 1.5	94.4% (125)	95% (121)

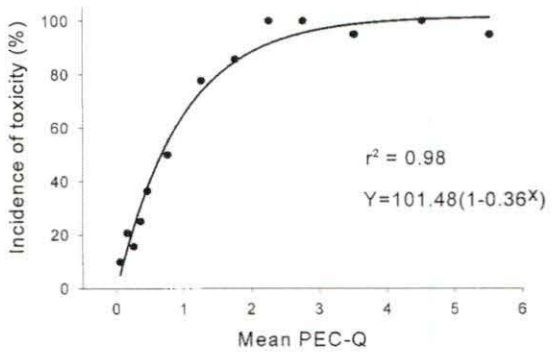

Fig. 1. Relationship between mean PEC quotient and incidence of toxicity in freshwater sediments

threshold that can be used to accurately classify sediment samples as both toxic and not toxic. The results of this evaluation were not substantially different when the PECs for the individuals PAHs (*i.e.*, instead of the PEC for total PAHs) were used to calculate the mean PEC quotients (Table 7). Kemble *et al.* (1999) reported similar results when the mean PEC quotients were evaluated using the results of only 28-day toxicity tests with *H. azteca* (n 5 149, 32% of the samples were toxic).

To examine further the relationship between the degree of chemical contamination and probability of observing toxicity in freshwater sediments, the incidence of toxicity within various ranges of mean PEC quotients was calculated (*e.g.*, , 0.1, 0.1±0.2, 0.2±0.3). Next, these data were plotted against the midpoint of each range of mean PEC quotients (Figure 1). Subsequent curve-®tting indicated that the mean PEC-quotient is highly correlated with incidence of toxicity (r^2 5 0.98), with the relationship being an exponential function. The resultant

equation can be used to estimate the probability of observing sediment toxicity at any mean PEC quotient.

Although it is important to be able to predict accurately the presence and absence of toxicity in field-collected sediments, it is also helpful to be able to identify the factors that are causing or substantially contributing to sediment toxicity. Such information enables environmental managers to focus limited resources on the highest-priority sediment quality issues and concerns. In this context, it has been suggested that the results of spiked sediment toxicity tests provide a basis for identifying the concentrations of sediment-associated contaminants that cause sediment toxicity (Swartz *et al.* 1988; Ingersoll *et al.* 1997). Unfortunately, there is limited relevant data available that assesses effects of spiked sediment in freshwater systems. For example, the available data from spiked sediment toxicity tests is limited to just a few of the chemical substances for which reliable PECs are available, primarily copper and fluoranthene. Additionally, differences in spiking procedures, equilibration time, and lighting conditions during exposures confound the interpretation of the results of sediment spiking studies, especially for PAHs (ASTM 1999). Moreover, many sediment spiking studies were conducted to evaluate bioaccumulation using relatively insensitive test organisms (*e.g., Diporeia* and *Lumbriculus*) or in sediments containing mixtures of chemical substances (Landrum *et al.* 1989, 1991).

In spite of the limitations associated with the available dose-response data, the consensus-based PECs for copper and fluoranthene were compared to the results of spiked sediment toxicity tests. Suedel (1995) conducted a series of sediment spiking studies with copper and reported 48-h to 14-day LC_{50} for four freshwater species, including the waterflea *Ceriodaphnia dubia* (32±129 mg/kg DW) and *Daphnia magna* (37±170 mg/kg DW), the amphipod *H. azteca* (247±424 mg/kg DW), and the midge *C. tentans* (1,026±4,522 mg/kg DW). An earlier study reported 10-day LC_{50}s of copper for *H. azteca* (1,078 mg/kg) and *C. tentans* (857 mg/kg), with somewhat higher effect concentrations observed in different sediment types (Cairns *et al.* 1984). The PEC for copper (149 mg/kg DW) is higher than or comparable to (*i.e.*, within a factor of three; MacDonald *et al.* 1996; Smith *et al.* 1996) the median lethal concentrations for several of these species. For fluoranthene, Suedel and Rodgers (1993) reported 10-day EC_{50}s of 4.2±15.0 mg/kg, 2.3±7.4 mg/kg, and 3.0±8.7 mg/kg for *D. magna, H. azteca*, and *C. tentans*, respectively. The lower of the values reported for each species are comparable to the PEC for fluoranthene that was derived in this study (*i.e.*, 2.23 mg/kg). Much higher toxicity thresholds have been reported in other studies (*e.g.*, Kane Driscoll *et al.* 1997; Kane Driscoll and Landrum 1997), but it is likely that these results were influenced by the lighting conditions under which the tests were conducted. Although this evaluation was made with limited data, the results suggest that the consensus-based SQGs are comparable to the acute toxicity thresholds that have been obtained from spiking studies.

A second approach to identify concentrations of sediment-associated contaminants that cause or contribute to toxicity was to compare our consensus-based PECs to equilibrium partitioning values (Swartz 1999; MacDonald *et al.* 1999). The equilibrium partitioning (EqP) approach provides a theoretical basis for deriving sediment quality guidelines for the protection of freshwater organisms (Di Toro *et al.* 1991; Zarba 1992). Using this approach, the US EPA (1997a) developed SQGs that are intended to represent chronic toxicity thresholds for various sediment-associated contaminants, primarily nonionic organic substances. The concentrations of these contaminants are considered to be sufficient to cause or substantially contribute to sediment toxicity when they exceed the EqP-based SQGs (Berry *et al.* 1996). To evaluate the extent to which the consensus-based SQGs are causally based, the PECs were compared to the chronic toxicity thresholds that have been developed previously using the EqP approach (see Table 2). The results of this evaluation indicate that the consensus-based PECs are generally comparable to the EqP-based SQGs (*i.e.*, within a factor of three; MacDonald *et al.* 1996; Smith *et al.* 1996). Therefore, the consensus-based PECs also define concentrations of sediment-associated contaminants that are sufficient to cause or substantially contribute to sediment toxicity.

Summary

Consensus-based SQGs were derived for 28 common chemicals of concern in freshwater sediments. For each chemical substance, two consensus-based SQGs were derived from the published SQGs. These SQGs reflect the toxicity of sediment-associated contaminants when they occur in mixtures with other contaminants. Therefore, these consensus-based SQGs are likely to be directly relevant for assessing freshwater sediments that are influenced by multiple sources of contaminants. The results of the evaluations of predictive ability demonstrate that the TECs and PECs for most of these chemicals, as well as the PEC quotients, provide a reliable basis for classifying sediments as not toxic and toxic. In addition, positive correlations between sediment chemistry and sediment toxicity indicate that many of these sediment-associated contaminants are associated with the effects that were observed in field-collected sediments. Furthermore, the level of agreement between the available dose-response data, the EqP-based SQGs, and the consensus-based SQGs indicates that sediment-associated contaminants are likely to cause or substantially contribute to, as opposed to simply be associated with, sediment toxicity at concentrations above the PECs.

Overall, the results of the various evaluations demonstrate that the consensus-based SQGs provide a unifying synthesis of the existing SQGs, reflect causal rather than correlative effects, and account for the effects of contaminant mixtures (Swartz 1999). As such, the SQGs can be used to identify hot spots with respect to sediment contamination, determine the potential for and spatial extent of injury to sediment-dwelling organisms, evaluate the need for sediment remediation, and support the development of monitoring programs to further assess the extent of contamination and the effects of contaminated sediments on sediment-dwelling organisms. These applications are strengthened when the SQGs are used in combination with other sediment quality assessment tools (*i.e.*, sediment toxicity tests, bioaccumulation assessments, benthic invertebrate community assessments; Ingersoll *et al.* 1997). In these applications, the TECs should be used to identify sediments that are unlikely to be adversely affected by sediment-associated contaminants. In contrast, the PECs should be used to identify sediments that are likely to be toxic to sediment-dwelling

organisms. The PEC quotients should be used to assess sediment that contain complex mixtures of chemical contaminants.

The consensus-based SQGs described in this paper do not consider the potential for bioaccumulation in aquatic organisms nor the associated hazards to the species that consume aquatic organisms (*i.e.*, wildlife and humans). Therefore, it is important to use the consensus-based SQGs in conjunction with other tools, such as bioaccumulation-based SQGs, bioaccumulation tests, and tissue residue guidelines, to evaluate more fully the potential effects of sediment-associated contaminants in the environment. Future investigations should focus of evaluating the predictive ability of these sediment assessment tools on a species- and endpoint-specific basis for various geographic areas.

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Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111248 - SW846 3550B										
LCS (7111248-BS1)										
Prepared: 15-Nov-07 Analyzed: 16-Nov-07										
Surrogate: 2-Fluorophenol	*1000*		µg/kg wet		*1670*		*60*	*15-110*		
Surrogate: Nitrobenzene-d5	*1030*		µg/kg wet		*1670*		*62*	*30-130*		
Surrogate: Phenol-d5	*773*		µg/kg wet		*1670*		*46*	*15-110*		
Surrogate: Terphenyl-dl4	*1180*		µg/kg wet		*1670*		*71*	*30-130*		
Surrogate: 2,4,6-Tribromophenol	*1220*		µg/kg wet		*1670*		*73*	*15-110*		
Duplicate (7111248-DUP1) **Source: SA70868-05**										
Prepared: 15-Nov-07 Analyzed: 17-Nov-07										
Acenaphthene	BRL	U	µg/kg dry	240		BRL				50
Acenaphthene	BRL	U	µg/kg dry	48.3		BRL				50
Acenaphthylene	BRL	U	µg/kg dry	240		BRL				50
Acenaphthylene	BRL	U	µg/kg dry	48.3		BRL				50
Aniline	BRL	U	µg/kg dry	240		BRL				50
Anthracene	BRL	U	µg/kg dry	240		BRL				50
Anthracene	BRL	U	µg/kg dry	48.3		BRL				50
Atrazine	BRL	U	µg/kg dry	240		BRL				50
Azobenzene/Diphenyldiazine	BRL	U	µg/kg dry	240		BRL				50
Benzidine	BRL	U	µg/kg dry	240		BRL				50
Benzo (a) anthracene	BRL	U	µg/kg dry	240		36.5				50
Benzo (a) anthracene	BRL	U	µg/kg dry	48.3		36.5				50
Benzo (a) pyrene	BRL	U	µg/kg dry	240		BRL				50
Benzo (a) pyrene	BRL	U	µg/kg dry	48.3		BRL				50
Benzo (b) fluoranthene	BRL	U	µg/kg dry	48.3		BRL				50
Benzo (b) fluoranthene	BRL	U	µg/kg dry	240		BRL				50
Benzo (g,h,i) perylene	BRL	U	µg/kg dry	240		BRL				50
Benzo (g,h,i) perylene	BRL	U	µg/kg dry	48.3		BRL				50
Benzo (k) fluoranthene	BRL	U	µg/kg dry	48.3		BRL				50
Benzo (k) fluoranthene	BRL	U	µg/kg dry	240		BRL				50
Benzoic acid	BRL	U	µg/kg dry	240		BRL				50
Benzyl alcohol	BRL	U	µg/kg dry	240		BRL				50
Bis(2-chloroethoxy)methane	BRL	U	µg/kg dry	240		BRL				50
Bis(2-chloroethyl)ether	BRL	U	µg/kg dry	240		BRL				50
Bis(2-chloroisopropyl)ether	BRL	U	µg/kg dry	240		BRL				50
Bis(2-ethylhexyl)phthalate	BRL	U	µg/kg dry	240		BRL				50
4-Bromophenyl phenyl ether	BRL	U	µg/kg dry	240		BRL				50
Butyl benzyl phthalate	BRL	U	µg/kg dry	240		BRL				50
Carbazole	BRL	U	µg/kg dry	240		BRL				50
4-Chloro-3-methylphenol	BRL	U	µg/kg dry	240		BRL				50
4-Chloroaniline	BRL	U	µg/kg dry	240		BRL				50
2-Chloronaphthalene	BRL	U	µg/kg dry	240		BRL				50
2-Chlorophenol	BRL	U	µg/kg dry	240		BRL				50
4-Chlorophenyl phenyl ether	BRL	U	µg/kg dry	240		BRL				50
Chrysene	BRL	U	µg/kg dry	240		33.5				50
Chrysene	BRL	U	µg/kg dry	48.3		33.5				50
Dibenzo (a,h) anthracene	BRL	U	µg/kg dry	48.3		BRL				50
Dibenzo (a,h) anthracene	BRL	U	µg/kg dry	240		BRL				50
Dibenzofuran	BRL	U	µg/kg dry	240		BRL				50
1,2-Dichlorobenzene	BRL	U	µg/kg dry	240		BRL				50
1,3-Dichlorobenzene	BRL	U	µg/kg dry	240		BRL				50
1,4-Dichlorobenzene	BRL	U	µg/kg dry	240		BRL				50
3,3´-Dichlorobenzidine	BRL	U	µg/kg dry	240		BRL				50

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111248 - SW846 3550B										
Duplicate (7111248-DUP1) **Source: SA70868-05**										
Prepared: 15-Nov-07 Analyzed: 17-Nov-07										
2,4-Dichlorophenol	BRL	U	µg/kg dry	240		BRL				50
Diethyl phthalate	BRL	U	µg/kg dry	240		BRL				50
Dimethyl phthalate	BRL	U	µg/kg dry	240		BRL				50
2,4-Dimethylphenol	BRL	U	µg/kg dry	240		BRL				50
Di-n-butyl phthalate	BRL	U	µg/kg dry	240		BRL				50
4,6-Dinitro-2-methylphenol	BRL	U	µg/kg dry	240		BRL				50
2,4-Dinitrophenol	BRL	U	µg/kg dry	240		BRL				50
2,4-Dinitrotoluene	BRL	U	µg/kg dry	240		BRL				50
2,6-Dinitrotoluene	BRL	U	µg/kg dry	240		BRL				50
Di-n-octyl phthalate	BRL	U	µg/kg dry	240		BRL				50
Fluoranthene	35.4	QM4, J	µg/kg dry	240		69.5			65	50
Fluoranthene	35.4	QM4, J	µg/kg dry	48.3		69.5			65	50
Fluorene	BRL	U	µg/kg dry	240		BRL				50
Fluorene	BRL	U	µg/kg dry	48.3		BRL				50
Hexachlorobenzene	BRL	U	µg/kg dry	240		BRL				50
Hexachlorobutadiene	BRL	U	µg/kg dry	240		BRL				50
Hexachlorocyclopentadiene	BRL	U	µg/kg dry	240		BRL				50
Hexachloroethane	BRL	U	µg/kg dry	240		BRL				50
Indeno (1,2,3-cd) pyrene	BRL	U	µg/kg dry	240		BRL				50
Indeno (1,2,3-cd) pyrene	BRL	U	µg/kg dry	48.3		BRL				50
Isophorone	BRL	U	µg/kg dry	240		BRL				50
1-Methylnaphthalene	BRL	U	µg/kg dry	48.3		BRL				50
1-Methylnaphthalene	BRL	U	µg/kg dry	240		BRL				50
2-Methylnaphthalene	BRL	U	µg/kg dry	48.3		BRL				50
2-Methylnaphthalene	BRL	U	µg/kg dry	240		BRL				50
2-Methylphenol	BRL	U	µg/kg dry	240		BRL				50
3,4-Methylphenol	BRL	U	µg/kg dry	240		BRL				50
Naphthalene	BRL	U	µg/kg dry	240		BRL				50
Naphthalene	BRL	U	µg/kg dry	48.3		BRL				50
2-Nitroaniline	BRL	U	µg/kg dry	240		BRL				50
3-Nitroaniline	BRL	U	µg/kg dry	240		BRL				50
4-Nitroaniline	BRL	U	µg/kg dry	959		BRL				50
Nitrobenzene	BRL	U	µg/kg dry	240		BRL				50
2-Nitrophenol	BRL	U	µg/kg dry	240		BRL				50
4-Nitrophenol	BRL	U	µg/kg dry	959		BRL				50
N-Nitrosodimethylamine	BRL	U	µg/kg dry	240		BRL				50
N-Nitrosodi-n-propylamine	BRL	U	µg/kg dry	240		BRL				50
N-Nitrosodiphenylamine	BRL	U	µg/kg dry	240		BRL				50
Pentachlorophenol	BRL	U	µg/kg dry	240		BRL				50
Phenanthrene	BRL	U	µg/kg dry	48.3		38.9				50
Phenanthrene	BRL	U	µg/kg dry	240		38.9				50
Phenol	BRL	U	µg/kg dry	240		BRL				50
Pyrene	33.4	QM4, J	µg/kg dry	48.3		60.3			57	50
Pyrene	33.4	QM4, J	µg/kg dry	240		60.3			57	50
Pyridine	BRL	U	µg/kg dry	240		BRL				50
1,2,4-Trichlorobenzene	BRL	U	µg/kg dry	240		BRL				50
2,4,5-Trichlorophenol	BRL	U	µg/kg dry	240		BRL				50

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111248 - SW846 3550B										
Duplicate (7111248-DUP1) **Source: SA70868-05**										
Prepared: 15-Nov-07 Analyzed: 17-Nov-07										
2,4,6-Trichlorophenol	BRL	U	µg/kg dry	240		BRL				50
Pentachloronitrobenzene	BRL	U	µg/kg dry	240		BRL				50
1,2,4,5-Tetrachlorobenzene	BRL	U	µg/kg dry	240		BRL				50
Surrogate: 2-Fluorobiphenyl	*1090*		µg/kg dry		*2420*		*45*	*30-130*		
Surrogate: Terphenyl-dl4	*1450*		µg/kg dry		*2420*		*60*	*30-130*		
Surrogate: 2-Fluorobiphenyl	*1090*		µg/kg dry		*2420*		*45*	*30-130*		
Surrogate: 2-Fluorophenol	*1660*		µg/kg dry		*2420*		*68*	*15-110*		
Surrogate: Nitrobenzene-d5	*1150*		µg/kg dry		*2420*		*47*	*30-130*		
Surrogate: Phenol-d5	*1060*		µg/kg dry		*2420*		*44*	*15-110*		
Surrogate: Terphenyl-dl4	*1450*		µg/kg dry		*2420*		*60*	*30-130*		
Surrogate: 2,4,6-Tribromophenol	*1470*		µg/kg dry		*2420*		*61*	*15-110*		
Matrix Spike (7111248-MS1) **Source: SA70868-05**										
Prepared: 15-Nov-07 Analyzed: 17-Nov-07										
Acenaphthene	1760		µg/kg dry	48.9	2450	BRL	72	40-140		
Acenaphthene	1760		µg/kg dry	243	2450	BRL	72	40-140		
Benzo (b) fluoranthene	BRL	U	µg/kg dry	243		BRL		40-140		
Benzo (k) fluoranthene	BRL	U	µg/kg dry	243		BRL		40-140		
4-Chloro-3-methylphenol	3330		µg/kg dry	243	4910	BRL	68	30-130		
2-Chlorophenol	3400		µg/kg dry	243	4910	BRL	69	30-130		
Chrysene	30.4	J	µg/kg dry	243		33.5		40-140		
1,4-Dichlorobenzene	1630		µg/kg dry	243	2450	BRL	66	40-140		
Indeno (1,2,3-cd) pyrene	BRL	U	µg/kg dry	243		BRL		40-140		
Naphthalene	BRL	U	µg/kg dry	243		BRL		40-140		
4-Nitrophenol	3580		µg/kg dry	972	4910	BRL	73	30-130		
N-Nitrosodi-n-propylamine	1360		µg/kg dry	243	2450	BRL	56	40-140		
Pentachlorophenol	3760		µg/kg dry	243	4910	BRL	77	30-130		
Phenol	3150		µg/kg dry	243	4910	BRL	64	30-130		
Pyrene	1920		µg/kg dry	48.9	2450	60.3	76	40-140		
Pyrene	1920		µg/kg dry	243	2450	60.3	76	40-140		
1,2,4-Trichlorobenzene	1610		µg/kg dry	243	2450	BRL	66	40-140		
Surrogate: 2-Fluorobiphenyl	*1700*		µg/kg dry		*2450*		*69*	*30-130*		
Surrogate: Terphenyl-dl4	*1850*		µg/kg dry		*2450*		*75*	*30-130*		
Surrogate: 2-Fluorobiphenyl	*1700*		µg/kg dry		*2450*		*69*	*30-130*		
Surrogate: 2-Fluorophenol	*1670*		µg/kg dry		*2450*		*68*	*15-110*		
Surrogate: Nitrobenzene-d5	*1380*		µg/kg dry		*2450*		*56*	*30-130*		
Surrogate: Phenol-d5	*1300*		µg/kg dry		*2450*		*53*	*15-110*		
Surrogate: Terphenyl-dl4	*1850*		µg/kg dry		*2450*		*75*	*30-130*		
Surrogate: 2,4,6-Tribromophenol	*1980*		µg/kg dry		*2450*		*81*	*15-110*		
Matrix Spike Dup (7111248-MSD1) **Source: SA70868-05**										
Prepared: 15-Nov-07 Analyzed: 17-Nov-07										
Acenaphthene	1630		µg/kg dry	238	2400	BRL	68	40-140	5	30
Acenaphthene	1630		µg/kg dry	47.9	2400	BRL	68	40-140	5	30
Benzo (b) fluoranthene	BRL	U	µg/kg dry	238		BRL		40-140		30
Benzo (k) fluoranthene	BRL	U	µg/kg dry	238		BRL		40-140		30
4-Chloro-3-methylphenol	3560		µg/kg dry	238	4800	BRL	74	30-130	9	30
2-Chlorophenol	3110		µg/kg dry	238	4800	BRL	65	30-130	7	30
Chrysene	42.7	J	µg/kg dry	238		33.5		40-140		30
1,4-Dichlorobenzene	1500		µg/kg dry	238	2400	BRL	62	40-140	6	30
Indeno (1,2,3-cd) pyrene	BRL	U	µg/kg dry	238		BRL		40-140		30
Naphthalene	BRL	U	µg/kg dry	238		BRL		40-140		30
4-Nitrophenol	3110		µg/kg dry	951	4800	BRL	65	30-130	12	30
N-Nitrosodi-n-propylamine	1580		µg/kg dry	238	2400	BRL	66	40-140	17	30

Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111248 - SW846 3550B										
Matrix Spike Dup (7111248-MSD1) **Source: SA70868-05**										
Prepared: 15-Nov-07 Analyzed: 17-Nov-07										
Pentachlorophenol	3360		µg/kg dry	238	4800	BRL	70	30-130	9	30
Phenol	2950		µg/kg dry	238	4800	BRL	61	30-130	4	30
Pyrene	1750		µg/kg dry	238	2400	60.3	71	40-140	7	30
Pyrene	1750		µg/kg dry	47.9	2400	60.3	71	40-140	7	30
1,2,4-Trichlorobenzene	1480		µg/kg dry	238	2400	BRL	62	40-140	6	30
Surrogate: 2-Fluorobiphenyl	*1530*		µg/kg dry		*2400*		*64*	*30-130*		
Surrogate: Terphenyl-dl4	*1630*		µg/kg dry		*2400*		*68*	*30-130*		
Surrogate: 2-Fluorobiphenyl	*1530*		µg/kg dry		*2400*		*64*	*30-130*		
Surrogate: 2-Fluorophenol	*1470*		µg/kg dry		*2400*		*61*	*15-110*		
Surrogate: Nitrobenzene-d5	*1720*		µg/kg dry		*2400*		*72*	*30-130*		
Surrogate: Phenol-d5	*1160*		µg/kg dry		*2400*		*48*	*15-110*		
Surrogate: Terphenyl-dl4	*1630*		µg/kg dry		*2400*		*68*	*30-130*		
Surrogate: 2,4,6-Tribromophenol	*1700*		µg/kg dry		*2400*		*71*	*15-110*		

Total Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111330 - EPA200/SW7000 Series										
Blank (7111330-BLK1)										
Prepared: 16-Nov-07 Analyzed: 19-Nov-07										
Mercury	BRL	U	mg/kg wet	0.0295						
Duplicate (7111330-DUP1) **Source: SA70868-11**										
Prepared: 16-Nov-07 Analyzed: 19-Nov-07										
Mercury	BRL	U	mg/kg dry	0.0333		BRL				20
Matrix Spike (7111330-MS1) **Source: SA70868-10**										
Prepared: 16-Nov-07 Analyzed: 19-Nov-07										
Mercury	0.414		mg/kg dry	0.0264	0.367	BRL	113	75-125		
Reference (7111330-SRM1)										
Prepared: 16-Nov-07 Analyzed: 19-Nov-07										
Mercury	1.30		mg/kg wet	0.0300	1.12		116	66-132.7		
Batch 7111615 - EPA200/SW7000 Series										
Blank (7111615-BLK1)										
Prepared: 20-Nov-07 Analyzed: 21-Nov-07										
Mercury	BRL	U	mg/kg wet	0.0291						
Duplicate (7111615-DUP1) **Source: SA70868-01**										
Prepared: 20-Nov-07 Analyzed: 21-Nov-07										
Mercury	1.14	QR6	mg/kg dry	0.0376		2.23			65	20
Matrix Spike (7111615-MS1) **Source: SA70868-02**										
Prepared: 20-Nov-07 Analyzed: 21-Nov-07										
Mercury	4.09		mg/kg dry	0.0430	1.19	3.06	86	75-125		
Matrix Spike Dup (7111615-MSD1) **Source: SA70868-02**										
Prepared: 20-Nov-07 Analyzed: 21-Nov-07										
Mercury	4.40		mg/kg dry	0.0424	1.18	3.06	114	75-125	7	20
Reference (7111615-SRM1)										
Prepared: 20-Nov-07 Analyzed: 21-Nov-07										
Mercury	1.18		mg/kg wet	0.0300	1.15		102	66-132.7		

Total Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111328 - EPA 200 Series										
Blank (7111328-BLK1)										
Prepared: 16-Nov-07 Analyzed: 20-Nov-07										
Vanadium	BRL	U	mg/kg wet	1.40						
Antimony	0.489	J	mg/kg wet	2.80						
Selenium	0.321	J	mg/kg wet	1.40						
Zinc	0.419	J	mg/kg wet	0.932						
Nickel	BRL	U	mg/kg wet	0.932						
Silver	BRL	U	mg/kg wet	1.40						
Thallium	BRL	U	mg/kg wet	2.80						
Manganese	BRL	U	mg/kg wet	0.932						
Lead	0.214	J	mg/kg wet	1.40						
Chromium	BRL	U	mg/kg wet	0.932						
Cadmium	0.0326	J	mg/kg wet	0.466						
Arsenic	BRL	U	mg/kg wet	1.40						
Beryllium	BRL	U	mg/kg wet	0.466						
Copper	BRL	U	mg/kg wet	0.932						
Barium	BRL	U	mg/kg wet	0.932						
Duplicate (7111328-DUP1) **Source: SA70868-11**										
Prepared: 16-Nov-07 Analyzed: 21-Nov-07										
Silver	BRL	U	mg/kg dry	1.48		BRL				35
Selenium	BRL	U	mg/kg dry	1.48		BRL				35
Zinc	10.9		mg/kg dry	0.985		11.9			8	35
Antimony	BRL	U	mg/kg dry	2.96		BRL				35
Vanadium	5.16		mg/kg dry	1.48		5.47			6	35
Thallium	1.40	J	mg/kg dry	2.96		1.56			11	35
Nickel	1.61		mg/kg dry	0.985		1.58			2	35
Manganese	171		mg/kg dry	0.985		168			2	35
Arsenic	BRL	U	mg/kg dry	1.48		BRL				35
Chromium	3.10		mg/kg dry	0.985		3.13			0.8	35
Lead	0.670	J	mg/kg dry	1.48		0.612			9	35
Beryllium	0.246	J	mg/kg dry	0.493		0.267			8	35
Copper	BRL	U	mg/kg dry	0.985		BRL				35
Cadmium	0.128	J	mg/kg dry	0.493		0.117			9	35
Barium	7.60		mg/kg dry	0.985		8.09			6	35
Matrix Spike (7111328-MS1) **Source: SA70868-09**										
Prepared: 16-Nov-07 Analyzed: 21-Nov-07										
Manganese	177		mg/kg dry	1.00	126	55.2	97	70-130		
Selenium	120		mg/kg dry	1.51	126	BRL	95	70-130		
Vanadium	124		mg/kg dry	1.51	126	4.69	95	70-130		
Zinc	127		mg/kg dry	1.00	126	7.67	95	70-130		
Silver	119		mg/kg dry	1.51	126	BRL	95	70-130		
Thallium	116		mg/kg dry	3.01	126	BRL	92	70-130		
Antimony	122		mg/kg dry	3.01	126	0.426	97	70-130		
Nickel	123		mg/kg dry	1.00	126	1.76	96	70-130		
Lead	119		mg/kg dry	1.51	126	1.45	94	70-130		
Chromium	124		mg/kg dry	1.00	126	3.75	96	70-130		
Arsenic	116		mg/kg dry	1.51	126	BRL	92	70-130		
Beryllium	119		mg/kg dry	0.502	126	0.160	94	70-130		
Copper	128		mg/kg dry	1.00	126	2.71	100	70-130		
Cadmium	121		mg/kg dry	0.502	126	0.124	96	70-130		
Barium	131		mg/kg dry	1.00	126	7.93	98	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111328 - EPA 200 Series										
Matrix Spike (7111328-MS1) **Source: SA70868-09**										
Prepared: 16-Nov-07 Analyzed: 21-Nov-07										
Matrix Spike (7111328-MS2) **Source: SA70868-10**										
Prepared: 16-Nov-07 Analyzed: 21-Nov-07										
Nickel	112		mg/kg dry	0.945	118	1.37	93	70-130		
Zinc	123		mg/kg dry	0.945	118	13.2	93	70-130		
Vanadium	116		mg/kg dry	1.42	118	8.05	92	70-130		
Selenium	108		mg/kg dry	1.42	118	BRL	92	70-130		
Thallium	107		mg/kg dry	2.84	118	1.40	89	70-130		
Antimony	109		mg/kg dry	2.84	118	BRL	92	70-130		
Silver	111		mg/kg dry	1.42	118	BRL	94	70-130		
Manganese	526		mg/kg dry	0.945	118	380	123	70-130		
Arsenic	105		mg/kg dry	1.42	118	BRL	89	70-130		
Lead	108		mg/kg dry	1.42	118	1.41	90	70-130		
Cadmium	111		mg/kg dry	0.473	118	0.197	93	70-130		
Copper	116		mg/kg dry	0.945	118	1.51	97	70-130		
Beryllium	109		mg/kg dry	0.473	118	0.192	92	70-130		
Chromium	114		mg/kg dry	0.945	118	4.27	93	70-130		
Barium	133		mg/kg dry	0.945	118	18.1	97	70-130		
Post Spike (7111328-PS1) **Source: SA70868-09**										
Prepared: 16-Nov-07 Analyzed: 21-Nov-07										
Vanadium	123		mg/kg dry	1.50	125	4.69	95	85-115		
Selenium	117		mg/kg dry	1.50	125	BRL	93	85-115		
Nickel	120		mg/kg dry	0.998	125	1.76	95	85-115		
Antimony	116		mg/kg dry	2.99	125	0.426	93	85-115		
Thallium	114		mg/kg dry	2.99	125	BRL	91	85-115		
Zinc	124		mg/kg dry	0.998	125	7.67	93	85-115		
Manganese	175		mg/kg dry	0.998	125	55.2	96	85-115		
Lead	116		mg/kg dry	1.50	125	1.45	92	85-115		
Copper	124		mg/kg dry	0.998	125	2.71	98	85-115		
Cadmium	119		mg/kg dry	0.499	125	0.124	95	85-115		
Arsenic	114		mg/kg dry	1.50	125	BRL	92	85-115		
Chromium	122		mg/kg dry	0.998	125	3.75	95	85-115		
Beryllium	117		mg/kg dry	0.499	125	0.160	94	85-115		
Barium	127		mg/kg dry	0.998	125	7.93	96	85-115		
Post Spike (7111328-PS2) **Source: SA70868-10**										
Prepared: 16-Nov-07 Analyzed: 21-Nov-07										
Antimony	108		mg/kg dry	2.81	117	BRL	92	85-115		
Selenium	108		mg/kg dry	1.41	117	BRL	92	85-115		
Nickel	111		mg/kg dry	0.938	117	1.37	93	85-115		
Manganese	502		mg/kg dry	0.938	117	380	104	85-115		
Vanadium	117		mg/kg dry	1.41	117	8.05	93	85-115		
Zinc	121		mg/kg dry	0.938	117	13.2	92	85-115		
Thallium	107		mg/kg dry	2.81	117	1.40	90	85-115		
Copper	114		mg/kg dry	0.938	117	1.51	96	85-115		
Arsenic	106		mg/kg dry	1.41	117	BRL	90	85-115		
Beryllium	107		mg/kg dry	0.469	117	0.192	92	85-115		
Chromium	113		mg/kg dry	0.938	117	4.27	93	85-115		
Cadmium	110		mg/kg dry	0.469	117	0.197	94	85-115		
Lead	109		mg/kg dry	1.41	117	1.41	91	85-115		

Total Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111328 - EPA 200 Series										
Post Spike (7111328-PS2) **Source: SA70868-10**										
Prepared: 16-Nov-07 Analyzed: 21-Nov-07										
Barium	130		mg/kg dry	0.938	117	18.1	95	85-115		
Reference (7111328-SRM1)										
Prepared: 16-Nov-07 Analyzed: 21-Nov-07										
Zinc	110		mg/kg wet	1.00	118		94	79.1-120.9		
Vanadium	53.2		mg/kg wet	1.50	54.2		98	77.1-122.6		
Manganese	153		mg/kg wet	1.00	154		99	79.1-120.9		
Thallium	64.6		mg/kg wet	3.00	67.0		96	77.1-122.9		
Nickel	58.6		mg/kg wet	1.00	59.3		99	82.6-117.2		
Antimony	110		mg/kg wet	3.00	54.7		200	0-211.2		
Silver	41.6		mg/kg wet	1.50	41.7		100	66.3-133.6		
Selenium	78.7		mg/kg wet	1.50	79.3		99	77.4-122.6		
Cadmium	31.6		mg/kg wet	0.500	32.2		98	82.1-117.9		
Beryllium	30.7		mg/kg wet	0.500	31.4		98	83-117		
Lead	44.4		mg/kg wet	1.50	45.5		98	81.8-118.1		
Chromium	48.5		mg/kg wet	1.00	50.1		97	78.9-120.5		
Copper	43.1		mg/kg wet	1.00	44.5		97	82.4-117.2		
Arsenic	43.2		mg/kg wet	1.50	45.4		95	80.9-119.4		
Barium	218		mg/kg wet	1.00	218		100	82.7-117.3		

SPLP Metals by EPA 1312 & 6000/7000 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111473 - SW846 3010A										
Blank (7111473-BLK1)										
Prepared: 15-Nov-07 Analyzed: 17-Nov-07										
Lead	BRL	U	mg/l	0.0150						
LCS (7111473-BS1)										
Prepared: 15-Nov-07 Analyzed: 17-Nov-07										
Lead	2.17		mg/l	0.0150	2.50		87	82.2-105		
LCS Dup (7111473-BSD1)										
Prepared: 15-Nov-07 Analyzed: 17-Nov-07										
Lead	2.24		mg/l	0.0150	2.50		90	82.2-105	3	20
Duplicate (7111473-DUP1) Source: SA70825-12										
Prepared: 15-Nov-07 Analyzed: 18-Nov-07										
Lead	BRL	U	mg/l	0.0150		0.0064				20
Matrix Spike (7111473-MS1) Source: SA70825-02										
Prepared: 15-Nov-07 Analyzed: 17-Nov-07										
Lead	2.22		mg/l	0.0150	2.50	BRL	89	81.9-105		
Matrix Spike (7111473-MS2) Source: SA70825-09										
Prepared: 15-Nov-07 Analyzed: 17-Nov-07										
Lead	2.30		mg/l	0.0150	2.50	0.0053	92	81.9-105		
Matrix Spike (7111473-MS3) Source: SA70825-12										
Prepared: 15-Nov-07 Analyzed: 18-Nov-07										
Lead	2.26		mg/l	0.0150	2.50	0.0064	90	81.9-105		
Matrix Spike Dup (7111473-MSD1) Source: SA70825-02										
Prepared: 15-Nov-07 Analyzed: 17-Nov-07										
Lead	2.22		mg/l	0.0150	2.50	BRL	89	81.9-105	0.2	35
Matrix Spike Dup (7111473-MSD2) Source: SA70825-09										
Prepared: 15-Nov-07 Analyzed: 17-Nov-07										
Lead	2.21		mg/l	0.0150	2.50	0.0053	88	81.9-105	4	35
Matrix Spike Dup (7111473-MSD3) Source: SA70825-12										
Prepared: 15-Nov-07 Analyzed: 18-Nov-07										
Lead	2.16		mg/l	0.0150	2.50	0.0064	86	81.9-105	5	35
Post Spike (7111473-PS1) Source: SA70825-02										
Prepared: 15-Nov-07 Analyzed: 17-Nov-07										
Lead	2.22		mg/l	0.0150	2.50	BRL	89	85.9-104		
Post Spike (7111473-PS2) Source: SA70825-09										
Prepared: 15-Nov-07 Analyzed: 17-Nov-07										
Lead	2.21		mg/l	0.0150	2.50	0.0053	88	85.9-104		
Post Spike (7111473-PS3) Source: SA70825-12										
Prepared: 15-Nov-07 Analyzed: 18-Nov-07										
Lead	2.23		mg/l	0.0150	2.50	0.0064	89	85.9-104		

General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111396 - General Preparation										
Duplicate (7111396-DUP1) Source: SA70839-01										
Prepared & Analyzed: 16-Nov-07										
% Solids	91.5		%			93.9			3	20
Batch 7111397 - General Preparation										
Duplicate (7111397-DUP1) Source: SA70868-08										
Prepared & Analyzed: 16-Nov-07										
% Solids	67.7		%			65.3			4	20

Notes and Definitions

J	Detected above the Method Detection Limit but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
QC1	Analyte out of acceptance range.
QC2	Analyte out of acceptance range in QC spike but no reportable concentration present in sample
QM4	Visual evaluation of the sample indicates the RPD is above the control limit due to a non-homogeneous sample matrix.
QM7	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
QR6	The RPD exceeded the QC control limits; however precision is demonstrated with acceptable RPD values for MS/MSD.
U	Analyte included in the analysis, but not detected
BRL	Below Reporting Limit - Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
NR	Not Reported
RPD	Relative Percent Difference

A plus sign (+) in the Method Reference column indicates the method is not accredited by NELAC

Laboratory Control Sample (LCS): A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix

Matrix Spike: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

Surrogate: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

Validated by:
Hanibal C. Tayeh, Ph.D.
Nicole Brown

SA 70868: EM

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 2

Special Handling:
- ☒ Standard TAT - 7 to 10 business days
- ☐ Rush TAT - Date Needed: _____
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: Jacques Whitford Co
24 Albion Rd. Suite 220
Lincoln, RI 02865

Project Mgr.: Joe Unsworth

Invoice To: Same

P.O. No.: 1004825.04/100 RQN: _____

Project No.: 1004825.04/100
Site Name: Potter Hill Mill
Location: Westerly State: RI
Sampler(s): JTU/RLS

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid
7=CH_3OH 8= $NaHSO_4$ 9=_____ 10=_____

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1=_____ X2=_____ X3=_____

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Preservative	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analyses: VOCs 8260	SVOCs 8270	16 Metals*	PAHs-8270	QA Reporting Notes:
70868-01	Sed 1	11/8/07		G	SO	7/-	1	1			X	X	X		* 16-Metals: Antimony,
02	Sed 2	11/8/07		G	SO	7/-	1	1			X	X	X		Arsenic, Barium, Beryllium,
03	Sed 3	11/8/07		G	SO	7/-	1	1			X	X	X		Cadmium, Chromium, Copper,
04	Sed 4	11/8/07		G	SO	7/-	1	1			X	X	X		Lead, Manganese, Mercury,
05	Sed 5	11/8/07		G	SO	7/-	1	1			X	X	X		Nickel, Selenium, Silver,
06	Sed 6	11/8/07		G	SO	7/-	1	1			X	X	X		Thallium, Vanadium, Zinc
07	Sed 7	11/8/07		G	SO	7/-	1	1			X	X	X		
08	Sed 8	11/8/07		G	SO	7/-	1	1			X	X	X		
09	SS-27	11/8/07		G	SO	7/-	1	1			X		X	X	
10	SS-28	11/8/07		G	SO	7/-	1	1			X		X	X	

☐ Fax results when available to (____) _____
☒ E-mail to: junsworth@jacquesWhitford.com
EDD Format _____

Condition upon receipt: ☒ Iced ☐ Ambient ☒ °C 5.8 Rec

Relinquished by:	Received by:	Date:	Time:
Joe Unsworth	Bill Hennessy	11/9/07	1225
Bill Hennessy	Joe Unsworth	11/9/07	1555

Ref 32.2°F

SA 70868 Em

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 2 of 2

Special Handling:
☒ Standard TAT - 7 to 10 business days
☐ Rush TAT - Date Needed:
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: Jacques Whitford Co
24 Albion Rd, Suite 220
Lincoln, RI 02865

Project Mgr.: Joe Unsworth

Invoice To: Same

P.O. No.: 1009825.04/100 RQN:

Project No.: 1009825.04/100
Site Name: Potter Hill Mill
Location: Westerly State: RI
Sampler(s): JTU/RLS

1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid
7=CH_3OH 8=$NaHSO_4$ 9= 10=

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW=Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

QA Reporting Notes: (check if needed)
☐ Provide MA DEP MCP CAM Report
☐ Provide CT DPH RCP Report
QA/QC Reporting Level
☐ Standard ☐ No QC
☐ Other
State specific reporting standards:

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Preservative	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	VOCs 8260	PAHs 8270	16 Metals	Priority Poll 13 Metals	SPLP Lead				QA Reporting Notes
70868-11	SS-29	11/8/07		G	SO	7/-	1	1			Y	Y	X						* 16 Metals - same as page 1 of 1
12	SS-30	11/8/07		G	SO	7/-	1	1			Y	Y		X					
13	SS-31	11/8/07		G	SO	7/-	1	1			Y	Y		Y					
14	SS-32	11/8/07		G	SO	7/-		1							X				
15	SS-33	11/8/07		G	SO	7/-		1							Y				

☐ Fax results when available to ( )
☒ E-mail to junswort@jacqueswhitford.com
EDD Format

Relinquished by:	Received by:	Date:	Time:
[signature]	Bill Hastings	11/9/07	1225
Bill Hastings	[signature]	11/9/07	1555

Condition upon receipt: ☐ Iced ☐ Ambient ☒ °C 5.8 Ref

Ref 32.7

Report Date:
13-Dec-07 14:09

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

Jacques Whitford Company, Inc.
24 Albion Rd, Suite 220
Lincoln, RI 02865
Attn: Joe Unsworth

Project: Potter Hill Mill - Westerly, RI
Project 1009825.04/100

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SA71936-01	Sed-9	Soil	05-Dec-07 00:00	06-Dec-07 14:23
SA71936-02	Sed-10	Soil	05-Dec-07 00:00	06-Dec-07 14:23

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.
All applicable NELAC requirements have been met
Please note that this report contains 8 pages of analytical data plus Chain of Custody document(s).
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Connecticut # PH-0777
Florida # E87600/E87936
Maine # MA138
New Hampshire # 2538/2972
New Jersey # MA011/MA012
New York # 11393/11840
Rhode Island # 98
USDA # S-51435
Vermont # VT-11393

ACCREDITED IN ACCORDANCE WITH nelac

Authorized by:

Hanibal C. Tayeh, Ph.D.
President/Laboratory Director

Technical Reviewer's Initial:

Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Spectrum is currently accredited for the specific method or analyte indicated. Please refer to our "Quality" web page at www.spectrum-analytical.com for a full listing of our current certifications and fields of accreditation. States in which Spectrum Analytical, Inc. holds NELAC certification are New York, New Hampshire, New Jersey and Florida. All analytical work for Volatile Organic and Air analysis are transferred to and conducted at our 830 Silver Street location (NH-2972, NY-11840, FL-E87936 and NJ-MA012).

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed-9 SA71936-01	1009825.04/100	Soil	05-Dec-07 00:00	06-Dec-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3550B											
83-32-9	Acenaphthene	194		µg/kg dry	152	1	SW846 8270C	11-Dec-07	12-Dec-07	7120633	M.B
208-96-8	Acenaphthylene	BRL		µg/kg dry	152	1	"	"	"	"	"
120-12-7	Anthracene	198		µg/kg dry	152	1	"	"	"	"	"
56-55-3	Benzo (a) anthracene	458		µg/kg dry	152	1	"	"	"	"	"
50-32-8	Benzo (a) pyrene	432		µg/kg dry	152	1	"	"	"	"	"
205-99-2	Benzo (b) fluoranthene	365		µg/kg dry	152	1	"	"	"	"	"
191-24-2	Benzo (g,h,i) perylene	240		µg/kg dry	152	1	"	"	"	"	"
207-08-9	Benzo (k) fluoranthene	385		µg/kg dry	152	1	"	"	"	"	"
218-01-9	Chrysene	473		µg/kg dry	152	1	"	"	"	"	"
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/kg dry	152	1	"	"	"	"	"
206-44-0	Fluoranthene	1,250		µg/kg dry	152	1	"	"	"	"	"
86-73-7	Fluorene	BRL		µg/kg dry	152	1	"	"	"	"	"
193-39-5	Indeno (1,2,3-cd) pyrene	293		µg/kg dry	152	1	"	"	"	"	"
90-12-0	1-Methylnaphthalene	BRL		µg/kg dry	152	1	"	"	"	"	"
91-57-6	2-Methylnaphthalene	BRL		µg/kg dry	152	1	"	"	"	"	"
91-20-3	Naphthalene	BRL		µg/kg dry	152	1	"	"	"	"	"
85-01-8	Phenanthrene	943		µg/kg dry	152	1	"	"	"	"	"
129-00-0	Pyrene	934		µg/kg dry	152	1	"	"	"	"	"
Surrogate recoveries:											
321-60-8	*2-Fluorobiphenyl*	*75*		*30-130 %*			"	"	"	"	"
1718-51-0	*Terphenyl-dl4*	*76*		*30-130 %*			"	"	"	"	"
Total Metals by EPA 6000/7000 Series Methods											
7439-97-6	Mercury	0.0602		mg/kg dry	0.0338	1	SW846 7471A	11-Dec-07	11-Dec-07	7120649	CRM
Total Metals by EPA 200 Series Methods											
7440-22-4	Silver	BRL		mg/kg dry	1.63	1	EPA 200.7	10-Dec-07	12-Dec-07	7120600	HB
7440-38-2	Arsenic	3.72		mg/kg dry	1.63	1	"	"	"	"	"
7440-39-3	Barium	27.1		mg/kg dry	1.08	1	"	"	12-Dec-07	"	TBG
7440-43-9	Cadmium	BRL		mg/kg dry	0.542	1	"	"	"	"	"
7440-47-3	Chromium	30.2		mg/kg dry	1.08	1	"	"	"	"	"
7439-92-1	Lead	26.2		mg/kg dry	1.63	1	"	"	"	"	"
7782-49-2	Selenium	2.38		mg/kg dry	1.63	1	"	"	"	"	"
General Chemistry Parameters											
	% Solids	86.3		%		1	SM2540 G Mod.	12-Dec-07	12-Dec-07	7120825	DBM

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed-10 SA71936-02	1009825.04/100	Soil	05-Dec-07 00:00	06-Dec-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3550B											
83-32-9	Acenaphthene	823		µg/kg dry	158	1	SW846 8270C	11-Dec-07	12-Dec-07	7120633	M.B
208-96-8	Acenaphthylene	187		µg/kg dry	158	1	"	"	"	"	"
120-12-7	Anthracene	1,210		µg/kg dry	158	1	"	"	"	"	"
56-55-3	Benzo (a) anthracene	3,320		µg/kg dry	158	1	"	"	"	"	"
50-32-8	Benzo (a) pyrene	2,890		µg/kg dry	158	1	"	"	"	"	"
205-99-2	Benzo (b) fluoranthene	3,000		µg/kg dry	158	1	"	"	"	"	"
191-24-2	Benzo (g,h,i) perylene	1,630		µg/kg dry	158	1	"	"	"	"	"
207-08-9	Benzo (k) fluoranthene	1,730		µg/kg dry	158	1	"	"	"	"	"
218-01-9	Chrysene	2,910		µg/kg dry	158	1	"	"	"	"	"
53-70-3	Dibenzo (a,h) anthracene	389		µg/kg dry	158	1	"	"	"	"	"
206-44-0	Fluoranthene	7,070		µg/kg dry	158	1	"	"	"	"	"
86-73-7	Fluorene	731		µg/kg dry	158	1	"	"	"	"	"
193-39-5	Indeno (1,2,3-cd) pyrene	1,950		µg/kg dry	158	1	"	"	"	"	"
90-12-0	1-Methylnaphthalene	178		µg/kg dry	158	1	"	"	"	"	"
91-57-6	2-Methylnaphthalene	214		µg/kg dry	158	1	"	"	"	"	"
91-20-3	Naphthalene	468		µg/kg dry	158	1	"	"	"	"	"
85-01-8	Phenanthrene	5,880		µg/kg dry	158	1	"	"	"	"	"
129-00-0	Pyrene	5,480		µg/kg dry	158	1	"	"	"	"	"
Surrogate recoveries:											
321-60-8	*2-Fluorobiphenyl*	*80*		*30-130 %*			"	"	"	"	"
1718-51-0	*Terphenyl-dl4*	*81*		*30-130 %*			"	"	"	"	"
Total Metals by EPA 6000/7000 Series Methods											
7439-97-6	Mercury	0.245		mg/kg dry	0.0360	1	SW846 7471A	11-Dec-07	11-Dec-07	7120649	CRM
Total Metals by EPA 200 Series Methods											
7440-22-4	Silver	BRL		mg/kg dry	1.64	1	EPA 200.7	10-Dec-07	12-Dec-07	7120600	HB
7440-38-2	Arsenic	1.72		mg/kg dry	1.64	1	"	"	"	"	"
7440-39-3	Barium	22.9		mg/kg dry	1.09	1	"	"	12-Dec-07	"	TBG
7440-43-9	Cadmium	BRL		mg/kg dry	0.545	1	"	"	"	"	"
7440-47-3	Chromium	27.4		mg/kg dry	1.09	1	"	"	"	"	"
7439-92-1	Lead	116		mg/kg dry	1.64	1	"	"	"	"	"
7782-49-2	Selenium	2.89		mg/kg dry	1.64	1	"	"	"	"	"
General Chemistry Parameters											
	% Solids	82.8		%		1	SM2540 G Mod.	12-Dec-07	12-Dec-07	7120825	DBM

Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7120633 - SW846 3550B										
Blank (7120633-BLK1)										
Prepared & Analyzed: 11-Dec-07										
Acenaphthene	BRL		µg/kg wet	33.2						
Acenaphthylene	BRL		µg/kg wet	33.2						
Anthracene	BRL		µg/kg wet	33.2						
Benzo (a) anthracene	BRL		µg/kg wet	33.2						
Benzo (a) pyrene	BRL		µg/kg wet	33.2						
Benzo (b) fluoranthene	BRL		µg/kg wet	33.2						
Benzo (g,h,i) perylene	BRL		µg/kg wet	33.2						
Benzo (k) fluoranthene	BRL		µg/kg wet	33.2						
Chrysene	BRL		µg/kg wet	33.2						
Dibenzo (a,h) anthracene	BRL		µg/kg wet	33.2						
Fluoranthene	BRL		µg/kg wet	33.2						
Fluorene	BRL		µg/kg wet	33.2						
Indeno (1,2,3-cd) pyrene	BRL		µg/kg wet	33.2						
1-Methylnaphthalene	BRL		µg/kg wet	33.2						
2-Methylnaphthalene	BRL		µg/kg wet	33.2						
Naphthalene	BRL		µg/kg wet	33.2						
Phenanthrene	BRL		µg/kg wet	33.2						
Pyrene	BRL		µg/kg wet	33.2						
Surrogate: 2-Fluorobiphenyl	*1140*		µg/kg wet		*1670*		*69*	*30-130*		
Surrogate: Terphenyl-dl4	*1130*		µg/kg wet		*1670*		*68*	*30-130*		
LCS (7120633-BS1)										
Prepared & Analyzed: 11-Dec-07										
Acenaphthene	1130		µg/kg wet	33.2	1670		68	40-140		
Acenaphthylene	1080		µg/kg wet	33.2	1670		65	40-140		
Anthracene	1220		µg/kg wet	33.2	1670		73	40-140		
Benzo (a) anthracene	1200		µg/kg wet	33.2	1670		72	40-140		
Benzo (a) pyrene	1200		µg/kg wet	33.2	1670		72	40-140		
Benzo (b) fluoranthene	1120		µg/kg wet	33.2	1670		67	40-140		
Benzo (g,h,i) perylene	1120		µg/kg wet	33.2	1670		67	40-140		
Benzo (k) fluoranthene	1180		µg/kg wet	33.2	1670		71	40-140		
Chrysene	1190		µg/kg wet	33.2	1670		71	40-140		
Dibenzo (a,h) anthracene	1110		µg/kg wet	33.2	1670		67	40-140		
Fluoranthene	1210		µg/kg wet	33.2	1670		73	40-140		
Fluorene	1140		µg/kg wet	33.2	1670		68	40-140		
Indeno (1,2,3-cd) pyrene	1080		µg/kg wet	33.2	1670		65	40-140		
1-Methylnaphthalene	1100		µg/kg wet	33.2	1670		66	40-140		
2-Methylnaphthalene	1140		µg/kg wet	33.2	1670		69	40-140		
Naphthalene	1150		µg/kg wet	33.2	1670		69	40-140		
Phenanthrene	1180		µg/kg wet	33.2	1670		71	40-140		
Pyrene	1230		µg/kg wet	33.2	1670		74	40-140		
Surrogate: 2-Fluorobiphenyl	*1020*		µg/kg wet		*1670*		*61*	*30-130*		
Surrogate: Terphenyl-dl4	*1150*		µg/kg wet		*1670*		*69*	*30-130*		
Duplicate (7120633-DUP1)	**Source: SA72039-02**									
Prepared & Analyzed: 11-Dec-07										
Acenaphthene	BRL		µg/kg dry	36.5		BRL				50
Acenaphthylene	BRL		µg/kg dry	36.5		BRL				50
Anthracene	BRL		µg/kg dry	36.5		BRL				50
Benzo (a) anthracene	BRL		µg/kg dry	36.5		BRL				50
Benzo (a) pyrene	BRL		µg/kg dry	36.5		BRL				50

Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7120633 - SW846 3550B										
Duplicate (7120633-DUP1)	**Source: SA72039-02**									
Prepared & Analyzed: 11-Dec-07										
Benzo (b) fluoranthene	BRL		µg/kg dry	36.5		BRL				50
Benzo (g,h,i) perylene	BRL		µg/kg dry	36.5		BRL				50
Benzo (k) fluoranthene	BRL		µg/kg dry	36.5		BRL				50
Chrysene	BRL		µg/kg dry	36.5		BRL				50
Dibenzo (a,h) anthracene	BRL		µg/kg dry	36.5		BRL				50
Fluoranthene	BRL		µg/kg dry	36.5		BRL				50
Fluorene	BRL		µg/kg dry	36.5		BRL				50
Indeno (1,2,3-cd) pyrene	BRL		µg/kg dry	36.5		BRL				50
1-Methylnaphthalene	BRL		µg/kg dry	36.5		BRL				50
2-Methylnaphthalene	BRL		µg/kg dry	36.5		BRL				50
Naphthalene	BRL		µg/kg dry	36.5		BRL				50
Phenanthrene	BRL		µg/kg dry	36.5		BRL				50
Pyrene	BRL		µg/kg dry	36.5		BRL				50
Surrogate: 2-Fluorobiphenyl	*1100*		µg/kg dry		*1830*		*60*	*30-130*		
Surrogate: Terphenyl-dl4	*1070*		µg/kg dry		*1830*		*59*	*30-130*		
Matrix Spike (7120633-MS1)	**Source: SA72039-02**									
Prepared & Analyzed: 11-Dec-07										
Acenaphthene	1090		µg/kg dry	36.5	1830	BRL	59	40-140		
Pyrene	1150		µg/kg dry	36.5	1830	BRL	63	40-140		
Surrogate: 2-Fluorobiphenyl	*1030*		µg/kg dry		*1830*		*57*	*30-130*		
Surrogate: Terphenyl-dl4	*1050*		µg/kg dry		*1830*		*57*	*30-130*		
Matrix Spike Dup (7120633-MSD1)	**Source: SA72039-02**									
Prepared & Analyzed: 11-Dec-07										
Acenaphthene	1080		µg/kg dry	37.2	1860	BRL	58	40-140	3	30
Pyrene	1160		µg/kg dry	37.2	1860	BRL	63	40-140	0.4	30
Surrogate: 2-Fluorobiphenyl	*973*		µg/kg dry		*1860*		*52*	*30-130*		
Surrogate: Terphenyl-dl4	*1070*		µg/kg dry		*1860*		*57*	*30-130*		

Total Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7120649 - EPA200/SW7000 Series										
Blank (7120649-BLK1)										
Prepared & Analyzed: 11-Dec-07										
Mercury	BRL		mg/kg wet	0.0299						
Duplicate (7120649-DUP1)	**Source: SA71908-01**									
Prepared & Analyzed: 11-Dec-07										
Mercury	BRL		mg/kg dry	0.0324		BRL				20
Matrix Spike (7120649-MS1)	**Source: SA71936-01**									
Prepared & Analyzed: 11-Dec-07										
Mercury	0.599		mg/kg dry	0.0346	0.480	0.0602	112	75-125		
Post Spike (7120649-PS1)	**Source: SA71936-01**									
Prepared & Analyzed: 11-Dec-07										
Mercury	0.598		mg/kg dry	0.0342	0.475	0.0602	113	85-115		
Reference (7120649-SRM1)										
Prepared & Analyzed: 11-Dec-07										
Mercury	1.70		mg/kg wet	0.0300	1.46		116	66-132.6		

Total Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7120600 - EPA 200 Series										
Blank (7120600-BLK1)										
Prepared: 10-Dec-07 Analyzed: 12-Dec-07										
Silver	BRL		mg/kg wet	1.45						
Selenium	BRL		mg/kg wet	1.45						
Cadmium	BRL		mg/kg wet	0.482						
Chromium	BRL		mg/kg wet	0.964						
Lead	BRL		mg/kg wet	1.45						
Arsenic	BRL		mg/kg wet	1.45						
Barium	BRL		mg/kg wet	0.964						
Duplicate (7120600-DUP1) Source: SA71908-02										
Prepared: 10-Dec-07 Analyzed: 12-Dec-07										
Silver	BRL		mg/kg dry	1.53		BRL				35
Selenium	BRL		mg/kg dry	1.53		BRL				35
Arsenic	1.35	J	mg/kg dry	1.53		1.35			0.2	35
Cadmium	BRL		mg/kg dry	0.509		0.0977				35
Chromium	17.4		mg/kg dry	1.02		16.2			7	35
Lead	10.7		mg/kg dry	1.53		8.49			23	35
Barium	69.4		mg/kg dry	1.02		61.2			13	35
Matrix Spike (7120600-MS1) Source: SA71908-01										
Prepared: 10-Dec-07 Analyzed: 12-Dec-07										
Selenium	123		mg/kg dry	1.54	128	BRL	96	70-130		
Silver	124		mg/kg dry	1.54	128	BRL	97	70-130		
Arsenic	117		mg/kg dry	1.54	128	0.769	91	70-130		
Chromium	125		mg/kg dry	1.02	128	15.2	86	70-130		
Lead	121		mg/kg dry	1.54	128	1.07	94	70-130		
Cadmium	112		mg/kg dry	0.512	128	BRL	87	70-130		
Barium	181		mg/kg dry	1.02	128	60.4	94	70-130		
Post Spike (7120600-PS1) Source: SA71908-01										
Prepared: 10-Dec-07 Analyzed: 12-Dec-07										
Selenium	114		mg/kg dry	1.47	123	BRL	93	85-115		
Arsenic	109		mg/kg dry	1.47	123	0.769	88	85-115		
Cadmium	106		mg/kg dry	0.491	123	BRL	86	85-115		
Chromium	120		mg/kg dry	0.982	123	15.2	85	85-115		
Lead	112		mg/kg dry	1.47	123	1.07	90	85-115		
Barium	168		mg/kg dry	0.982	123	60.4	88	85-115		
Reference (7120600-SRM1)										
Prepared: 10-Dec-07 Analyzed: 12-Dec-07										
Silver	56.6		mg/kg wet	1.50	49.3		115	66.3-133.3		
Selenium	80.6		mg/kg wet	1.50	70.3		115	77.5-122.5		
Arsenic	86.2		mg/kg wet	1.50	77.0		112	76.8-123.2		
Cadmium	51.7		mg/kg wet	0.500	48.6		106	80.1-119.6		
Lead	71.9		mg/kg wet	1.50	61.2		118	78.4-120.1		
Chromium	64.6		mg/kg wet	1.00	61.2		106	80.5-119.2		
Barium	154		mg/kg wet	1.00	139		111	82.1-118		

General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7120825 - General Preparation										
Duplicate (7120825-DUP1) Source: SA71810-01										
Prepared & Analyzed: 12-Dec-07										
% Solids	90.2		%			90.2			0.04	20

Notes and Definitions

BRL	Below Reporting Limit - Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
NR	Not Reported
RPD	Relative Percent Difference
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration(CLP J-Flag).

A plus sign (+) in the Method Reference column indicates the method is not accredited by NELAC

Laboratory Control Sample (LCS): A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix

Matrix Spike: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure The method blank is used to document contamination resulting from the analytical process

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction Sample RDLs are highly matrix-dependent.

Surrogate: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

Validated by:
Hanibal C. Tayeh, Ph.D.
Nicole Brown

SA71936

SPECTRUM ANALYTICAL, INC.
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HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
- ☐ Standard TAT - 7 to 10 business days
- ☒ Rush TAT - Date Needed: 12-13-07
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: Jacques Whitford Co
24 Albion Rd. Suite 220
Lincoln, RI 02863

Project Mgr.: Joe Unsworth

Invoice To: Same

P.O. No.: 109625.04/100 RQN:

Project No.: 109625.04/100
Site Name: Potter Hill M.V.
Location: Westerly State: RI
Sampler(s): JTU

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid
7=CH_3OH 8= $NaHSO_4$ 9=_____ 10=_____

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1=_____ X2=_____ X3=_____

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Preservative	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Containers:	Analyses: RCRA 8 Metals	Analyses: PAHs	Analyses:	Analyses:	Analyses:	Analyses:	Analyses:	Analyses:
71936-01	Sed-9	12-5-07		G	SO	-		1				X	X						
↓ 02	Sed-10	12-5-07		G	SO	-		1				X	X						

QA Reporting Notes: (check if needed)
- ☐ Provide MA DEP MCP CAM Report
- ☐ Provide CT DPH RCP Report

QA/QC Reporting Level
- ☒ Standard ☐ No QC
- ☐ Other _____

State specific reporting standards: _____

- ☐ Fax results when available to (_____) _____
- ☒ E-mail to junswort@jacqueswhitford.com
- EDD Format _____

Condition upon receipt: ☐ Iced ☐ Ambient ☐ °C 0.8

Relinquished by:	Received by:	Date:	Time:
Joseph Maynard	M Scott	12/6/07	1230
M Scott	M Daniels	12/6/07	1423

Report Date:
19-Dec-07 16:32

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

Jacques Whitford Company, Inc.
24 Albion Rd, Suite 220
Lincoln, RI 02865
Attn: Joe Unsworth

Project: Potter Hill Mill - Westerly, RI
Project 1009825.04/100

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SA72400-01	Sed-11	Soil	05-Dec-07 00:00	17-Dec-07 16:44

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.
All applicable NELAC requirements have been met
Please note that this report contains 7 pages of analytical data plus Chain of Custody document(s).
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Massachusetts Certification # M-MA138/MA1110
Connecticut # PH-0777
Florida # E87600/E87936
Maine # MA138
New Hampshire # 2538/2972
New Jersey # MA011/MA012
New York # 11393/11840
Rhode Island # 98
USDA # S-51435
Vermont # VT-11393

Authorized by:

Hanibal C. Tayeh, Ph.D.
President/Laboratory Director

Technical Reviewer's Initial:

Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Spectrum is currently accredited for the specific method or analyte indicated. Please refer to our "Quality" web page at www.spectrum-analytical.com for a full listing of our current certifications and fields of accreditation. States in which Spectrum Analytical, Inc. holds NELAC certification are New York, New Hampshire, New Jersey and Florida. All analytical work for Volatile Organic and Air analysis are transferred to and conducted at our 830 Silver Street location (NH-2972, NY-11840, FL-E87936 and NJ-MA012).

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed-11 SA72400-01	1009825.04/100	Soil	05-Dec-07 00:00	17-Dec-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3550B											
83-32-9	Acenaphthene	BRL		µg/kg dry	168	1	SW846 8270C	18-Dec-07	19-Dec-07	7121206	M.B
208-96-8	Acenaphthylene	BRL		µg/kg dry	168	1	"	"	"	"	"
120-12-7	Anthracene	BRL		µg/kg dry	168	1	"	"	"	"	"
56-55-3	Benzo (a) anthracene	BRL		µg/kg dry	168	1	"	"	"	"	"
50-32-8	Benzo (a) pyrene	BRL		µg/kg dry	168	1	"	"	"	"	"
205-99-2	Benzo (b) fluoranthene	BRL		µg/kg dry	168	1	"	"	"	"	"
191-24-2	Benzo (g,h,i) perylene	BRL		µg/kg dry	168	1	"	"	"	"	"
207-08-9	Benzo (k) fluoranthene	BRL		µg/kg dry	168	1	"	"	"	"	"
218-01-9	Chrysene	BRL		µg/kg dry	168	1	"	"	"	"	"
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/kg dry	168	1	"	"	"	"	"
206-44-0	Fluoranthene	BRL		µg/kg dry	168	1	"	"	"	"	"
86-73-7	Fluorene	BRL		µg/kg dry	168	1	"	"	"	"	"
193-39-5	Indeno (1,2,3-cd) pyrene	BRL		µg/kg dry	168	1	"	"	"	"	"
90-12-0	1-Methylnaphthalene	BRL		µg/kg dry	168	1	"	"	"	"	"
91-57-6	2-Methylnaphthalene	BRL		µg/kg dry	168	1	"	"	"	"	"
91-20-3	Naphthalene	BRL		µg/kg dry	168	1	"	"	"	"	"
85-01-8	Phenanthrene	BRL		µg/kg dry	168	1	"	"	"	"	"
129-00-0	Pyrene	BRL		µg/kg dry	168	1	"	"	"	"	"
Surrogate recoveries:											
321-60-8	*2-Fluorobiphenyl*	*67*		*30-130 %*			"	"	"	"	"
1718-51-0	*Terphenyl-dl4*	*71*		*30-130 %*			"	"	"	"	"
Total Metals by EPA 6000/7000 Series Methods											
7439-97-6	Mercury	BRL		mg/kg dry	0.0332	1	SW846 7471A	18-Dec-07	19-Dec-07	7121241	CRM
Total Metals by EPA 200 Series Methods											
7440-22-4	Silver	BRL		mg/kg dry	1.81	1	EPA 200.7	18-Dec-07	18-Dec-07	7121240	SA
7440-38-2	Arsenic	BRL		mg/kg dry	1.81	1	"	"	"	"	"
7440-41-7	Beryllium	BRL		mg/kg dry	0.602	1	"	"	"	"	"
7440-43-9	Cadmium	BRL		mg/kg dry	0.602	1	"	"	"	"	"
7440-47-3	Chromium	2.01		mg/kg dry	1.20	1	"	"	"	"	"
7440-50-8	Copper	BRL		mg/kg dry	1.20	1	"	"	"	"	"
7440-02-0	Nickel	BRL		mg/kg dry	1.20	1	"	"	"	"	"
7439-92-1	Lead	BRL		mg/kg dry	1.81	1	"	"	"	"	"
7440-36-0	Antimony	BRL		mg/kg dry	3.61	1	"	"	"	"	"
7782-49-2	Selenium	BRL		mg/kg dry	1.81	1	"	"	"	"	"
7440-28-0	Thallium	BRL		mg/kg dry	3.61	1	"	"	"	"	"
7440-66-6	Zinc	4.72		mg/kg dry	1.20	1	"	"	"	"	"
General Chemistry Parameters											
	% Solids	79.4		%		1	SM2540 G Mod.	18-Dec-07	18-Dec-07	7121262	DBM

Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7121206 - SW846 3550B										
Blank (7121206-BLK1)										
Prepared: 18-Dec-07 Analyzed: 19-Dec-07										
Acenaphthene	BRL		µg/kg wet	33.2						
Acenaphthylene	BRL		µg/kg wet	33.2						
Anthracene	BRL		µg/kg wet	33.2						
Benzo (a) anthracene	BRL		µg/kg wet	33.2						
Benzo (a) pyrene	BRL		µg/kg wet	33.2						
Benzo (b) fluoranthene	BRL		µg/kg wet	33.2						
Benzo (g,h,i) perylene	BRL		µg/kg wet	33.2						
Benzo (k) fluoranthene	BRL		µg/kg wet	33.2						
Chrysene	BRL		µg/kg wet	33.2						
Dibenzo (a,h) anthracene	BRL		µg/kg wet	33.2						
Fluoranthene	BRL		µg/kg wet	33.2						
Fluorene	BRL		µg/kg wet	33.2						
Indeno (1,2,3-cd) pyrene	BRL		µg/kg wet	33.2						
1-Methylnaphthalene	BRL		µg/kg wet	33.2						
2-Methylnaphthalene	BRL		µg/kg wet	33.2						
Naphthalene	BRL		µg/kg wet	33.2						
Phenanthrene	BRL		µg/kg wet	33.2						
Pyrene	BRL		µg/kg wet	33.2						
Surrogate: 2-Fluorobiphenyl	*1230*		µg/kg wet		*1670*		*74*	*30-130*		
Surrogate: Terphenyl-dl4	*1200*		µg/kg wet		*1670*		*72*	*30-130*		
LCS (7121206-BS1)										
Prepared: 18-Dec-07 Analyzed: 19-Dec-07										
Acenaphthene	1210		µg/kg wet	33.2	1670		72	40-140		
Acenaphthylene	1250		µg/kg wet	33.2	1670		75	40-140		
Anthracene	1240		µg/kg wet	33.2	1670		74	40-140		
Benzo (a) anthracene	1400		µg/kg wet	33.2	1670		84	40-140		
Benzo (a) pyrene	1300		µg/kg wet	33.2	1670		78	40-140		
Benzo (b) fluoranthene	1310		µg/kg wet	33.2	1670		79	40-140		
Benzo (g,h,i) perylene	1320		µg/kg wet	33.2	1670		79	40-140		
Benzo (k) fluoranthene	1110		µg/kg wet	33.2	1670		67	40-140		
Chrysene	1210		µg/kg wet	33.2	1670		73	40-140		
Dibenzo (a,h) anthracene	1280		µg/kg wet	33.2	1670		77	40-140		
Fluoranthene	1390		µg/kg wet	33.2	1670		84	40-140		
Fluorene	1270		µg/kg wet	33.2	1670		76	40-140		
Indeno (1,2,3-cd) pyrene	1390		µg/kg wet	33.2	1670		83	40-140		
1-Methylnaphthalene	1260		µg/kg wet	33.2	1670		75	40-140		
2-Methylnaphthalene	1270		µg/kg wet	33.2	1670		76	40-140		
Naphthalene	1240		µg/kg wet	33.2	1670		74	40-140		
Phenanthrene	1430		µg/kg wet	33.2	1670		86	40-140		
Pyrene	1350		µg/kg wet	33.2	1670		81	40-140		
Surrogate: 2-Fluorobiphenyl	*1150*		µg/kg wet		*1670*		*69*	*30-130*		
Surrogate: Terphenyl-dl4	*1250*		µg/kg wet		*1670*		*75*	*30-130*		
Duplicate (7121206-DUP1) **Source: SA72299-03**										
Prepared: 18-Dec-07 Analyzed: 19-Dec-07										
Acenaphthene	BRL		µg/kg wet	32.9		BRL				50
Acenaphthylene	BRL		µg/kg wet	32.9		BRL				50
Anthracene	BRL		µg/kg wet	32.9		BRL				50
Benzo (a) anthracene	BRL		µg/kg wet	32.9		BRL				50
Benzo (a) pyrene	BRL		µg/kg wet	32.9		BRL				50

Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7121206 - SW846 3550B										
Duplicate (7121206-DUP1) **Source: SA72299-03**										
Prepared: 18-Dec-07 Analyzed: 19-Dec-07										
Benzo (b) fluoranthene	BRL		µg/kg wet	32.9		BRL				50
Benzo (g,h,i) perylene	BRL		µg/kg wet	32.9		BRL				50
Benzo (k) fluoranthene	BRL		µg/kg wet	32.9		BRL				50
Chrysene	BRL		µg/kg wet	32.9		BRL				50
Dibenzo (a,h) anthracene	BRL		µg/kg wet	32.9		BRL				50
Fluoranthene	16.5	J	µg/kg wet	32.9		BRL				50
Fluorene	BRL		µg/kg wet	32.9		BRL				50
Indeno (1,2,3-cd) pyrene	BRL		µg/kg wet	32.9		BRL				50
1-Methylnaphthalene	BRL		µg/kg wet	32.9		BRL				50
2-Methylnaphthalene	BRL		µg/kg wet	32.9		BRL				50
Naphthalene	BRL		µg/kg wet	32.9		BRL				50
Phenanthrene	BRL		µg/kg wet	32.9		BRL				50
Pyrene	16.5	J	µg/kg wet	32.9		BRL				50
Surrogate: 2-Fluorobiphenyl	*872*		µg/kg wet		*1650*		*53*	*30-130*		
Surrogate: Terphenyl-dl4	*871*		µg/kg wet		*1650*		*53*	*30-130*		
Matrix Spike (7121206-MS1) **Source: SA72299-03**										
Prepared: 18-Dec-07 Analyzed: 19-Dec-07										
Acenaphthene	1070		µg/kg wet	33.0	1660	BRL	65	40-140		
Pyrene	1110		µg/kg wet	33.0	1660	BRL	67	40-140		
Surrogate: 2-Fluorobiphenyl	*1010*		µg/kg wet		*1660*		*61*	*30-130*		
Surrogate: Terphenyl-dl4	*1040*		µg/kg wet		*1660*		*63*	*30-130*		
Matrix Spike Dup (7121206-MSD1) **Source: SA72299-03**										
Prepared: 18-Dec-07 Analyzed: 19-Dec-07										
Acenaphthene	938		µg/kg wet	32.9	1650	BRL	57	40-140	13	30
Pyrene	1000		µg/kg wet	32.9	1650	BRL	61	40-140	10	30
Surrogate: 2-Fluorobiphenyl	*876*		µg/kg wet		*1650*		*53*	*30-130*		
Surrogate: Terphenyl-dl4	*921*		µg/kg wet		*1650*		*56*	*30-130*		

Total Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7121241 - EPA200/SW7000 Series										
Blank (7121241-BLK1)										
Prepared: 18-Dec-07 Analyzed: 19-Dec-07										
Mercury	BRL		mg/kg wet	0.0287						
Duplicate (7121241-DUP1) **Source: SA72400-01**										
Prepared: 18-Dec-07 Analyzed: 19-Dec-07										
Mercury	BRL		mg/kg dry	0.0343		BRL				20
Matrix Spike (7121241-MS1) **Source: SA72383-11**										
Prepared: 18-Dec-07 Analyzed: 19-Dec-07										
Mercury	0.462		mg/kg dry	0.0305	0.424	0.0113	106	75-125		
Post Spike (7121241-PS1) **Source: SA72383-11**										
Prepared: 18-Dec-07 Analyzed: 19-Dec-07										
Mercury	0.498		mg/kg dry	0.0327	0.455	0.0113	107	85-115		
Reference (7121241-SRM1)										
Prepared: 18-Dec-07 Analyzed: 19-Dec-07										
Mercury	1.53		mg/kg wet	0.0300	1.45		106	66-132.6		

Total Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7121240 - EPA 200 Series										
Blank (7121240-BLK1)										
Prepared & Analyzed: 18-Dec-07										
Antimony	BRL		mg/kg wet	2.91						
Thallium	BRL		mg/kg wet	2.91						
Zinc	BRL		mg/kg wet	0.971						
Selenium	BRL		mg/kg wet	1.46						
Silver	BRL		mg/kg wet	1.46						
Nickel	BRL		mg/kg wet	0.971						
Cadmium	BRL		mg/kg wet	0.485						
Chromium	BRL		mg/kg wet	0.971						
Beryllium	BRL		mg/kg wet	0.485						
Arsenic	BRL		mg/kg wet	1.46						
Lead	BRL		mg/kg wet	1.46						
Copper	BRL		mg/kg wet	0.971						
Duplicate (7121240-DUP1)	**Source: SA72400-01**									
Prepared & Analyzed: 18-Dec-07										
Thallium	BRL		mg/kg dry	3.46		BRL				35
Zinc	4.94		mg/kg dry	1.15		4.72			5	35
Nickel	1.98		mg/kg dry	1.15		0.656			101	35
Silver	BRL		mg/kg dry	1.73		BRL				35
Antimony	BRL		mg/kg dry	3.46		1.19				35
Selenium	BRL		mg/kg dry	1.73		BRL				35
Chromium	2.09		mg/kg dry	1.15		2.01			4	35
Arsenic	BRL		mg/kg dry	1.73		BRL				35
Beryllium	BRL		mg/kg dry	0.576		0.235				35
Cadmium	0.0634	J,QR8	mg/kg dry	0.576		0.187			99	35
Copper	1.22		mg/kg dry	1.15		0.951			24	35
Lead	1.24	J	mg/kg dry	1.73		1.75			34	35
Matrix Spike (7121240-MS1)	**Source: SA72383-11**									
Prepared & Analyzed: 18-Dec-07										
Thallium	127		mg/kg dry	3.11	130	BRL	98	70-130		
Nickel	140		mg/kg dry	1.04	130	5.30	104	70-130		
Silver	133		mg/kg dry	1.55	130	BRL	103	70-130		
Antimony	130		mg/kg dry	3.11	130	0.420	100	70-130		
Zinc	199		mg/kg dry	1.04	130	52.8	113	70-130		
Selenium	142		mg/kg dry	1.55	130	BRL	109	70-130		
Arsenic	133		mg/kg dry	1.55	130	1.80	102	70-130		
Lead	281		mg/kg dry	1.55	130	138	111	70-130		
Chromium	145		mg/kg dry	1.04	130	10.2	104	70-130		
Copper	154		mg/kg dry	1.04	130	15.7	106	70-130		
Cadmium	133		mg/kg dry	0.518	130	0.318	102	70-130		
Beryllium	127		mg/kg dry	0.518	130	0.137	98	70-130		
Post Spike (7121240-PS1)	**Source: SA72383-11**									
Prepared & Analyzed: 18-Dec-07										
Silver	95.0		mg/kg dry	1.49	124	BRL	76	85-115		
Selenium	135		mg/kg dry	1.49	124	BRL	108	85-115		
Antimony	118		mg/kg dry	2.99	124	0.420	95	85-115		
Thallium	124		mg/kg dry	2.99	124	BRL	100	85-115		
Zinc	185		mg/kg dry	0.995	124	52.8	107	85-115		
Nickel	134		mg/kg dry	0.995	124	5.30	103	85-115		

Total Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7121240 - EPA 200 Series										
Post Spike (7121240-PS1)	**Source: SA72383-11**									
Prepared & Analyzed: 18-Dec-07										
Copper	147		mg/kg dry	0.995	124	15.7	105	85-115		
Chromium	140		mg/kg dry	0.995	124	10.2	104	85-115		
Lead	282		mg/kg dry	1.49	124	138	116	85-115		
Arsenic	126		mg/kg dry	1.49	124	1.80	100	85-115		
Cadmium	125		mg/kg dry	0.498	124	0.318	100	85-115		
Beryllium	122		mg/kg dry	0.498	124	0.137	98	85-115		
Reference (7121240-SRM1)										
Prepared & Analyzed: 18-Dec-07										
Thallium	82.1		mg/kg wet	3.00	85.0		97	77.6-122.4		
Nickel	48.1		mg/kg wet	1.00	51.0		94	79.4-120.6		
Silver	46.7		mg/kg wet	1.50	48.4		97	66.3-133.3		
Zinc	50.2		mg/kg wet	1.00	58.5		86	79.1-121.4		
Selenium	69.6		mg/kg wet	1.50	69.0		101	77.5-122.5		
Antimony	129	QC2	mg/kg wet	3.00	56.5		228	0-210.6		
Arsenic	70.9		mg/kg wet	1.50	75.5		94	76.8-123.2		
Beryllium	46.2		mg/kg wet	0.500	51.0		91	82.1-118.6		
Lead	56.8		mg/kg wet	1.50	60.0		95	78.4-120.1		
Copper	40.6		mg/kg wet	1.00	41.5		98	78.2-121.7		
Chromium	58.3		mg/kg wet	1.00	60.0		97	80.5-119.2		
Cadmium	44.6		mg/kg wet	0.500	47.7		94	80.1-119.6		

General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7121262 - General Preparation										
Duplicate (7121262-DUP1)	**Source: SA72341-05**									
Prepared & Analyzed: 18-Dec-07										
% Solids	95.7		%			95.6			0.1	20

Notes and Definitions

QC2	Analyte out of acceptance range in QC spike but no reportable concentration present in sample
QR8	Analyses are not controlled on RPD values from sample concentrations that are less than5 times the reporting level. The batch is accepted based upon the difference between the sample and duplicate is less than or equal to the reporting limit
BRL	Below Reporting Limit - Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
NR	Not Reported
RPD	Relative Percent Difference
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration(CLP J-Flag).

A plus sign (+) in the Method Reference column indicates the method is not accredited by NELAC

Laboratory Control Sample (LCS): A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix

Matrix Spike: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure The method blank is used to document contamination resulting from the analytical process

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction Sample RDLs are highly matrix-dependent.

Surrogate: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

Validated by:
Hanibal C. Tayeh, Ph.D.
Nicole Brown

SA 72400

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
- ☐ Standard TAT - 7 to 10 business days
- ☒ Rush TAT - Date Needed: 12- -07
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: Jacques Whitford Co. Inc
24 Albion Rd. Suite 220
Lincoln, RI 02865

Project Mgr.: Joe Unsworth

Invoice To: Same

P.O. No.: 109825.04/100 RQN:

Project No.: 109825.04/100
Site Name: Potter Hill M, V
Location: Westerly State: RI
Sampler(s): JTU

1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid
7=CH_3OH 8= $NaHSO_4$ 9=_____ 10=_____

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1=_____ X2=_____ X3=_____

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Preservative	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analyses: PAHs 8270	RCP 13 Metals	QA Reporting Notes: (check if needed)
72400-01	Sed-11	12-5-07		G	SO	-		1			X	X	

☐ Provide MA DEP MCP CAM Report
☐ Provide CT DPH RCP Report

QA/QC Reporting Level
☒ Standard ☐ No QC
☐ Other_____

State specific reporting standards:

☐ Fax results when available to (____) _____
☒ E-mail to junswort@jacqueswhitford.com
EDD Format _____

Condition upon receipt: ☐ Iced ☐ Ambient ☒ °C 5.9 Rep

Relinquished by:	Received by:	Date:	Time:
Joe Unsworth	Bob Hanig	12/17/07	1430
Bob Hanig	Michael Graham	12-17-07	1644

Report Date:
12-Mar-08 17:23

☐ Final Report
☐ Re-Issued Report
☑ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

Jacques Whitford Company, Inc.
24 Albion Rd, Suite 220
Lincoln, RI 02865
Attn: Joe Unsworth

Project: Potter Hill Mill - Westerly, RI
Project 1009825.02/100

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SA53278-01	MW-1	Ground Water	26-Oct-06 10:00	26-Oct-06 14:41
SA53278-02	MW-2	Ground Water	26-Oct-06 10:30	26-Oct-06 14:41

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.
All applicable NELAC requirements have been met
Please note that this report contains 7 pages of analytical data plus Chain of Custody document(s).
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Maine # MA138
New Hampshire # 2538
New Jersey # MA011/MA012
New York # 11393/11840
Rhode Island # 98
USDA # S-51435
Vermont # VT-11393

ACCREDITED IN ACCORDANCE WITH nelac

Authorized by:

Hanibal C. Tayeh, Ph.D.
President/Laboratory Director

Technical Reviewer's Initial:

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Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-1 SA53278-01	1009825.02/100	Ground Water	26-Oct-06 10:00	26-Oct-06

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS												
PAHs by SW846 8270C												
Prepared by method SW846 3510C												
83-32-9	Acenaphthene	BRL	U	µg/l	5.56	0.133	1	SW846 8270C	30-Oct-06	30-Oct-06	6102204	M.B
208-96-8	Acenaphthylene	BRL	U	µg/l	5.56	0.167	1	"	"	"	"	"
120-12-7	Anthracene	BRL	U	µg/l	5.56	0.167	1	"	"	"	"	"
56-55-3	Benzo (a) anthracene	BRL	U	µg/l	5.56	0.356	1	"	"	"	"	"
50-32-8	Benzo (a) pyrene	BRL	U	µg/l	5.56	0.189	1	"	"	"	"	"
205-99-2	Benzo (b) fluoranthene	BRL	U	µg/l	5.56	0.733	1	"	"	"	"	"
191-24-2	Benzo (g,h,i) perylene	BRL	U	µg/l	5.56	0.156	1	"	"	"	"	"
207-08-9	Benzo (k) fluoranthene	BRL	U	µg/l	5.56	0.222	1	"	"	"	"	"
218-01-9	Chrysene	BRL	U	µg/l	5.56	0.0778	1	"	"	"	"	"
53-70-3	Dibenzo (a,h) anthracene	BRL	U	µg/l	5.56	0.0889	1	"	"	"	"	"
206-44-0	Fluoranthene	BRL	U	µg/l	5.56	0.133	1	"	"	"	"	"
86-73-7	Fluorene	BRL	U	µg/l	5.56	0.133	1	"	"	"	"	"
193-39-5	Indeno (1,2,3-cd) pyrene	BRL	U	µg/l	5.56	0.256	1	"	"	"	"	"
90-12-0	1-Methylnaphthalene	BRL	U	µg/l	5.56	0.122	1	"	"	"	"	"
91-57-6	2-Methylnaphthalene	BRL	U	µg/l	5.56	0.122	1	"	"	"	"	"
91-20-3	Naphthalene	BRL	U	µg/l	5.56	0.211	1	"	"	"	"	"
85-01-8	Phenanthrene	BRL	U	µg/l	5.56	0.256	1	"	"	"	"	"
129-00-0	Pyrene	BRL	U	µg/l	5.56	0.389	1	"	"	"	"	"
Surrogate recoveries:												
321-60-8	*2-Fluorobiphenyl*	*75*		*30-130 %*				"	"	"	"	"
1718-51-0	*Terphenyl-dl4*	*76*		*30-130 %*				"	"	"	"	"
Total Metals by EPA 6000/7000 Series Methods												
7440-22-4	Silver	BRL	U	mg/l	0.0050	0.0008	1	SW846 6010B	30-Oct-06	31-Oct-06	6102169	LR
7440-38-2	Arsenic	BRL	U	mg/l	0.0040	0.0022	1	"	"	"	"	"
7440-39-3	Barium	0.0200		mg/l	0.0050	0.0012	1	"	"	"	"	"
7440-43-9	Cadmium	0.0005	J	mg/l	0.0025	0.0002	1	"	"	"	"	"
7440-47-3	Chromium	BRL	U	mg/l	0.0050	0.0017	1	"	"	"	"	"
7439-92-1	Lead	BRL	U	mg/l	0.0075	0.0023	1	"	"	"	"	"
7782-49-2	Selenium	BRL	U	mg/l	0.0150	0.0060	1	"	"	"	"	"
Total Metals by EPA 200 Series Methods												
7439-97-6	Mercury	BRL	U	mg/l	0.00030	0.00004	1	EPA 245.1/7470A	30-Oct-06	01-Nov-06	6102170	YP

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-2 SA53278-02	1009825.02/100	Ground Water	26-Oct-06 10:30	26-Oct-06

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS												
PAHs by SW846 8270C												
Prepared by method SW846 3510C												
83-32-9	Acenaphthene	BRL	U	µg/l	6.25	0.150	1	SW846 8270C	30-Oct-06	31-Oct-06	6102204	M.B
208-96-8	Acenaphthylene	BRL	U	µg/l	6.25	0.188	1	"	"	"	"	"
120-12-7	Anthracene	BRL	U	µg/l	6.25	0.188	1	"	"	"	"	"
56-55-3	Benzo (a) anthracene	BRL	U	µg/l	6.25	0.400	1	"	"	"	"	"
50-32-8	Benzo (a) pyrene	BRL	U	µg/l	6.25	0.212	1	"	"	"	"	"
205-99-2	Benzo (b) fluoranthene	BRL	U	µg/l	6.25	0.825	1	"	"	"	"	"
191-24-2	Benzo (g,h,i) perylene	BRL	U	µg/l	6.25	0.175	1	"	"	"	"	"
207-08-9	Benzo (k) fluoranthene	BRL	U	µg/l	6.25	0.250	1	"	"	"	"	"
218-01-9	Chrysene	BRL	U	µg/l	6.25	0.0875	1	"	"	"	"	"
53-70-3	Dibenzo (a,h) anthracene	BRL	U	µg/l	6.25	0.100	1	"	"	"	"	"
206-44-0	Fluoranthene	BRL	U	µg/l	6.25	0.150	1	"	"	"	"	"
86-73-7	Fluorene	BRL	U	µg/l	6.25	0.150	1	"	"	"	"	"
193-39-5	Indeno (1,2,3-cd) pyrene	BRL	U	µg/l	6.25	0.288	1	"	"	"	"	"
90-12-0	1-Methylnaphthalene	BRL	U	µg/l	6.25	0.138	1	"	"	"	"	"
91-57-6	2-Methylnaphthalene	BRL	U	µg/l	6.25	0.138	1	"	"	"	"	"
91-20-3	Naphthalene	BRL	U	µg/l	6.25	0.238	1	"	"	"	"	"
85-01-8	Phenanthrene	BRL	U	µg/l	6.25	0.288	1	"	"	"	"	"
129-00-0	Pyrene	BRL	U	µg/l	6.25	0.438	1	"	"	"	"	"
Surrogate recoveries:												
321-60-8	*2-Fluorobiphenyl*	*59*		*30-130 %*				"	"	"	"	"
1718-51-0	*Terphenyl-dl4*	*60*		*30-130 %*				"	"	"	"	"
Total Metals by EPA 6000/7000 Series Methods												
7440-22-4	Silver	BRL	U	mg/l	0.0050	0.0008	1	SW846 6010B	30-Oct-06	31-Oct-06	6102169	LR
7440-38-2	Arsenic	0.0033	J	mg/l	0.0040	0.0022	1	"	"	"	"	"
7440-39-3	Barium	0.0166		mg/l	0.0050	0.0012	1	"	"	"	"	"
7440-43-9	Cadmium	0.0004	J	mg/l	0.0025	0.0002	1	"	"	"	"	"
7440-47-3	Chromium	0.0042	J	mg/l	0.0050	0.0017	1	"	"	"	"	"
7439-92-1	Lead	0.0033	J	mg/l	0.0075	0.0023	1	"	"	"	"	"
7782-49-2	Selenium	BRL	U	mg/l	0.0150	0.0060	1	"	"	"	"	"
Total Metals by EPA 200 Series Methods												
7439-97-6	Mercury	BRL	U	mg/l	0.00030	0.00004	1	EPA 245.1/7470A	30-Oct-06	01-Nov-06	6102170	YP

Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6102204 - SW846 3510C										
Blank (6102204-BLK1)										
Prepared & Analyzed: 30-Oct-06										
Acenaphthene	BRL	U	µg/l	2.50						
Acenaphthylene	BRL	U	µg/l	2.50						
Anthracene	BRL	U	µg/l	2.50						
Benzo (a) anthracene	BRL	U	µg/l	2.50						
Benzo (a) pyrene	BRL	U	µg/l	2.50						
Benzo (b) fluoranthene	BRL	U	µg/l	2.50						
Benzo (g,h,i) perylene	BRL	U	µg/l	2.50						
Benzo (k) fluoranthene	BRL	U	µg/l	2.50						
Chrysene	BRL	U	µg/l	2.50						
Dibenzo (a,h) anthracene	BRL	U	µg/l	2.50						
Fluoranthene	BRL	U	µg/l	2.50						
Fluorene	BRL	U	µg/l	2.50						
Indeno (1,2,3-cd) pyrene	BRL	U	µg/l	2.50						
1-Methylnaphthalene	BRL	U	µg/l	2.50						
2-Methylnaphthalene	BRL	U	µg/l	2.50						
Naphthalene	BRL	U	µg/l	2.50						
Phenanthrene	BRL	U	µg/l	2.50						
Pyrene	BRL	U	µg/l	2.50						
Surrogate: 2-Fluorobiphenyl	*70.0*		µg/l		*100*		*70*	*30-130*		
Surrogate: Terphenyl-dl4	*70.1*		µg/l		*100*		*70*	*30-130*		
LCS (6102204-BS1)										
Prepared & Analyzed: 30-Oct-06										
Acenaphthene	71.7		µg/l	2.50	100		72	40-140		
Acenaphthylene	71.4		µg/l	2.50	100		71	40-140		
Anthracene	75.7		µg/l	2.50	100		76	40-140		
Benzo (a) anthracene	77.2		µg/l	2.50	100		77	40-140		
Benzo (a) pyrene	77.3		µg/l	2.50	100		77	40-140		
Benzo (b) fluoranthene	71.4		µg/l	2.50	100		71	40-140		
Benzo (g,h,i) perylene	77.7		µg/l	2.50	100		78	40-140		
Benzo (k) fluoranthene	78.4		µg/l	2.50	100		78	40-140		
Chrysene	77.4		µg/l	2.50	100		77	40-140		
Dibenzo (a,h) anthracene	77.0		µg/l	2.50	100		77	40-140		
Fluoranthene	80.7		µg/l	2.50	100		81	40-140		
Fluorene	73.2		µg/l	2.50	100		73	40-140		
Indeno (1,2,3-cd) pyrene	77.1		µg/l	2.50	100		77	40-140		
1-Methylnaphthalene	71.1		µg/l	2.50	100		71	40-140		
2-Methylnaphthalene	64.0		µg/l	2.50	100		64	40-140		
Naphthalene	69.5		µg/l	2.50	100		70	40-140		
Phenanthrene	73.5		µg/l	2.50	100		74	40-140		
Pyrene	73.2		µg/l	2.50	100		73	40-140		
Surrogate: 2-Fluorobiphenyl	*74.3*		µg/l		*100*		*74*	*30-130*		
Surrogate: Terphenyl-dl4	*78.3*		µg/l		*100*		*78*	*30-130*		

Total Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6102169 - SW846 3005A										
Blank (6102169-BLK1)										
Prepared: 30-Oct-06 Analyzed: 31-Oct-06										
Lead	BRL	U	mg/l	0.0075						
Selenium	BRL	U	mg/l	0.0150						
Barium	BRL	U	mg/l	0.0050						
Arsenic	BRL	U	mg/l	0.0040						
Chromium	BRL	U	mg/l	0.0050						
Cadmium	BRL	U	mg/l	0.0025						
Silver	BRL	U	mg/l	0.0050						
LCS (6102169-BS1)										
Prepared: 30-Oct-06 Analyzed: 31-Oct-06										
Lead	0.483		mg/l	0.0075	0.500		97	85-115		
Selenium	0.451		mg/l	0.0150	0.500		90	85-115		
Cadmium	0.500		mg/l	0.0025	0.500		100	85-115		
Arsenic	0.466		mg/l	0.0040	0.500		93	85-115		
Barium	0.522		mg/l	0.0050	0.500		104	85-115		
Chromium	0.483		mg/l	0.0050	0.500		97	85-115		
Silver	0.479		mg/l	0.0050	0.500		96	85-115		
LCS Dup (6102169-BSD1)										
Prepared: 30-Oct-06 Analyzed: 31-Oct-06										
Selenium	0.453		mg/l	0.0150	0.500		91	85-115	0.4	20
Lead	0.485		mg/l	0.0075	0.500		97	85-115	0.5	20
Silver	0.494		mg/l	0.0050	0.500		99	85-115	3	20
Barium	0.534		mg/l	0.0050	0.500		107	85-115	2	20
Arsenic	0.463		mg/l	0.0040	0.500		93	85-115	0.5	20
Cadmium	0.504		mg/l	0.0025	0.500		101	85-115	0.9	20
Chromium	0.493		mg/l	0.0050	0.500		99	85-115	2	20
Duplicate (6102169-DUP1) **Source: SA53278-01**										
Prepared: 30-Oct-06 Analyzed: 31-Oct-06										
Selenium	BRL	U	mg/l	0.0150		BRL				20
Lead	BRL	U	mg/l	0.0075		BRL				20
Silver	BRL	U	mg/l	0.0050		BRL				20
Chromium	BRL	U	mg/l	0.0050		BRL				20
Cadmium	0.0006	J	mg/l	0.0025		0.0005			10	20
Barium	0.0225		mg/l	0.0050		0.0200			12	20
Arsenic	0.0025	J	mg/l	0.0040		BRL				20
Matrix Spike (6102169-MS1) **Source: SA53279-06**										
Prepared: 30-Oct-06 Analyzed: 31-Oct-06										
Selenium	0.444		mg/l	0.0150	0.500	BRL	89	75-125		
Lead	0.472		mg/l	0.0075	0.500	BRL	94	75-125		
Barium	0.519		mg/l	0.0050	0.500	BRL	104	75-125		
Arsenic	0.450		mg/l	0.0040	0.500	BRL	90	75-125		
Cadmium	0.492		mg/l	0.0025	0.500	BRL	98	75-125		
Silver	0.473		mg/l	0.0050	0.500	BRL	95	75-125		
Chromium	0.476		mg/l	0.0050	0.500	BRL	95	75-125		
Matrix Spike Dup (6102169-MSD1) **Source: SA53279-06**										
Prepared: 30-Oct-06 Analyzed: 31-Oct-06										
Selenium	0.446		mg/l	0.0150	0.500	BRL	89	75-125	0.4	20
Lead	0.474		mg/l	0.0075	0.500	BRL	95	75-125	0.4	20

Total Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6102169 - SW846 3005A										
Matrix Spike Dup (6102169-MSD1) **Source: SA53279-06**										
Prepared: 30-Oct-06 Analyzed: 31-Oct-06										
Silver	0.489		mg/l	0.0050	0.500	BRL	98	75-125	3	20
Barium	0.528		mg/l	0.0050	0.500	BRL	106	75-125	2	20
Cadmium	0.493		mg/l	0.0025	0.500	BRL	99	75-125	0.06	20
Chromium	0.482		mg/l	0.0050	0.500	BRL	96	75-125	1	20
Arsenic	0.447		mg/l	0.0040	0.500	BRL	89	75-125	0.7	20
Post Spike (6102169-PS1) **Source: SA53279-06**										
Prepared: 30-Oct-06 Analyzed: 31-Oct-06										
Selenium	0.425		mg/l	0.0150	0.500	BRL	85	80-120		
Lead	0.453		mg/l	0.0075	0.500	BRL	91	80-120		
Arsenic	0.429		mg/l	0.0040	0.500	BRL	86	80-120		
Cadmium	0.467		mg/l	0.0025	0.500	BRL	93	80-120		
Chromium	0.458		mg/l	0.0050	0.500	BRL	92	80-120		
Barium	0.495		mg/l	0.0050	0.500	BRL	99	80-120		
Silver	0.439		mg/l	0.0050	0.500	BRL	88	80-120		

Total Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6102170 - EPA200/SW7000 Series										
Blank (6102170-BLK1)										
Prepared: 30-Oct-06 Analyzed: 01-Nov-06										
Mercury	BRL	U	mg/l	0.00030						
LCS (6102170-BS1)										
Prepared: 30-Oct-06 Analyzed: 01-Nov-06										
Mercury	0.00204		mg/l	0.00030	0.00250		82	80-120		
Duplicate (6102170-DUP1) **Source: SA53278-01**										
Prepared: 30-Oct-06 Analyzed: 01-Nov-06										
Mercury	BRL	U	mg/l	0.00030		BRL				20
Matrix Spike (6102170-MS1) **Source: SA53279-06**										
Prepared: 30-Oct-06 Analyzed: 01-Nov-06										
Mercury	0.00229		mg/l	0.00030	0.00250	BRL	92	75-125		
Matrix Spike Dup (6102170-MSD1) **Source: SA53279-06**										
Prepared: 30-Oct-06 Analyzed: 01-Nov-06										
Mercury	0.00208		mg/l	0.00030	0.00250	BRL	83	75-125	10	20
Post Spike (6102170-PS1) **Source: SA53279-06**										
Prepared: 30-Oct-06 Analyzed: 01-Nov-06										
Mercury	0.00231		mg/l	0.00030	0.00250	BRL	92	75-125		

Notes and Definitions

J	Detected above the Method Detection Limit but below the Reporting Limit, therefore, result is an estimated concentration (CLP J-Flag).
U	Analyte included in the analysis, but not detected
BRL	Below Reporting Limit - Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
NR	Not Reported
RPD	Relative Percent Difference

A plus sign (+) in the Method Reference column indicates the method is not accredited by NELAC

Laboratory Control Sample (LCS): A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix

Matrix Spike: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure The method blank is used to document contamination resulting from the analytical process

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

Surrogate: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

Validated by:
Hanibal C. Tayeh, Ph.D.
Nicole Brown

SAS3278

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
- ☐ Standard TAT - 7 to 10 business days
- ☒ Rush TAT - Date Needed: 11/2/06
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: Jacques Whitford Co
24 Albon Rd. Suite 220
Lincoln, RI 02865

Project Mgr.: Joe Unsworth

Invoice To: Same

P.O. No.: 109825.02/100 RQN:

Project No.: 109825.02/100
Site Name: Potter Hill Mill
Location: Westerly State: RI
Sampler(s): Robert Snyder

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid
7=CH_3OH 8= $NaHSO_4$ 9=_____ 10=_____

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1=_____ X2=_____ X3=_____

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Preservative	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic		Containers:	RCRA8 Metals	PAHs 8270	Analyses:	QA Reporting Notes: (check if needed)
53278-01	MW-1	10/26/06	1000	G	GW	4		1		1			X	X		
-02	MW-2	10/26/06	1050	G	GW	4		1		1			X	X		

☐ Provide MA DEP MCP CAM Report
☐ Provide CT DPH RCP Report

QA/QC Reporting Level
☒ Standard ☐ No QC
☐ Other_____

State specific reporting standards:

☐ Fax results when available to (____) _____
☒ E-mail to: junswort@jacqueswhitford.com
EDD Format _____

Condition upon receipt: ☐ Iced ☐ Ambient ☐ 4°C

Relinquished by:	Received by:	Date:	Time:
		10/26/06	1210
		10/26/06	1441

11 Almgren Drive • Agawam, Massachusetts 01001 • 413-789-9018 • Fax 413-789-4076 • www.spectrum-analytical.com

no refrigeration

Report Date:
12-Mar-08 16:17

☐ Final Report
☐ Re-Issued Report
☑ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

Jacques Whitford Company, Inc.
24 Albion Rd, Suite 220
Lincoln, RI 02865
Attn: Joe Unsworth

Project: Potter Hill Mill - Westerly, RI
Project 1009825.04 Phase 100

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SA71128-01	MW1	Ground Water	14-Nov-07 10:00	15-Nov-07 16:28
SA71128-02	MW2	Ground Water	14-Nov-07 09:45	15-Nov-07 16:28
SA71128-03	MW3	Ground Water	14-Nov-07 11:05	15-Nov-07 16:28
SA71128-04	MW4	Ground Water	14-Nov-07 11:15	15-Nov-07 16:28
SA71128-05	MW5	Ground Water	14-Nov-07 12:40	15-Nov-07 16:28
SA71128-06	Trip Blank	Aqueous	14-Nov-07 00:00	15-Nov-07 16:28

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.
All applicable NELAC requirements have been met
Please note that this report contains 32 pages of analytical data plus Chain of Custody document(s).
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Florida # E87600/E87936
Maine # MA138
New Hampshire # 2538
New Jersey # MA011/MA012
New York # 11393/11840
Rhode Island # 98
USDA # S-51435
Vermont # VT-11393

Authorized by:

Hanibal C. Tayeh, Ph.D.
President/Laboratory Director

Technical Reviewer's Initial:

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Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW1 SA71128-01	1009825.04 Phase 100	Ground Water	14-Nov-07 10:00	15-Nov-07

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Batch*	*Analyst*
Volatile Organic Compounds												
Volatile Organic Compounds												
Prepared by method SW846 5030 Water MS												
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon	BRL	U	µg/l	1.0	0.4	1	SW 846 8260B	20-Nov-07	21-Nov-07	7111621	jld
67-64-1	Acetone	BRL	U	µg/l	10.0	2.6	1	"	"	"	"	"
107-13-1	Acrylonitrile	BRL	U	µg/l	1.0	0.8	1	"	"	"	"	"
71-43-2	Benzene	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
108-86-1	Bromobenzene	BRL	U	µg/l	1.0	0.7	1	"	"	"	"	"
74-97-5	Bromochloromethane	BRL	U	µg/l	1.0	0.9	1	"	"	"	"	"
75-27-4	Bromodichloromethane	BRL	U	µg/l	1.0	0.9	1	"	"	"	"	"
75-25-2	Bromoform	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
74-83-9	Bromomethane	BRL	U	µg/l	2.0	1.6	1	"	"	"	"	"
78-93-3	2-Butanone (MEK)	BRL	U	µg/l	10.0	2.4	1	"	"	"	"	"
104-51-8	n-Butylbenzene	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
135-98-8	sec-Butylbenzene	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
98-06-6	tert-Butylbenzene	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
75-15-0	Carbon disulfide	BRL	U	µg/l	5.0	0.3	1	"	"	"	"	"
56-23-5	Carbon tetrachloride	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
108-90-7	Chlorobenzene	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
75-00-3	Chloroethane	BRL	U	µg/l	2.0	0.7	1	"	"	"	"	"
67-66-3	Chloroform	BRL	U	µg/l	1.0	0.8	1	"	"	"	"	"
74-87-3	Chloromethane	BRL	U	µg/l	2.0	0.6	1	"	"	"	"	"
95-49-8	2-Chlorotoluene	BRL	U	µg/l	1.0	0.7	1	"	"	"	"	"
106-43-4	4-Chlorotoluene	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloropropane	BRL	U	µg/l	2.0	0.6	1	"	"	"	"	"
124-48-1	Dibromochloromethane	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
106-93-4	1,2-Dibromoethane (EDB)	BRL	U	µg/l	1.0	0.7	1	"	"	"	"	"
74-95-3	Dibromomethane	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
75-71-8	Dichlorodifluoromethane (Freon12)	BRL	U	µg/l	2.0	0.6	1	"	"	"	"	"
75-34-3	1,1-Dichloroethane	BRL	U	µg/l	1.0	0.3	1	"	"	"	"	"
107-06-2	1,2-Dichloroethane	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
75-35-4	1,1-Dichloroethene	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
156-59-2	cis-1,2-Dichloroethene	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL	U	µg/l	1.0	0.9	1	"	"	"	"	"
78-87-5	1,2-Dichloropropane	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
142-28-9	1,3-Dichloropropane	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
594-20-7	2,2-Dichloropropane	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
563-58-6	1,1-Dichloropropene	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
10061-01-5	cis-1,3-Dichloropropene	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
10061-02-6	trans-1,3-Dichloropropene	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
100-41-4	Ethylbenzene	BRL	U	µg/l	1.0	0.3	1	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL	U	µg/l	1.0	0.8	1	"	"	"	"	"
591-78-6	2-Hexanone (MBK)	BRL	U	µg/l	10.0	0.5	1	"	"	"	"	"
98-82-8	Isopropylbenzene	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
99-87-6	4-Isopropyltoluene	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
1634-04-4	Methyl tert-butyl ether	BRL	U	µg/l	1.0	0.3	1	"	"	"	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	U	µg/l	10.0	0.4	1	"	"	"	"	"
75-09-2	Methylene chloride	BRL	U	µg/l	5.0	0.6	1	"	"	"	"	"
91-20-3	Naphthalene	BRL	U	µg/l	1.0	0.7	1	"	"	"	"	"
103-65-1	n-Propylbenzene	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW1 SA71128-01	1009825.04 Phase 100	Ground Water	14-Nov-07 10:00	15-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds												
Volatile Organic Compounds												
Prepared by method SW846 5030 Water MS												
100-42-5	Styrene	BRL	U	µg/l	1.0	0.4	1	SW 846 8260B	20-Nov-07	21-Nov-07	7111621	jld
630-20-6	1,1,1,2-Tetrachloroethane	BRL	U	µg/l	1.0	0.7	1	"	"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	BRL	U	µg/l	1.0	0.7	1	"	"	"	"	"
127-18-4	Tetrachloroethene	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
108-88-3	Toluene	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
87-61-6	1,2,3-Trichlorobenzene	BRL	U	µg/l	1.0	0.7	1	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL	U	µg/l	1.0	0.7	1	"	"	"	"	"
71-55-6	1,1,1-Trichloroethane	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
79-00-5	1,1,2-Trichloroethane	BRL	U	µg/l	1.0	0.9	1	"	"	"	"	"
79-01-6	Trichloroethene	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
75-69-4	Trichlorofluoromethane (Freon 11)	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
96-18-4	1,2,3-Trichloropropane	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	BRL	U	µg/l	1.0	0.7	1	"	"	"	"	"
108-67-8	1,3,5-Trimethylbenzene	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
75-01-4	Vinyl chloride	BRL	U	µg/l	1.0	0.9	1	"	"	"	"	"
1330-20-7	m,p-Xylene	BRL	U	µg/l	2.0	0.7	1	"	"	"	"	"
95-47-6	o-Xylene	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
109-99-9	Tetrahydrofuran	BRL	U	µg/l	10.0	0.4	1	"	"	"	"	"
60-29-7	Ethyl ether	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
994-05-8	Tert-amyl methyl ether	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
637-92-3	Ethyl tert-butyl ether	BRL	U	µg/l	1.0	0.3	1	"	"	"	"	"
108-20-3	Di-isopropyl ether	BRL	U	µg/l	1.0	0.3	1	"	"	"	"	"
75-65-0	Tert-Butanol / butyl alcohol	BRL	U	µg/l	10.0	7.4	1	"	"	"	"	"
123-91-1	1,4-Dioxane	BRL	U	µg/l	20.0	4.9	1	"	"	"	"	"
110-57-6	trans-1,4-Dichloro-2-butene	BRL	U	µg/l	5.0	2.5	1	"	"	"	"	"
64-17-5	Ethanol	BRL	U	µg/l	500	73.4	1	"	"	"	"	"
Surrogate recoveries:												
460-00-4	*4-Bromofluorobenzene*	*102*		*70-130 %*				"	"	"	"	"
2037-26-5	*Toluene-d8*	*104*		*70-130 %*				"	"	"	"	"
17060-07-0	*1,2-Dichloroethane-d4*	*94*		*70-130 %*				"	"	"	"	"
1868-53-7	*Dibromofluoromethane*	*104*		*70-130 %*				"	"	"	"	"
Total Metals by EPA 6000/7000 Series Methods												
7440-22-4	Silver	BRL	U	mg/l	0.0050	0.0020	1	SW846 6010B	27-Nov-07	04-Dec-07	7111877	SA
7440-38-2	Arsenic	BRL	U	mg/l	0.0040	0.0025	1	"	"	"	"	"
7440-41-7	Beryllium	BRL	U	mg/l	0.0020	0.0010	1	"	"	"	"	"
7440-43-9	Cadmium	0.0005	J	mg/l	0.0025	0.0002	1	"	"	"	"	"
7440-47-3	Chromium	BRL	U	mg/l	0.0050	0.0025	1	"	"	"	"	"
7440-50-8	Copper	0.0110		mg/l	0.0050	0.0015	1	"	"	"	"	"
7440-02-0	Nickel	0.0068		mg/l	0.0050	0.0005	1	"	"	"	"	"
7439-92-1	Lead	BRL	U	mg/l	0.0075	0.0025	1	"	"	"	"	"
7440-36-0	Antimony	0.0036	J	mg/l	0.0060	0.0035	1	"	"	28-Nov-07	"	TBG
7782-49-2	Selenium	BRL	U	mg/l	0.0150	0.0050	1	"	"	04-Dec-07	"	SA
7440-28-0	Thallium	BRL	U	mg/l	0.0050	0.0015	1	"	"	"	"	"
7440-66-6	Zinc	0.0703		mg/l	0.0050	0.0005	1	"	"	"	"	"
Total Metals by EPA 200 Series Methods												
7439-97-6	Mercury	BRL	U	mg/l	0.00020	0.00008	1	EPA 245.1/7470A	27-Nov-07	28-Nov-07	7111878	CRM

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW2 SA71128-02	1009825.04 Phase 100	Ground Water	14-Nov-07 09:45	15-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds												
Volatile Organic Compounds												
Prepared by method SW846 5030 Water MS												
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon	BRL	U	µg/l	1.0	0.4	1	SW 846 8260B	20-Nov-07	21-Nov-07	7111621	jld
67-64-1	Acetone	BRL	U	µg/l	10.0	2.6	1	"	"	"	"	"
107-13-1	Acrylonitrile	BRL	U	µg/l	1.0	0.8	1	"	"	"	"	"
71-43-2	Benzene	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
108-86-1	Bromobenzene	BRL	U	µg/l	1.0	0.7	1	"	"	"	"	"
74-97-5	Bromochloromethane	BRL	U	µg/l	1.0	0.9	1	"	"	"	"	"
75-27-4	Bromodichloromethane	BRL	U	µg/l	1.0	0.9	1	"	"	"	"	"
75-25-2	Bromoform	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
74-83-9	Bromomethane	BRL	U	µg/l	2.0	1.6	1	"	"	"	"	"
78-93-3	2-Butanone (MEK)	BRL	U	µg/l	10.0	2.4	1	"	"	"	"	"
104-51-8	n-Butylbenzene	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
135-98-8	sec-Butylbenzene	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
98-06-6	tert-Butylbenzene	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
75-15-0	Carbon disulfide	BRL	U	µg/l	5.0	0.3	1	"	"	"	"	"
56-23-5	Carbon tetrachloride	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
108-90-7	Chlorobenzene	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
75-00-3	Chloroethane	BRL	U	µg/l	2.0	0.7	1	"	"	"	"	"
67-66-3	Chloroform	BRL	U	µg/l	1.0	0.8	1	"	"	"	"	"
74-87-3	Chloromethane	BRL	U	µg/l	2.0	0.6	1	"	"	"	"	"
95-49-8	2-Chlorotoluene	BRL	U	µg/l	1.0	0.7	1	"	"	"	"	"
106-43-4	4-Chlorotoluene	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloropropane	BRL	U	µg/l	2.0	0.6	1	"	"	"	"	"
124-48-1	Dibromochloromethane	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
106-93-4	1,2-Dibromoethane (EDB)	BRL	U	µg/l	1.0	0.7	1	"	"	"	"	"
74-95-3	Dibromomethane	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
75-71-8	Dichlorodifluoromethane (Freon12)	BRL	U	µg/l	2.0	0.6	1	"	"	"	"	"
75-34-3	1,1-Dichloroethane	BRL	U	µg/l	1.0	0.3	1	"	"	"	"	"
107-06-2	1,2-Dichloroethane	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
75-35-4	1,1-Dichloroethene	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
156-59-2	cis-1,2-Dichloroethene	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL	U	µg/l	1.0	0.9	1	"	"	"	"	"
78-87-5	1,2-Dichloropropane	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
142-28-9	1,3-Dichloropropane	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
594-20-7	2,2-Dichloropropane	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
563-58-6	1,1-Dichloropropene	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
10061-01-5	cis-1,3-Dichloropropene	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
10061-02-6	trans-1,3-Dichloropropene	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
100-41-4	Ethylbenzene	BRL	U	µg/l	1.0	0.3	1	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL	U	µg/l	1.0	0.8	1	"	"	"	"	"
591-78-6	2-Hexanone (MBK)	BRL	U	µg/l	10.0	0.5	1	"	"	"	"	"
98-82-8	Isopropylbenzene	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
99-87-6	4-Isopropyltoluene	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
1634-04-4	Methyl tert-butyl ether	BRL	U	µg/l	1.0	0.3	1	"	"	"	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	U	µg/l	10.0	0.4	1	"	"	"	"	"
75-09-2	Methylene chloride	BRL	U	µg/l	5.0	0.6	1	"	"	"	"	"
91-20-3	Naphthalene	BRL	U	µg/l	1.0	0.7	1	"	"	"	"	"
103-65-1	n-Propylbenzene	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW2 SA71128-02	1009825.04 Phase 100	Ground Water	14-Nov-07 09:45	15-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds												
Volatile Organic Compounds												
Prepared by method SW846 5030 Water MS												
100-42-5	Styrene	BRL	U	µg/l	1.0	0.4	1	SW 846 8260B	20-Nov-07	21-Nov-07	7111621	jld
630-20-6	1,1,1,2-Tetrachloroethane	BRL	U	µg/l	1.0	0.7	1	"	"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	BRL	U	µg/l	1.0	0.7	1	"	"	"	"	"
127-18-4	Tetrachloroethene	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
108-88-3	Toluene	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
87-61-6	1,2,3-Trichlorobenzene	BRL	U	µg/l	1.0	0.7	1	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL	U	µg/l	1.0	0.7	1	"	"	"	"	"
71-55-6	1,1,1-Trichloroethane	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
79-00-5	1,1,2-Trichloroethane	BRL	U	µg/l	1.0	0.9	1	"	"	"	"	"
79-01-6	Trichloroethene	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
75-69-4	Trichlorofluoromethane (Freon 11)	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
96-18-4	1,2,3-Trichloropropane	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	BRL	U	µg/l	1.0	0.7	1	"	"	"	"	"
108-67-8	1,3,5-Trimethylbenzene	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
75-01-4	Vinyl chloride	BRL	U	µg/l	1.0	0.9	1	"	"	"	"	"
1330-20-7	m,p-Xylene	BRL	U	µg/l	2.0	0.7	1	"	"	"	"	"
95-47-6	o-Xylene	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
109-99-9	Tetrahydrofuran	BRL	U	µg/l	10.0	0.4	1	"	"	"	"	"
60-29-7	Ethyl ether	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
994-05-8	Tert-amyl methyl ether	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
637-92-3	Ethyl tert-butyl ether	BRL	U	µg/l	1.0	0.3	1	"	"	"	"	"
108-20-3	Di-isopropyl ether	BRL	U	µg/l	1.0	0.3	1	"	"	"	"	"
75-65-0	Tert-Butanol / butyl alcohol	BRL	U	µg/l	10.0	7.4	1	"	"	"	"	"
123-91-1	1,4-Dioxane	BRL	U	µg/l	20.0	4.9	1	"	"	"	"	"
110-57-6	trans-1,4-Dichloro-2-butene	BRL	U	µg/l	5.0	2.5	1	"	"	"	"	"
64-17-5	Ethanol	BRL	U	µg/l	500	73.4	1	"	"	"	"	"
Surrogate recoveries:												
460-00-4	*4-Bromofluorobenzene*	*103*		*70-130 %*				"	"	"	"	"
2037-26-5	*Toluene-d8*	*103*		*70-130 %*				"	"	"	"	"
17060-07-0	*1,2-Dichloroethane-d4*	*94*		*70-130 %*				"	"	"	"	"
1868-53-7	*Dibromofluoromethane*	*103*		*70-130 %*				"	"	"	"	"
Total Metals by EPA 6000/7000 Series Methods												
7440-22-4	Silver	BRL	U	mg/l	0.0050	0.0020	1	SW846 6010B	27-Nov-07	04-Dec-07	7111877	SA
7440-38-2	Arsenic	0.0034	J	mg/l	0.0040	0.0025	1	"	"	"	"	"
7440-41-7	Beryllium	BRL	U	mg/l	0.0020	0.0010	1	"	"	"	"	"
7440-43-9	Cadmium	0.0006	J	mg/l	0.0025	0.0002	1	"	"	"	"	"
7440-47-3	Chromium	0.0027	J	mg/l	0.0050	0.0025	1	"	"	"	"	"
7440-50-8	Copper	0.0047	J	mg/l	0.0050	0.0015	1	"	"	"	"	"
7440-02-0	Nickel	0.0060		mg/l	0.0050	0.0005	1	"	"	"	"	"
7439-92-1	Lead	BRL	U	mg/l	0.0075	0.0025	1	"	"	"	"	"
7440-36-0	Antimony	BRL	U	mg/l	0.0060	0.0035	1	"	"	29-Nov-07	"	TBG
7782-49-2	Selenium	BRL	U	mg/l	0.0150	0.0050	1	"	"	04-Dec-07	"	SA
7440-28-0	Thallium	BRL	U	mg/l	0.0050	0.0015	1	"	"	"	"	"
7440-66-6	Zinc	0.0926		mg/l	0.0050	0.0005	1	"	"	"	"	"
Total Metals by EPA 200 Series Methods												
7439-97-6	Mercury	BRL	U	mg/l	0.00020	0.00008	1	EPA 245.1/7470A	27-Nov-07	28-Nov-07	7111878	CRM

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW3 SA71128-03	1009825.04 Phase 100	Ground Water	14-Nov-07 11:05	15-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds												
Volatile Organic Compounds												
Prepared by method SW846 5030 Water MS												
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon	BRL	U	µg/l	1.0	0.4	1	SW 846 8260B	20-Nov-07	21-Nov-07	7111621	jld
67-64-1	Acetone	BRL	U	µg/l	10.0	2.6	1	"	"	"	"	"
107-13-1	Acrylonitrile	BRL	U	µg/l	1.0	0.8	1	"	"	"	"	"
71-43-2	Benzene	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
108-86-1	Bromobenzene	BRL	U	µg/l	1.0	0.7	1	"	"	"	"	"
74-97-5	Bromochloromethane	BRL	U	µg/l	1.0	0.9	1	"	"	"	"	"
75-27-4	Bromodichloromethane	BRL	U	µg/l	1.0	0.9	1	"	"	"	"	"
75-25-2	Bromoform	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
74-83-9	Bromomethane	BRL	U	µg/l	2.0	1.6	1	"	"	"	"	"
78-93-3	2-Butanone (MEK)	BRL	U	µg/l	10.0	2.4	1	"	"	"	"	"
104-51-8	n-Butylbenzene	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
135-98-8	sec-Butylbenzene	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
98-06-6	tert-Butylbenzene	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
75-15-0	Carbon disulfide	BRL	U	µg/l	5.0	0.3	1	"	"	"	"	"
56-23-5	Carbon tetrachloride	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
108-90-7	Chlorobenzene	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
75-00-3	Chloroethane	BRL	U	µg/l	2.0	0.7	1	"	"	"	"	"
67-66-3	Chloroform	BRL	U	µg/l	1.0	0.8	1	"	"	"	"	"
74-87-3	Chloromethane	BRL	U	µg/l	2.0	0.6	1	"	"	"	"	"
95-49-8	2-Chlorotoluene	BRL	U	µg/l	1.0	0.7	1	"	"	"	"	"
106-43-4	4-Chlorotoluene	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloropropane	BRL	U	µg/l	2.0	0.6	1	"	"	"	"	"
124-48-1	Dibromochloromethane	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
106-93-4	1,2-Dibromoethane (EDB)	BRL	U	µg/l	1.0	0.7	1	"	"	"	"	"
74-95-3	Dibromomethane	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
75-71-8	Dichlorodifluoromethane (Freon12)	BRL	U	µg/l	2.0	0.6	1	"	"	"	"	"
75-34-3	1,1-Dichloroethane	BRL	U	µg/l	1.0	0.3	1	"	"	"	"	"
107-06-2	1,2-Dichloroethane	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
75-35-4	1,1-Dichloroethene	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
156-59-2	cis-1,2-Dichloroethene	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL	U	µg/l	1.0	0.9	1	"	"	"	"	"
78-87-5	1,2-Dichloropropane	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
142-28-9	1,3-Dichloropropane	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
594-20-7	2,2-Dichloropropane	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
563-58-6	1,1-Dichloropropene	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
10061-01-5	cis-1,3-Dichloropropene	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
10061-02-6	trans-1,3-Dichloropropene	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
100-41-4	Ethylbenzene	BRL	U	µg/l	1.0	0.3	1	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL	U	µg/l	1.0	0.8	1	"	"	"	"	"
591-78-6	2-Hexanone (MBK)	BRL	U	µg/l	10.0	0.5	1	"	"	"	"	"
98-82-8	Isopropylbenzene	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
99-87-6	4-Isopropyltoluene	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
1634-04-4	Methyl tert-butyl ether	BRL	U	µg/l	1.0	0.3	1	"	"	"	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	U	µg/l	10.0	0.4	1	"	"	"	"	"
75-09-2	Methylene chloride	BRL	U	µg/l	5.0	0.6	1	"	"	"	"	"
91-20-3	Naphthalene	BRL	U	µg/l	1.0	0.7	1	"	"	"	"	"
103-65-1	n-Propylbenzene	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW3 SA71128-03	1009825.04 Phase 100	Ground Water	14-Nov-07 11:05	15-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds												
Volatile Organic Compounds												
Prepared by method SW846 5030 Water MS												
100-42-5	Styrene	BRL	U	µg/l	1.0	0.4	1	SW 846 8260B	20-Nov-07	21-Nov-07	7111621	jld
630-20-6	1,1,1,2-Tetrachloroethane	BRL	U	µg/l	1.0	0.7	1	"	"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	BRL	U	µg/l	1.0	0.7	1	"	"	"	"	"
127-18-4	Tetrachloroethene	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
108-88-3	Toluene	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
87-61-6	1,2,3-Trichlorobenzene	BRL	U	µg/l	1.0	0.7	1	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL	U	µg/l	1.0	0.7	1	"	"	"	"	"
71-55-6	1,1,1-Trichloroethane	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
79-00-5	1,1,2-Trichloroethane	BRL	U	µg/l	1.0	0.9	1	"	"	"	"	"
79-01-6	Trichloroethene	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
75-69-4	Trichlorofluoromethane (Freon 11)	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
96-18-4	1,2,3-Trichloropropane	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	BRL	U	µg/l	1.0	0.7	1	"	"	"	"	"
108-67-8	1,3,5-Trimethylbenzene	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
75-01-4	Vinyl chloride	BRL	U	µg/l	1.0	0.9	1	"	"	"	"	"
1330-20-7	m,p-Xylene	BRL	U	µg/l	2.0	0.7	1	"	"	"	"	"
95-47-6	o-Xylene	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
109-99-9	Tetrahydrofuran	BRL	U	µg/l	10.0	0.4	1	"	"	"	"	"
60-29-7	Ethyl ether	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
994-05-8	Tert-amyl methyl ether	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
637-92-3	Ethyl tert-butyl ether	BRL	U	µg/l	1.0	0.3	1	"	"	"	"	"
108-20-3	Di-isopropyl ether	BRL	U	µg/l	1.0	0.3	1	"	"	"	"	"
75-65-0	Tert-Butanol / butyl alcohol	BRL	U	µg/l	10.0	7.4	1	"	"	"	"	"
123-91-1	1,4-Dioxane	BRL	U	µg/l	20.0	4.9	1	"	"	"	"	"
110-57-6	trans-1,4-Dichloro-2-butene	BRL	U	µg/l	5.0	2.5	1	"	"	"	"	"
64-17-5	Ethanol	BRL	U	µg/l	500	73.4	1	"	"	"	"	"
Surrogate recoveries:												
460-00-4	*4-Bromofluorobenzene*	*101*		*70-130 %*				"	"	"	"	"
2037-26-5	*Toluene-d8*	*102*		*70-130 %*				"	"	"	"	"
17060-07-0	*1,2-Dichloroethane-d4*	*95*		*70-130 %*				"	"	"	"	"
1868-53-7	*Dibromofluoromethane*	*104*		*70-130 %*				"	"	"	"	"
Semivolatile Organic Compounds by GCMS												
PAHs by SW846 8270C												
Prepared by method SW846 3510C												
83-32-9	Acenaphthene	BRL	U	µg/l	5.26	0.126	1	SW846 8270C	18-Nov-07	20-Nov-07	7111475	M.B
208-96-8	Acenaphthylene	BRL	U	µg/l	5.26	0.158	1	"	"	"	"	"
120-12-7	Anthracene	BRL	U	µg/l	5.26	0.158	1	"	"	"	"	"
56-55-3	Benzo (a) anthracene	BRL	U	µg/l	5.26	0.337	1	"	"	"	"	"
50-32-8	Benzo (a) pyrene	BRL	U	µg/l	5.26	0.179	1	"	"	"	"	"
205-99-2	Benzo (b) fluoranthene	BRL	U	µg/l	5.26	0.695	1	"	"	"	"	"
191-24-2	Benzo (g,h,i) perylene	BRL	U	µg/l	5.26	0.147	1	"	"	"	"	"
207-08-9	Benzo (k) fluoranthene	BRL	U	µg/l	5.26	0.211	1	"	"	"	"	"
218-01-9	Chrysene	BRL	U	µg/l	5.26	0.0737	1	"	"	"	"	"
53-70-3	Dibenzo (a,h) anthracene	BRL	U	µg/l	5.26	0.0842	1	"	"	"	"	"
206-44-0	Fluoranthene	BRL	U	µg/l	5.26	0.126	1	"	"	"	"	"
86-73-7	Fluorene	BRL	U	µg/l	5.26	0.126	1	"	"	"	"	"
193-39-5	Indeno (1,2,3-cd) pyrene	BRL	U	µg/l	5.26	0.242	1	"	"	"	"	"
90-12-0	1-Methylnaphthalene	BRL	U	µg/l	5.26	0.116	1	"	"	"	"	"
91-57-6	2-Methylnaphthalene	BRL	U	µg/l	5.26	0.116	1	"	"	"	"	"
91-20-3	Naphthalene	BRL	U	µg/l	5.26	0.200	1	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW3 SA71128-03	1009825.04 Phase 100	Ground Water	14-Nov-07 11:05	15-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS												
PAHs by SW846 8270C												
Prepared by method SW846 3510C												
85-01-8	Phenanthrene	BRL	U	µg/l	5.26	0.242	1	SW846 8270C	18-Nov-07	20-Nov-07	7111475	M.B
129-00-0	Pyrene	BRL	U	µg/l	5.26	0.368	1	"	"	"	"	"
Surrogate recoveries:												
321-60-8	*2-Fluorobiphenyl*	*92*		*30-130 %*				"	"	"	"	"
1718-51-0	*Terphenyl-dl4*	*99*		*30-130 %*				"	"	"	"	"
Total Metals by EPA 6000/7000 Series Methods												
7440-22-4	Silver	BRL	U	mg/l	0.0050	0.0020	1	SW846 6010B	27-Nov-07	04-Dec-07	7111877	SA
7440-38-2	Arsenic	BRL	U	mg/l	0.0040	0.0025	1	"	"	"	"	"
7440-41-7	Beryllium	BRL	U	mg/l	0.0020	0.0010	1	"	"	"	"	"
7440-43-9	Cadmium	0.0002	J	mg/l	0.0025	0.0002	1	"	"	"	"	"
7440-47-3	Chromium	0.0026	J	mg/l	0.0050	0.0025	1	"	"	"	"	"
7440-50-8	Copper	0.0038	J	mg/l	0.0050	0.0015	1	"	"	"	"	"
7440-02-0	Nickel	0.0042	J	mg/l	0.0050	0.0005	1	"	"	"	"	"
7439-92-1	Lead	BRL	U	mg/l	0.0075	0.0025	1	"	"	"	"	"
7440-36-0	Antimony	BRL	U	mg/l	0.0060	0.0035	1	"	"	29-Nov-07	"	TBG
7782-49-2	Selenium	BRL	U	mg/l	0.0150	0.0050	1	"	"	04-Dec-07	"	SA
7440-28-0	Thallium	BRL	U	mg/l	0.0050	0.0015	1	"	"	"	"	"
7440-66-6	Zinc	0.0274		mg/l	0.0050	0.0005	1	"	"	"	"	"
Total Metals by EPA 200 Series Methods												
7439-97-6	Mercury	BRL	U	mg/l	0.00020	0.00008	1	EPA 245.1/7470A	27-Nov-07	28-Nov-07	7111878	CRM

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW4 SA71128-04	1009825.04 Phase 100	Ground Water	14-Nov-07 11:15	15-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds												
Volatile Organic Compounds												
Prepared by method SW846 5030 Water MS												
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon	BRL	U	µg/l	1.0	0.4	1	SW 846 8260B	20-Nov-07	21-Nov-07	7111621	jld
67-64-1	Acetone	BRL	U	µg/l	10.0	2.6	1	"	"	"	"	"
107-13-1	Acrylonitrile	BRL	U	µg/l	1.0	0.8	1	"	"	"	"	"
71-43-2	Benzene	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
108-86-1	Bromobenzene	BRL	U	µg/l	1.0	0.7	1	"	"	"	"	"
74-97-5	Bromochloromethane	BRL	U	µg/l	1.0	0.9	1	"	"	"	"	"
75-27-4	Bromodichloromethane	BRL	U	µg/l	1.0	0.9	1	"	"	"	"	"
75-25-2	Bromoform	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
74-83-9	Bromomethane	BRL	U	µg/l	2.0	1.6	1	"	"	"	"	"
78-93-3	2-Butanone (MEK)	BRL	U	µg/l	10.0	2.4	1	"	"	"	"	"
104-51-8	n-Butylbenzene	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
135-98-8	sec-Butylbenzene	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
98-06-6	tert-Butylbenzene	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
75-15-0	Carbon disulfide	BRL	U	µg/l	5.0	0.3	1	"	"	"	"	"
56-23-5	Carbon tetrachloride	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
108-90-7	Chlorobenzene	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
75-00-3	Chloroethane	BRL	U	µg/l	2.0	0.7	1	"	"	"	"	"
67-66-3	Chloroform	BRL	U	µg/l	1.0	0.8	1	"	"	"	"	"
74-87-3	Chloromethane	BRL	U	µg/l	2.0	0.6	1	"	"	"	"	"
95-49-8	2-Chlorotoluene	BRL	U	µg/l	1.0	0.7	1	"	"	"	"	"
106-43-4	4-Chlorotoluene	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloropropane	BRL	U	µg/l	2.0	0.6	1	"	"	"	"	"
124-48-1	Dibromochloromethane	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
106-93-4	1,2-Dibromoethane (EDB)	BRL	U	µg/l	1.0	0.7	1	"	"	"	"	"
74-95-3	Dibromomethane	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
75-71-8	Dichlorodifluoromethane (Freon12)	BRL	U	µg/l	2.0	0.6	1	"	"	"	"	"
75-34-3	1,1-Dichloroethane	BRL	U	µg/l	1.0	0.3	1	"	"	"	"	"
107-06-2	1,2-Dichloroethane	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
75-35-4	1,1-Dichloroethene	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
156-59-2	cis-1,2-Dichloroethene	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL	U	µg/l	1.0	0.9	1	"	"	"	"	"
78-87-5	1,2-Dichloropropane	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
142-28-9	1,3-Dichloropropane	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
594-20-7	2,2-Dichloropropane	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
563-58-6	1,1-Dichloropropene	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
10061-01-5	cis-1,3-Dichloropropene	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
10061-02-6	trans-1,3-Dichloropropene	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
100-41-4	Ethylbenzene	BRL	U	µg/l	1.0	0.3	1	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL	U	µg/l	1.0	0.8	1	"	"	"	"	"
591-78-6	2-Hexanone (MBK)	BRL	U	µg/l	10.0	0.5	1	"	"	"	"	"
98-82-8	Isopropylbenzene	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
99-87-6	4-Isopropyltoluene	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
1634-04-4	Methyl tert-butyl ether	1.0		µg/l	1.0	0.3	1	"	"	"	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	U	µg/l	10.0	0.4	1	"	"	"	"	"
75-09-2	Methylene chloride	BRL	U	µg/l	5.0	0.6	1	"	"	"	"	"
91-20-3	Naphthalene	BRL	U	µg/l	1.0	0.7	1	"	"	"	"	"
103-65-1	n-Propylbenzene	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW4 SA71128-04	1009825.04 Phase 100	Ground Water	14-Nov-07 11:15	15-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds												
Volatile Organic Compounds												
Prepared by method SW846 5030 Water MS												
100-42-5	Styrene	BRL	U	µg/l	1.0	0.4	1	SW 846 8260B	20-Nov-07	21-Nov-07	7111621	jld
630-20-6	1,1,1,2-Tetrachloroethane	BRL	U	µg/l	1.0	0.7	1	"	"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	BRL	U	µg/l	1.0	0.7	1	"	"	"	"	"
127-18-4	Tetrachloroethene	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
108-88-3	Toluene	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
87-61-6	1,2,3-Trichlorobenzene	BRL	U	µg/l	1.0	0.7	1	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL	U	µg/l	1.0	0.7	1	"	"	"	"	"
71-55-6	1,1,1-Trichloroethane	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
79-00-5	1,1,2-Trichloroethane	BRL	U	µg/l	1.0	0.9	1	"	"	"	"	"
79-01-6	Trichloroethene	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
75-69-4	Trichlorofluoromethane (Freon 11)	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
96-18-4	1,2,3-Trichloropropane	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	BRL	U	µg/l	1.0	0.7	1	"	"	"	"	"
108-67-8	1,3,5-Trimethylbenzene	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
75-01-4	Vinyl chloride	BRL	U	µg/l	1.0	0.9	1	"	"	"	"	"
1330-20-7	m,p-Xylene	BRL	U	µg/l	2.0	0.7	1	"	"	"	"	"
95-47-6	o-Xylene	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
109-99-9	Tetrahydrofuran	BRL	U	µg/l	10.0	0.4	1	"	"	"	"	"
60-29-7	Ethyl ether	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
994-05-8	Tert-amyl methyl ether	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
637-92-3	Ethyl tert-butyl ether	BRL	U	µg/l	1.0	0.3	1	"	"	"	"	"
108-20-3	Di-isopropyl ether	BRL	U	µg/l	1.0	0.3	1	"	"	"	"	"
75-65-0	Tert-Butanol / butyl alcohol	BRL	U	µg/l	10.0	7.4	1	"	"	"	"	"
123-91-1	1,4-Dioxane	BRL	U	µg/l	20.0	4.9	1	"	"	"	"	"
110-57-6	trans-1,4-Dichloro-2-butene	BRL	U	µg/l	5.0	2.5	1	"	"	"	"	"
64-17-5	Ethanol	BRL	U	µg/l	500	73.4	1	"	"	"	"	"
Surrogate recoveries:												
460-00-4	*4-Bromofluorobenzene*	*101*		*70-130 %*				"	"	"	"	"
2037-26-5	*Toluene-d8*	*103*		*70-130 %*				"	"	"	"	"
17060-07-0	*1,2-Dichloroethane-d4*	*95*		*70-130 %*				"	"	"	"	"
1868-53-7	*Dibromofluoromethane*	*105*		*70-130 %*				"	"	"	"	"
Semivolatile Organic Compounds by GCMS												
PAHs by SW846 8270C												
Prepared by method SW846 3510C												
83-32-9	Acenaphthene	BRL	U	µg/l	5.26	0.126	1	SW846 8270C	18-Nov-07	20-Nov-07	7111475	M.B
208-96-8	Acenaphthylene	BRL	U	µg/l	5.26	0.158	1	"	"	"	"	"
120-12-7	Anthracene	BRL	U	µg/l	5.26	0.158	1	"	"	"	"	"
56-55-3	Benzo (a) anthracene	BRL	U	µg/l	5.26	0.337	1	"	"	"	"	"
50-32-8	Benzo (a) pyrene	BRL	U	µg/l	5.26	0.179	1	"	"	"	"	"
205-99-2	Benzo (b) fluoranthene	BRL	U	µg/l	5.26	0.695	1	"	"	"	"	"
191-24-2	Benzo (g,h,i) perylene	BRL	U	µg/l	5.26	0.147	1	"	"	"	"	"
207-08-9	Benzo (k) fluoranthene	BRL	U	µg/l	5.26	0.211	1	"	"	"	"	"
218-01-9	Chrysene	BRL	U	µg/l	5.26	0.0737	1	"	"	"	"	"
53-70-3	Dibenzo (a,h) anthracene	BRL	U	µg/l	5.26	0.0842	1	"	"	"	"	"
206-44-0	Fluoranthene	BRL	U	µg/l	5.26	0.126	1	"	"	"	"	"
86-73-7	Fluorene	BRL	U	µg/l	5.26	0.126	1	"	"	"	"	"
193-39-5	Indeno (1,2,3-cd) pyrene	BRL	U	µg/l	5.26	0.242	1	"	"	"	"	"
90-12-0	1-Methylnaphthalene	BRL	U	µg/l	5.26	0.116	1	"	"	"	"	"
91-57-6	2-Methylnaphthalene	BRL	U	µg/l	5.26	0.116	1	"	"	"	"	"
91-20-3	Naphthalene	BRL	U	µg/l	5.26	0.200	1	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW4 SA71128-04	1009825.04 Phase 100	Ground Water	14-Nov-07 11:15	15-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS												
PAHs by SW846 8270C												
Prepared by method SW846 3510C												
85-01-8	Phenanthrene	BRL	U	µg/l	5.26	0.242	1	SW846 8270C	18-Nov-07	20-Nov-07	7111475	M.B
129-00-0	Pyrene	BRL	U	µg/l	5.26	0.368	1	"	"	"	"	"
Surrogate recoveries:												
321-60-8	*2-Fluorobiphenyl*	*80*		*30-130 %*				"	"	"	"	"
1718-51-0	*Terphenyl-dl4*	*89*		*30-130 %*				"	"	"	"	"
Total Metals by EPA 6000/7000 Series Methods												
7440-22-4	Silver	BRL	U	mg/l	0.0050	0.0020	1	SW846 6010B	27-Nov-07	04-Dec-07	7111877	SA
7440-38-2	Arsenic	BRL	U	mg/l	0.0040	0.0025	1	"	"	"	"	"
7440-41-7	Beryllium	BRL	U	mg/l	0.0020	0.0010	1	"	"	"	"	"
7440-43-9	Cadmium	0.0002	J	mg/l	0.0025	0.0002	1	"	"	"	"	"
7440-47-3	Chromium	0.0041	J	mg/l	0.0050	0.0025	1	"	"	"	"	"
7440-50-8	Copper	0.0061		mg/l	0.0050	0.0015	1	"	"	"	"	"
7440-02-0	Nickel	0.0097		mg/l	0.0050	0.0005	1	"	"	"	"	"
7439-92-1	Lead	BRL	U	mg/l	0.0075	0.0025	1	"	"	"	"	"
7440-36-0	Antimony	BRL	U	mg/l	0.0060	0.0035	1	"	"	29-Nov-07	"	TBG
7782-49-2	Selenium	BRL	U	mg/l	0.0150	0.0050	1	"	"	04-Dec-07	"	SA
7440-28-0	Thallium	BRL	U	mg/l	0.0050	0.0015	1	"	"	"	"	"
7440-66-6	Zinc	0.0532		mg/l	0.0050	0.0005	1	"	"	"	"	"
Total Metals by EPA 200 Series Methods												
7439-97-6	Mercury	BRL	U	mg/l	0.00020	0.00008	1	EPA 245.1/7470A	27-Nov-07	28-Nov-07	7111878	CRM

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW5 SA71128-05	1009825.04 Phase 100	Ground Water	14-Nov-07 12:40	15-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds												
Volatile Organic Compounds												
Prepared by method SW846 5030 Water MS												
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon	BRL	U	µg/l	1.0	0.4	1	SW 846 8260B	20-Nov-07	21-Nov-07	7111621	jld
67-64-1	Acetone	BRL	U	µg/l	10.0	2.6	1	"	"	"	"	"
107-13-1	Acrylonitrile	BRL	U	µg/l	1.0	0.8	1	"	"	"	"	"
71-43-2	Benzene	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
108-86-1	Bromobenzene	BRL	U	µg/l	1.0	0.7	1	"	"	"	"	"
74-97-5	Bromochloromethane	BRL	U	µg/l	1.0	0.9	1	"	"	"	"	"
75-27-4	Bromodichloromethane	BRL	U	µg/l	1.0	0.9	1	"	"	"	"	"
75-25-2	Bromoform	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
74-83-9	Bromomethane	BRL	U	µg/l	2.0	1.6	1	"	"	"	"	"
78-93-3	2-Butanone (MEK)	BRL	U	µg/l	10.0	2.4	1	"	"	"	"	"
104-51-8	n-Butylbenzene	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
135-98-8	sec-Butylbenzene	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
98-06-6	tert-Butylbenzene	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
75-15-0	Carbon disulfide	BRL	U	µg/l	5.0	0.3	1	"	"	"	"	"
56-23-5	Carbon tetrachloride	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
108-90-7	Chlorobenzene	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
75-00-3	Chloroethane	BRL	U	µg/l	2.0	0.7	1	"	"	"	"	"
67-66-3	Chloroform	BRL	U	µg/l	1.0	0.8	1	"	"	"	"	"
74-87-3	Chloromethane	BRL	U	µg/l	2.0	0.6	1	"	"	"	"	"
95-49-8	2-Chlorotoluene	BRL	U	µg/l	1.0	0.7	1	"	"	"	"	"
106-43-4	4-Chlorotoluene	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloropropane	BRL	U	µg/l	2.0	0.6	1	"	"	"	"	"
124-48-1	Dibromochloromethane	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
106-93-4	1,2-Dibromoethane (EDB)	BRL	U	µg/l	1.0	0.7	1	"	"	"	"	"
74-95-3	Dibromomethane	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
75-71-8	Dichlorodifluoromethane (Freon12)	BRL	U	µg/l	2.0	0.6	1	"	"	"	"	"
75-34-3	1,1-Dichloroethane	BRL	U	µg/l	1.0	0.3	1	"	"	"	"	"
107-06-2	1,2-Dichloroethane	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
75-35-4	1,1-Dichloroethene	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
156-59-2	cis-1,2-Dichloroethene	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL	U	µg/l	1.0	0.9	1	"	"	"	"	"
78-87-5	1,2-Dichloropropane	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
142-28-9	1,3-Dichloropropane	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
594-20-7	2,2-Dichloropropane	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
563-58-6	1,1-Dichloropropene	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
10061-01-5	cis-1,3-Dichloropropene	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
10061-02-6	trans-1,3-Dichloropropene	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
100-41-4	Ethylbenzene	BRL	U	µg/l	1.0	0.3	1	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL	U	µg/l	1.0	0.8	1	"	"	"	"	"
591-78-6	2-Hexanone (MBK)	BRL	U	µg/l	10.0	0.5	1	"	"	"	"	"
98-82-8	Isopropylbenzene	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
99-87-6	4-Isopropyltoluene	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
1634-04-4	Methyl tert-butyl ether	BRL	U	µg/l	1.0	0.3	1	"	"	"	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	U	µg/l	10.0	0.4	1	"	"	"	"	"
75-09-2	Methylene chloride	BRL	U	µg/l	5.0	0.6	1	"	"	"	"	"
91-20-3	Naphthalene	BRL	U	µg/l	1.0	0.7	1	"	"	"	"	"
103-65-1	n-Propylbenzene	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW5 SA71128-05	1009825.04 Phase 100	Ground Water	14-Nov-07 12:40	15-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds												
Volatile Organic Compounds												
Prepared by method SW846 5030 Water MS												
100-42-5	Styrene	BRL	U	µg/l	1.0	0.4	1	SW 846 8260B	20-Nov-07	21-Nov-07	7111621	jld
630-20-6	1,1,1,2-Tetrachloroethane	BRL	U	µg/l	1.0	0.7	1	"	"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	BRL	U	µg/l	1.0	0.7	1	"	"	"	"	"
127-18-4	Tetrachloroethene	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
108-88-3	Toluene	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
87-61-6	1,2,3-Trichlorobenzene	BRL	U	µg/l	1.0	0.7	1	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL	U	µg/l	1.0	0.7	1	"	"	"	"	"
71-55-6	1,1,1-Trichloroethane	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
79-00-5	1,1,2-Trichloroethane	BRL	U	µg/l	1.0	0.9	1	"	"	"	"	"
79-01-6	Trichloroethene	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
75-69-4	Trichlorofluoromethane (Freon 11)	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
96-18-4	1,2,3-Trichloropropane	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	BRL	U	µg/l	1.0	0.7	1	"	"	"	"	"
108-67-8	1,3,5-Trimethylbenzene	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
75-01-4	Vinyl chloride	BRL	U	µg/l	1.0	0.9	1	"	"	"	"	"
1330-20-7	m,p-Xylene	BRL	U	µg/l	2.0	0.7	1	"	"	"	"	"
95-47-6	o-Xylene	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
109-99-9	Tetrahydrofuran	BRL	U	µg/l	10.0	0.4	1	"	"	"	"	"
60-29-7	Ethyl ether	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
994-05-8	Tert-amyl methyl ether	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
637-92-3	Ethyl tert-butyl ether	BRL	U	µg/l	1.0	0.3	1	"	"	"	"	"
108-20-3	Di-isopropyl ether	BRL	U	µg/l	1.0	0.3	1	"	"	"	"	"
75-65-0	Tert-Butanol / butyl alcohol	BRL	U	µg/l	10.0	7.4	1	"	"	"	"	"
123-91-1	1,4-Dioxane	BRL	U	µg/l	20.0	4.9	1	"	"	"	"	"
110-57-6	trans-1,4-Dichloro-2-butene	BRL	U	µg/l	5.0	2.5	1	"	"	"	"	"
64-17-5	Ethanol	BRL	U	µg/l	500	73.4	1	"	"	"	"	"
Surrogate recoveries:												
460-00-4	*4-Bromofluorobenzene*	*102*		*70-130 %*				"	"	"	"	"
2037-26-5	*Toluene-d8*	*103*		*70-130 %*				"	"	"	"	"
17060-07-0	*1,2-Dichloroethane-d4*	*95*		*70-130 %*				"	"	"	"	"
1868-53-7	*Dibromofluoromethane*	*106*		*70-130 %*				"	"	"	"	"
Semivolatile Organic Compounds by GCMS												
PAHs by SW846 8270C												
Prepared by method SW846 3510C												
83-32-9	Acenaphthene	BRL	U	µg/l	5.56	0.133	1	SW846 8270C	18-Nov-07	20-Nov-07	7111475	M.B
208-96-8	Acenaphthylene	BRL	U	µg/l	5.56	0.167	1	"	"	"	"	"
120-12-7	Anthracene	BRL	U	µg/l	5.56	0.167	1	"	"	"	"	"
56-55-3	Benzo (a) anthracene	BRL	U	µg/l	5.56	0.356	1	"	"	"	"	"
50-32-8	Benzo (a) pyrene	BRL	U	µg/l	5.56	0.189	1	"	"	"	"	"
205-99-2	Benzo (b) fluoranthene	BRL	U	µg/l	5.56	0.733	1	"	"	"	"	"
191-24-2	Benzo (g,h,i) perylene	BRL	U	µg/l	5.56	0.156	1	"	"	"	"	"
207-08-9	Benzo (k) fluoranthene	BRL	U	µg/l	5.56	0.222	1	"	"	"	"	"
218-01-9	Chrysene	BRL	U	µg/l	5.56	0.0778	1	"	"	"	"	"
53-70-3	Dibenzo (a,h) anthracene	BRL	U	µg/l	5.56	0.0889	1	"	"	"	"	"
206-44-0	Fluoranthene	BRL	U	µg/l	5.56	0.133	1	"	"	"	"	"
86-73-7	Fluorene	BRL	U	µg/l	5.56	0.133	1	"	"	"	"	"
193-39-5	Indeno (1,2,3-cd) pyrene	BRL	U	µg/l	5.56	0.256	1	"	"	"	"	"
90-12-0	1-Methylnaphthalene	BRL	U	µg/l	5.56	0.122	1	"	"	"	"	"
91-57-6	2-Methylnaphthalene	BRL	U	µg/l	5.56	0.122	1	"	"	"	"	"
91-20-3	Naphthalene	BRL	U	µg/l	5.56	0.211	1	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW5 SA71128-05	1009825.04 Phase 100	Ground Water	14-Nov-07 12:40	15-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS												
PAHs by SW846 8270C												
Prepared by method SW846 3510C												
85-01-8	Phenanthrene	BRL	U	µg/l	5.56	0.256	1	SW846 8270C	18-Nov-07	20-Nov-07	7111475	M.B
129-00-0	Pyrene	BRL	U	µg/l	5.56	0.389	1	"	"	"	"	"
Surrogate recoveries:												
321-60-8	*2-Fluorobiphenyl*	*83*		*30-130 %*				"	"	"	"	"
1718-51-0	*Terphenyl-dl4*	*90*		*30-130 %*				"	"	"	"	"
Total Metals by EPA 6000/7000 Series Methods												
7440-22-4	Silver	BRL	U	mg/l	0.0050	0.0020	1	SW846 6010B	27-Nov-07	04-Dec-07	7111877	SA
7440-38-2	Arsenic	0.0030	J	mg/l	0.0040	0.0025	1	"	"	"	"	"
7440-41-7	Beryllium	BRL	U	mg/l	0.0020	0.0010	1	"	"	"	"	"
7440-43-9	Cadmium	0.0002	J	mg/l	0.0025	0.0002	1	"	"	"	"	"
7440-47-3	Chromium	BRL	U	mg/l	0.0050	0.0025	1	"	"	"	"	"
7440-50-8	Copper	0.0018	J	mg/l	0.0050	0.0015	1	"	"	"	"	"
7440-02-0	Nickel	0.0043	J	mg/l	0.0050	0.0005	1	"	"	"	"	"
7439-92-1	Lead	BRL	U	mg/l	0.0075	0.0025	1	"	"	"	"	"
7440-36-0	Antimony	BRL	U	mg/l	0.0060	0.0035	1	"	"	29-Nov-07	"	TBG
7782-49-2	Selenium	BRL	U	mg/l	0.0150	0.0050	1	"	"	04-Dec-07	"	SA
7440-28-0	Thallium	BRL	U	mg/l	0.0050	0.0015	1	"	"	"	"	"
7440-66-6	Zinc	0.0223		mg/l	0.0050	0.0005	1	"	"	"	"	"
Total Metals by EPA 200 Series Methods												
7439-97-6	Mercury	BRL	U	mg/l	0.00020	0.00008	1	EPA 245.1/7470A	27-Nov-07	28-Nov-07	7111878	CRM

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Trip Blank SA71128-06	1009825.04 Phase 100	Aqueous	14-Nov-07 00:00	15-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds												
Volatile Organic Compounds												
Prepared by method SW846 5030 Water MS												
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon	BRL	U	µg/l	1.0	0.4	1	SW 846 8260B	26-Nov-07	27-Nov-07	7111893	adu
67-64-1	Acetone	BRL	U	µg/l	10.0	2.6	1	"	"	"	"	"
107-13-1	Acrylonitrile	BRL	U	µg/l	1.0	0.8	1	"	"	"	"	"
71-43-2	Benzene	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
108-86-1	Bromobenzene	BRL	U	µg/l	1.0	0.7	1	"	"	"	"	"
74-97-5	Bromochloromethane	BRL	U	µg/l	1.0	0.9	1	"	"	"	"	"
75-27-4	Bromodichloromethane	BRL	U	µg/l	1.0	0.9	1	"	"	"	"	"
75-25-2	Bromoform	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
74-83-9	Bromomethane	BRL	U	µg/l	2.0	1.6	1	"	"	"	"	"
78-93-3	2-Butanone (MEK)	BRL	U	µg/l	10.0	2.4	1	"	"	"	"	"
104-51-8	n-Butylbenzene	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
135-98-8	sec-Butylbenzene	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
98-06-6	tert-Butylbenzene	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
75-15-0	Carbon disulfide	BRL	U	µg/l	5.0	0.3	1	"	"	"	"	"
56-23-5	Carbon tetrachloride	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
108-90-7	Chlorobenzene	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
75-00-3	Chloroethane	BRL	U	µg/l	2.0	0.7	1	"	"	"	"	"
67-66-3	Chloroform	BRL	U	µg/l	1.0	0.8	1	"	"	"	"	"
74-87-3	Chloromethane	BRL	U	µg/l	2.0	0.6	1	"	"	"	"	"
95-49-8	2-Chlorotoluene	BRL	U	µg/l	1.0	0.7	1	"	"	"	"	"
106-43-4	4-Chlorotoluene	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloropropane	BRL	U	µg/l	2.0	0.6	1	"	"	"	"	"
124-48-1	Dibromochloromethane	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
106-93-4	1,2-Dibromoethane (EDB)	BRL	U	µg/l	1.0	0.7	1	"	"	"	"	"
74-95-3	Dibromomethane	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
75-71-8	Dichlorodifluoromethane (Freon12)	BRL	U	µg/l	2.0	0.6	1	"	"	"	"	"
75-34-3	1,1-Dichloroethane	BRL	U	µg/l	1.0	0.3	1	"	"	"	"	"
107-06-2	1,2-Dichloroethane	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
75-35-4	1,1-Dichloroethene	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
156-59-2	cis-1,2-Dichloroethene	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL	U	µg/l	1.0	0.9	1	"	"	"	"	"
78-87-5	1,2-Dichloropropane	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
142-28-9	1,3-Dichloropropane	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
594-20-7	2,2-Dichloropropane	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
563-58-6	1,1-Dichloropropene	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
10061-01-5	cis-1,3-Dichloropropene	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
10061-02-6	trans-1,3-Dichloropropene	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
100-41-4	Ethylbenzene	BRL	U	µg/l	1.0	0.3	1	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL	U	µg/l	1.0	0.8	1	"	"	"	"	"
591-78-6	2-Hexanone (MBK)	BRL	U	µg/l	10.0	0.5	1	"	"	"	"	"
98-82-8	Isopropylbenzene	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
99-87-6	4-Isopropyltoluene	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
1634-04-4	Methyl tert-butyl ether	BRL	U	µg/l	1.0	0.3	1	"	"	"	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	U	µg/l	10.0	0.4	1	"	"	"	"	"
75-09-2	Methylene chloride	BRL	U	µg/l	5.0	0.6	1	"	"	"	"	"
91-20-3	Naphthalene	BRL	U	µg/l	1.0	0.7	1	"	"	"	"	"
103-65-1	n-Propylbenzene	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Trip Blank SA71128-06	1009825.04 Phase 100	Aqueous	14-Nov-07 00:00	15-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds												
Volatile Organic Compounds												
Prepared by method SW846 5030 Water MS												
100-42-5	Styrene	BRL	U	µg/l	1.0	0.4	1	SW 846 8260B	26-Nov-07	27-Nov-07	7111893	adu
630-20-6	1,1,1,2-Tetrachloroethane	BRL	U	µg/l	1.0	0.7	1	"	"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	BRL	U	µg/l	1.0	0.7	1	"	"	"	"	"
127-18-4	Tetrachloroethene	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
108-88-3	Toluene	BRL	U	µg/l	1.0	0.6	1	"	"	"	"	"
87-61-6	1,2,3-Trichlorobenzene	BRL	U	µg/l	1.0	0.7	1	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL	U	µg/l	1.0	0.7	1	"	"	"	"	"
71-55-6	1,1,1-Trichloroethane	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
79-00-5	1,1,2-Trichloroethane	BRL	U	µg/l	1.0	0.9	1	"	"	"	"	"
79-01-6	Trichloroethene	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
75-69-4	Trichlorofluoromethane (Freon 11)	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
96-18-4	1,2,3-Trichloropropane	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	BRL	U	µg/l	1.0	0.7	1	"	"	"	"	"
108-67-8	1,3,5-Trimethylbenzene	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
75-01-4	Vinyl chloride	BRL	U	µg/l	1.0	0.9	1	"	"	"	"	"
1330-20-7	m,p-Xylene	BRL	U	µg/l	2.0	0.7	1	"	"	"	"	"
95-47-6	o-Xylene	BRL	U	µg/l	1.0	0.5	1	"	"	"	"	"
109-99-9	Tetrahydrofuran	BRL	U	µg/l	10.0	0.4	1	"	"	"	"	"
60-29-7	Ethyl ether	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
994-05-8	Tert-amyl methyl ether	BRL	U	µg/l	1.0	0.4	1	"	"	"	"	"
637-92-3	Ethyl tert-butyl ether	BRL	U	µg/l	1.0	0.3	1	"	"	"	"	"
108-20-3	Di-isopropyl ether	BRL	U	µg/l	1.0	0.3	1	"	"	"	"	"
75-65-0	Tert-Butanol / butyl alcohol	BRL	U	µg/l	10.0	7.4	1	"	"	"	"	"
123-91-1	1,4-Dioxane	BRL	U	µg/l	20.0	4.9	1	"	"	"	"	"
110-57-6	trans-1,4-Dichloro-2-butene	BRL	U	µg/l	5.0	2.5	1	"	"	"	"	"
64-17-5	Ethanol	BRL	U	µg/l	500	73.4	1	"	"	"	"	"
Surrogate recoveries:												
460-00-4	*4-Bromofluorobenzene*	*103*			*70-130 %*			"	"	"	"	"
2037-26-5	*Toluene-d8*	*107*			*70-130 %*			"	"	"	"	"
17060-07-0	*1,2-Dichloroethane-d4*	*127*			*70-130 %*			"	"	"	"	"
1868-53-7	*Dibromofluoromethane*	*116*			*70-130 %*			"	"	"	"	"

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111621 - SW846 5030 Water MS										
Blank (7111621-BLK1)										
Prepared & Analyzed: 20-Nov-07										
1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL	U	µg/l	1.0						
Acetone	BRL	U	µg/l	10.0						
Acrylonitrile	BRL	U	µg/l	1.0						
Benzene	BRL	U	µg/l	1.0						
Bromobenzene	BRL	U	µg/l	1.0						
Bromochloromethane	BRL	U	µg/l	1.0						
Bromodichloromethane	BRL	U	µg/l	1.0						
Bromoform	BRL	U	µg/l	1.0						
Bromomethane	BRL	U	µg/l	2.0						
2-Butanone (MEK)	BRL	U	µg/l	10.0						
n-Butylbenzene	BRL	U	µg/l	1.0						
sec-Butylbenzene	BRL	U	µg/l	1.0						
tert-Butylbenzene	BRL	U	µg/l	1.0						
Carbon disulfide	BRL	U	µg/l	5.0						
Carbon tetrachloride	BRL	U	µg/l	1.0						
Chlorobenzene	BRL	U	µg/l	1.0						
Chloroethane	BRL	U	µg/l	2.0						
Chloroform	BRL	U	µg/l	1.0						
Chloromethane	BRL	U	µg/l	2.0						
2-Chlorotoluene	BRL	U	µg/l	1.0						
4-Chlorotoluene	BRL	U	µg/l	1.0						
1,2-Dibromo-3-chloropropane	BRL	U	µg/l	2.0						
Dibromochloromethane	BRL	U	µg/l	1.0						
1,2-Dibromoethane (EDB)	BRL	U	µg/l	1.0						
Dibromomethane	BRL	U	µg/l	1.0						
1,2-Dichlorobenzene	BRL	U	µg/l	1.0						
1,3-Dichlorobenzene	BRL	U	µg/l	1.0						
1,4-Dichlorobenzene	BRL	U	µg/l	1.0						
Dichlorodifluoromethane (Freon12)	BRL	U	µg/l	2.0						
1,1-Dichloroethane	BRL	U	µg/l	1.0						
1,2-Dichloroethane	BRL	U	µg/l	1.0						
1,1-Dichloroethene	BRL	U	µg/l	1.0						
cis-1,2-Dichloroethene	BRL	U	µg/l	1.0						
trans-1,2-Dichloroethene	BRL	U	µg/l	1.0						
1,2-Dichloropropane	BRL	U	µg/l	1.0						
1,3-Dichloropropane	BRL	U	µg/l	1.0						
2,2-Dichloropropane	BRL	U	µg/l	1.0						
1,1-Dichloropropene	BRL	U	µg/l	1.0						
cis-1,3-Dichloropropene	BRL	U	µg/l	1.0						
trans-1,3-Dichloropropene	BRL	U	µg/l	1.0						
Ethylbenzene	BRL	U	µg/l	1.0						
Hexachlorobutadiene	BRL	U	µg/l	1.0						
2-Hexanone (MBK)	BRL	U	µg/l	10.0						
Isopropylbenzene	BRL	U	µg/l	1.0						
4-Isopropyltoluene	BRL	U	µg/l	1.0						
Methyl tert-butyl ether	BRL	U	µg/l	1.0						
4-Methyl-2-pentanone (MIBK)	BRL	U	µg/l	10.0						
Methylene chloride	BRL	U	µg/l	5.0						
Naphthalene	BRL	U	µg/l	1.0						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111621 - SW846 5030 Water MS										
Blank (7111621-BLK1)										
Prepared & Analyzed: 20-Nov-07										
n-Propylbenzene	BRL	U	µg/l	1.0						
Styrene	BRL	U	µg/l	1.0						
1,1,1,2-Tetrachloroethane	BRL	U	µg/l	1.0						
1,1,2,2-Tetrachloroethane	BRL	U	µg/l	1.0						
Tetrachloroethene	BRL	U	µg/l	1.0						
Toluene	BRL	U	µg/l	1.0						
1,2,3-Trichlorobenzene	BRL	U	µg/l	1.0						
1,2,4-Trichlorobenzene	BRL	U	µg/l	1.0						
1,1,1-Trichloroethane	BRL	U	µg/l	1.0						
1,1,2-Trichloroethane	BRL	U	µg/l	1.0						
Trichloroethene	BRL	U	µg/l	1.0						
Trichlorofluoromethane (Freon 11)	BRL	U	µg/l	1.0						
1,2,3-Trichloropropane	BRL	U	µg/l	1.0						
1,2,4-Trimethylbenzene	BRL	U	µg/l	1.0						
1,3,5-Trimethylbenzene	BRL	U	µg/l	1.0						
Vinyl chloride	BRL	U	µg/l	1.0						
m,p-Xylene	BRL	U	µg/l	2.0						
o-Xylene	BRL	U	µg/l	1.0						
Tetrahydrofuran	BRL	U	µg/l	10.0						
Ethyl ether	BRL	U	µg/l	1.0						
Tert-amyl methyl ether	BRL	U	µg/l	1.0						
Ethyl tert-butyl ether	BRL	U	µg/l	1.0						
Di-isopropyl ether	BRL	U	µg/l	1.0						
Tert-Butanol / butyl alcohol	BRL	U	µg/l	10.0						
1,4-Dioxane	BRL	U	µg/l	20.0						
trans-1,4-Dichloro-2-butene	BRL	U	µg/l	5.0						
Ethanol	BRL	U	µg/l	500						
Surrogate: 4-Bromofluorobenzene	*50.6*		µg/l		*50.0*		*101*	*70-130*		
Surrogate: Toluene-d8	*51.1*		µg/l		*50.0*		*102*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*47.7*		µg/l		*50.0*		*95*	*70-130*		
Surrogate: Dibromofluoromethane	*51.9*		µg/l		*50.0*		*104*	*70-130*		
LCS (7111621-BS1)										
Prepared: 20-Nov-07 Analyzed: 21-Nov-07										
1,1,2-Trichlorotrifluoroethane (Freon 113)	21.8		µg/l		20.0		109	70-130		
Acetone	14.8		µg/l		20.0		74	0-166		
Acrylonitrile	17.5		µg/l		20.0		88	70-130		
Benzene	18.7		µg/l		20.0		93	70-130		
Bromobenzene	21.0		µg/l		20.0		105	70-130		
Bromochloromethane	21.0		µg/l		20.0		105	70-130		
Bromodichloromethane	19.2		µg/l		20.0		96	70-130		
Bromoform	18.5		µg/l		20.0		92	70-130		
Bromomethane	17.9		µg/l		20.0		89	14-172		
2-Butanone (MEK)	15.3		µg/l		20.0		76	28.6-137		
n-Butylbenzene	17.0		µg/l		20.0		85	70-130		
sec-Butylbenzene	19.9		µg/l		20.0		99	70-130		
tert-Butylbenzene	20.2		µg/l		20.0		101	70-130		
Carbon disulfide	20.7		µg/l		20.0		103	70-130		
Carbon tetrachloride	20.7		µg/l		20.0		103	70-130		
Chlorobenzene	20.2		µg/l		20.0		101	70-130		
Chloroethane	16.3		µg/l		20.0		82	59.9-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111621 - SW846 5030 Water MS										
LCS (7111621-BS1)										
Prepared: 20-Nov-07 Analyzed: 21-Nov-07										
Chloroform	18.8		µg/l		20.0		94	70-130		
Chloromethane	18.2		µg/l		20.0		91	70-130		
2-Chlorotoluene	19.3		µg/l		20.0		96	70-130		
4-Chlorotoluene	19.5		µg/l		20.0		98	70-130		
1,2-Dibromo-3-chloropropane	15.0		µg/l		20.0		75	70-130		
Dibromochloromethane	19.2		µg/l		20.0		96	70-130		
1,2-Dibromoethane (EDB)	20.0		µg/l		20.0		100	70-130		
Dibromomethane	19.5		µg/l		20.0		98	70-130		
1,2-Dichlorobenzene	18.1		µg/l		20.0		90	70-130		
1,3-Dichlorobenzene	21.4		µg/l		20.0		107	70-130		
1,4-Dichlorobenzene	18.1		µg/l		20.0		90	70-130		
Dichlorodifluoromethane (Freon12)	21.0		µg/l		20.0		105	59.1-169		
1,1-Dichloroethane	18.7		µg/l		20.0		94	70-130		
1,2-Dichloroethane	17.3		µg/l		20.0		86	70-130		
1,1-Dichloroethene	19.0		µg/l		20.0		95	70-130		
cis-1,2-Dichloroethene	20.4		µg/l		20.0		102	70-130		
trans-1,2-Dichloroethene	19.7		µg/l		20.0		98	70-130		
1,2-Dichloropropane	17.9		µg/l		20.0		90	70-130		
1,3-Dichloropropane	18.6		µg/l		20.0		93	70-130		
2,2-Dichloropropane	15.2		µg/l		20.0		76	70-130		
1,1-Dichloropropene	17.8		µg/l		20.0		89	70-130		
cis-1,3-Dichloropropene	17.3		µg/l		20.0		86	70-130		
trans-1,3-Dichloropropene	17.2		µg/l		20.0		86	70-130		
Ethylbenzene	19.1		µg/l		20.0		96	70-130		
Hexachlorobutadiene	16.8		µg/l		20.0		84	58.8-136		
2-Hexanone (MBK)	15.2		µg/l		20.0		76	70-130		
Isopropylbenzene	18.3		µg/l		20.0		92	70-130		
4-Isopropyltoluene	17.8		µg/l		20.0		89	70-130		
Methyl tert-butyl ether	17.4		µg/l		20.0		87	70-130		
4-Methyl-2-pentanone (MIBK)	16.1		µg/l		20.0		81	63.2-130		
Methylene chloride	18.5		µg/l		20.0		92	70-130		
Naphthalene	18.7		µg/l		20.0		94	70-130		
n-Propylbenzene	19.3		µg/l		20.0		96	70-130		
Styrene	20.5		µg/l		20.0		103	70-130		
1,1,1,2-Tetrachloroethane	20.2		µg/l		20.0		101	70-130		
1,1,2,2-Tetrachloroethane	17.9		µg/l		20.0		89	70-130		
Tetrachloroethene	20.9		µg/l		20.0		105	70-130		
Toluene	19.1		µg/l		20.0		96	70-130		
1,2,3-Trichlorobenzene	18.2		µg/l		20.0		91	70-130		
1,2,4-Trichlorobenzene	18.2		µg/l		20.0		91	70-130		
1,1,1-Trichloroethane	19.5		µg/l		20.0		97	70-130		
1,1,2-Trichloroethane	19.3		µg/l		20.0		96	70-130		
Trichloroethene	19.0		µg/l		20.0		95	70-130		
Trichlorofluoromethane (Freon 11)	19.9		µg/l		20.0		100	70-136		
1,2,3-Trichloropropane	19.9		µg/l		20.0		100	70-130		
1,2,4-Trimethylbenzene	20.6		µg/l		20.0		103	70-130		
1,3,5-Trimethylbenzene	20.1		µg/l		20.0		101	70-130		
Vinyl chloride	21.3		µg/l		20.0		107	70-130		
m,p-Xylene	39.6		µg/l		40.0		99	70-130		

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111621 - SW846 5030 Water MS										
LCS (7111621-BS1)										
Prepared: 20-Nov-07 Analyzed: 21-Nov-07										
o-Xylene	20.8		µg/l		20.0		104	70-130		
Tetrahydrofuran	15.6		µg/l		20.0		78	70-130		
Ethyl ether	19.1		µg/l		20.0		95	70-130		
Tert-amyl methyl ether	17.1		µg/l		20.0		85	70-130		
Ethyl tert-butyl ether	18.3		µg/l		20.0		92	70-130		
Di-isopropyl ether	17.4		µg/l		20.0		87	70-130		
Tert-Butanol / butyl alcohol	154		µg/l		200		77	70-130		
1,4-Dioxane	194		µg/l		200		97	42.2-144		
trans-1,4-Dichloro-2-butene	14.6		µg/l		20.0		73	70-130		
Ethanol	352		µg/l		400		88	70-130		
Surrogate: 4-Bromofluorobenzene	*53.5*		µg/l		*50.0*		*107*	*70-130*		
Surrogate: Toluene-d8	*51.9*		µg/l		*50.0*		*104*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*46.8*		µg/l		*50.0*		*94*	*70-130*		
Surrogate: Dibromofluoromethane	*52.0*		µg/l		*50.0*		*104*	*70-130*		
LCS Dup (7111621-BSD1)										
Prepared: 20-Nov-07 Analyzed: 21-Nov-07										
1,1,2-Trichlorotrifluoroethane (Freon 113)	21.0		µg/l		20.0		105	70-130	3	25
Acetone	15.0		µg/l		20.0		75	0-166	2	50
Acrylonitrile	17.7		µg/l		20.0		89	70-130	1	25
Benzene	18.4		µg/l		20.0		92	70-130	1	25
Bromobenzene	20.9		µg/l		20.0		105	70-130	0.4	25
Bromochloromethane	20.6		µg/l		20.0		103	70-130	2	25
Bromodichloromethane	19.0		µg/l		20.0		95	70-130	0.6	25
Bromoform	18.1		µg/l		20.0		90	70-130	2	25
Bromomethane	18.8		µg/l		20.0		94	14-172	5	50
2-Butanone (MEK)	15.4		µg/l		20.0		77	28.6-137	0.7	50
n-Butylbenzene	16.2		µg/l		20.0		81	70-130	5	25
sec-Butylbenzene	19.6		µg/l		20.0		98	70-130	1	25
tert-Butylbenzene	20.1		µg/l		20.0		100	70-130	0.4	25
Carbon disulfide	20.4		µg/l		20.0		102	70-130	1	25
Carbon tetrachloride	20.9		µg/l		20.0		104	70-130	1	25
Chlorobenzene	20.0		µg/l		20.0		100	70-130	0.6	25
Chloroethane	16.0		µg/l		20.0		80	59.9-130	2	50
Chloroform	18.9		µg/l		20.0		95	70-130	0.8	25
Chloromethane	17.8		µg/l		20.0		89	70-130	2	25
2-Chlorotoluene	19.2		µg/l		20.0		96	70-130	0.8	25
4-Chlorotoluene	19.3		µg/l		20.0		96	70-130	1	25
1,2-Dibromo-3-chloropropane	14.7		µg/l		20.0		74	70-130	2	25
Dibromochloromethane	19.2		µg/l		20.0		96	70-130	0	50
1,2-Dibromoethane (EDB)	19.9		µg/l		20.0		100	70-130	0.6	25
Dibromomethane	19.0		µg/l		20.0		95	70-130	3	25
1,2-Dichlorobenzene	18.0		µg/l		20.0		90	70-130	0.7	25
1,3-Dichlorobenzene	21.2		µg/l		20.0		106	70-130	1	25
1,4-Dichlorobenzene	17.6		µg/l		20.0		88	70-130	3	25
Dichlorodifluoromethane (Freon12)	20.4		µg/l		20.0		102	59.1-169	3	50
1,1-Dichloroethane	18.4		µg/l		20.0		92	70-130	2	25
1,2-Dichloroethane	17.3		µg/l		20.0		87	70-130	0.5	25
1,1-Dichloroethene	18.8		µg/l		20.0		94	70-130	1	25
cis-1,2-Dichloroethene	20.5		µg/l		20.0		102	70-130	0.2	25
trans-1,2-Dichloroethene	19.6		µg/l		20.0		98	70-130	0.7	25

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111621 - SW846 5030 Water MS										
LCS Dup (7111621-BSD1)										
Prepared: 20-Nov-07 Analyzed: 21-Nov-07										
1,2-Dichloropropane	17.8		µg/l		20.0		89	70-130	0.4	25
1,3-Dichloropropane	18.6		µg/l		20.0		93	70-130	0.4	25
2,2-Dichloropropane	15.0		µg/l		20.0		75	70-130	1	25
1,1-Dichloropropene	17.5		µg/l		20.0		87	70-130	2	25
cis-1,3-Dichloropropene	17.1		µg/l		20.0		86	70-130	0.8	25
trans-1,3-Dichloropropene	17.1		µg/l		20.0		86	70-130	0.6	25
Ethylbenzene	19.0		µg/l		20.0		95	70-130	0.7	25
Hexachlorobutadiene	16.1		µg/l		20.0		80	58.8-136	4	50
2-Hexanone (MBK)	14.9		µg/l		20.0		74	70-130	2	25
Isopropylbenzene	18.4		µg/l		20.0		92	70-130	0.2	25
4-Isopropyltoluene	17.1		µg/l		20.0		86	70-130	4	25
Methyl tert-butyl ether	17.5		µg/l		20.0		88	70-130	0.7	25
4-Methyl-2-pentanone (MIBK)	15.9		µg/l		20.0		80	63.2-130	1	50
Methylene chloride	18.7		µg/l		20.0		93	70-130	1	25
Naphthalene	17.8		µg/l		20.0		89	70-130	5	25
n-Propylbenzene	18.8		µg/l		20.0		94	70-130	3	25
Styrene	20.5		µg/l		20.0		102	70-130	0.1	25
1,1,1,2-Tetrachloroethane	20.1		µg/l		20.0		100	70-130	0.7	25
1,1,2,2-Tetrachloroethane	17.8		µg/l		20.0		89	70-130	0.6	25
Tetrachloroethene	20.5		µg/l		20.0		103	70-130	2	25
Toluene	18.9		µg/l		20.0		95	70-130	0.9	25
1,2,3-Trichlorobenzene	17.8		µg/l		20.0		89	70-130	2	25
1,2,4-Trichlorobenzene	17.7		µg/l		20.0		88	70-130	3	25
1,1,1-Trichloroethane	19.0		µg/l		20.0		95	70-130	2	25
1,1,2-Trichloroethane	19.1		µg/l		20.0		95	70-130	1	25
Trichloroethene	19.0		µg/l		20.0		95	70-130	0	25
Trichlorofluoromethane (Freon 11)	19.3		µg/l		20.0		96	70-136	3	50
1,2,3-Trichloropropane	19.6		µg/l		20.0		98	70-130	1	25
1,2,4-Trimethylbenzene	20.2		µg/l		20.0		101	70-130	2	25
1,3,5-Trimethylbenzene	19.8		µg/l		20.0		99	70-130	2	25
Vinyl chloride	21.4		µg/l		20.0		107	70-130	0.05	25
m,p-Xylene	39.5		µg/l		40.0		99	70-130	0.3	25
o-Xylene	20.4		µg/l		20.0		102	70-130	2	25
Tetrahydrofuran	15.5		µg/l		20.0		78	70-130	0.6	25
Ethyl ether	18.7		µg/l		20.0		93	70-130	2	50
Tert-amyl methyl ether	17.4		µg/l		20.0		87	70-130	2	25
Ethyl tert-butyl ether	18.6		µg/l		20.0		93	70-130	2	25
Di-isopropyl ether	17.4		µg/l		20.0		87	70-130	0.3	25
Tert-Butanol / butyl alcohol	156		µg/l		200		78	70-130	1	25
1,4-Dioxane	196		µg/l		200		98	42.2-144	0.6	25
trans-1,4-Dichloro-2-butene	14.7		µg/l		20.0		74	70-130	1	25
Ethanol	352		µg/l		400		88	70-130	0.03	30
Surrogate: 4-Bromofluorobenzene	*54.2*		µg/l		*50.0*		*108*	*70-130*		
Surrogate: Toluene-d8	*51.9*		µg/l		*50.0*		*104*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*46.4*		µg/l		*50.0*		*93*	*70-130*		
Surrogate: Dibromofluoromethane	*51.8*		µg/l		*50.0*		*104*	*70-130*		
Matrix Spike (7111621-MS1) **Source: SA71128-01**										
Prepared: 20-Nov-07 Analyzed: 21-Nov-07										
Benzene	15.8		µg/l		20.0	BRL	79	70-130		
Chlorobenzene	17.4		µg/l		20.0	BRL	87	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111621 - SW846 5030 Water MS										
Matrix Spike (7111621-MS1) **Source: SA71128-01**										
Prepared: 20-Nov-07 Analyzed: 21-Nov-07										
1,1-Dichloroethene	17.5		µg/l		20.0	BRL	88	70-130		
Toluene	16.3		µg/l		20.0	BRL	82	70-130		
Trichloroethene	17.2		µg/l		20.0	BRL	86	70-130		
Surrogate: 4-Bromofluorobenzene	*51.6*		µg/l		*50.0*		*103*	*70-130*		
Surrogate: Toluene-d8	*51.5*		µg/l		*50.0*		*103*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*47.2*		µg/l		*50.0*		*94*	*70-130*		
Surrogate: Dibromofluoromethane	*52.5*		µg/l		*50.0*		*105*	*70-130*		
Matrix Spike Dup (7111621-MSD1) **Source: SA71128-01**										
Prepared: 20-Nov-07 Analyzed: 21-Nov-07										
Benzene	15.8		µg/l		20.0	BRL	79	70-130	0	30
Chlorobenzene	17.4		µg/l		20.0	BRL	87	70-130	0.5	30
1,1-Dichloroethene	17.8		µg/l		20.0	BRL	89	70-130	2	30
Toluene	16.6		µg/l		20.0	BRL	83	70-130	2	30
Trichloroethene	17.2		µg/l		20.0	BRL	86	70-130	0.2	30
Surrogate: 4-Bromofluorobenzene	*51.7*		µg/l		*50.0*		*103*	*70-130*		
Surrogate: Toluene-d8	*51.7*		µg/l		*50.0*		*103*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*47.3*		µg/l		*50.0*		*95*	*70-130*		
Surrogate: Dibromofluoromethane	*52.3*		µg/l		*50.0*		*105*	*70-130*		
Batch 7111893 - SW846 5030 Water MS										
Blank (7111893-BLK1)										
Prepared: 26-Nov-07 Analyzed: 27-Nov-07										
1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL	U	µg/l	1.0						
Acetone	BRL	U	µg/l	10.0						
Acrylonitrile	BRL	U	µg/l	1.0						
Benzene	BRL	U	µg/l	1.0						
Bromobenzene	BRL	U	µg/l	1.0						
Bromochloromethane	BRL	U	µg/l	1.0						
Bromodichloromethane	BRL	U	µg/l	1.0						
Bromoform	BRL	U	µg/l	1.0						
Bromomethane	BRL	U	µg/l	2.0						
2-Butanone (MEK)	BRL	U	µg/l	10.0						
n-Butylbenzene	BRL	U	µg/l	1.0						
sec-Butylbenzene	BRL	U	µg/l	1.0						
tert-Butylbenzene	BRL	U	µg/l	1.0						
Carbon disulfide	BRL	U	µg/l	5.0						
Carbon tetrachloride	BRL	U	µg/l	1.0						
Chlorobenzene	BRL	U	µg/l	1.0						
Chloroethane	BRL	U	µg/l	2.0						
Chloroform	BRL	U	µg/l	1.0						
Chloromethane	BRL	U	µg/l	2.0						
2-Chlorotoluene	BRL	U	µg/l	1.0						
4-Chlorotoluene	BRL	U	µg/l	1.0						
1,2-Dibromo-3-chloropropane	BRL	U	µg/l	2.0						
Dibromochloromethane	BRL	U	µg/l	1.0						
1,2-Dibromoethane (EDB)	BRL	U	µg/l	1.0						
Dibromomethane	BRL	U	µg/l	1.0						
1,2-Dichlorobenzene	BRL	U	µg/l	1.0						
1,3-Dichlorobenzene	BRL	U	µg/l	1.0						
1,4-Dichlorobenzene	BRL	U	µg/l	1.0						
Dichlorodifluoromethane (Freon12)	BRL	U	µg/l	2.0						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111893 - SW846 5030 Water MS										
Blank (7111893-BLK1)										
Prepared: 26-Nov-07 Analyzed: 27-Nov-07										
1,1-Dichloroethane	BRL	U	µg/l	1.0						
1,2-Dichloroethane	BRL	U	µg/l	1.0						
1,1-Dichloroethene	BRL	U	µg/l	1.0						
cis-1,2-Dichloroethene	BRL	U	µg/l	1.0						
trans-1,2-Dichloroethene	BRL	U	µg/l	1.0						
1,2-Dichloropropane	BRL	U	µg/l	1.0						
1,3-Dichloropropane	BRL	U	µg/l	1.0						
2,2-Dichloropropane	BRL	U	µg/l	1.0						
1,1-Dichloropropene	BRL	U	µg/l	1.0						
cis-1,3-Dichloropropene	BRL	U	µg/l	1.0						
trans-1,3-Dichloropropene	BRL	U	µg/l	1.0						
Ethylbenzene	BRL	U	µg/l	1.0						
Hexachlorobutadiene	BRL	U	µg/l	1.0						
2-Hexanone (MBK)	BRL	U	µg/l	10.0						
Isopropylbenzene	BRL	U	µg/l	1.0						
4-Isopropyltoluene	BRL	U	µg/l	1.0						
Methyl tert-butyl ether	BRL	U	µg/l	1.0						
4-Methyl-2-pentanone (MIBK)	BRL	U	µg/l	10.0						
Methylene chloride	BRL	U	µg/l	5.0						
Naphthalene	BRL	U	µg/l	1.0						
n-Propylbenzene	BRL	U	µg/l	1.0						
Styrene	BRL	U	µg/l	1.0						
1,1,1,2-Tetrachloroethane	BRL	U	µg/l	1.0						
1,1,2,2-Tetrachloroethane	BRL	U	µg/l	1.0						
Tetrachloroethene	BRL	U	µg/l	1.0						
Toluene	BRL	U	µg/l	1.0						
1,2,3-Trichlorobenzene	BRL	U	µg/l	1.0						
1,2,4-Trichlorobenzene	BRL	U	µg/l	1.0						
1,1,1-Trichloroethane	BRL	U	µg/l	1.0						
1,1,2-Trichloroethane	BRL	U	µg/l	1.0						
Trichloroethene	BRL	U	µg/l	1.0						
Trichlorofluoromethane (Freon 11)	BRL	U	µg/l	1.0						
1,2,3-Trichloropropane	BRL	U	µg/l	1.0						
1,2,4-Trimethylbenzene	BRL	U	µg/l	1.0						
1,3,5-Trimethylbenzene	BRL	U	µg/l	1.0						
Vinyl chloride	BRL	U	µg/l	1.0						
m,p-Xylene	BRL	U	µg/l	2.0						
o-Xylene	BRL	U	µg/l	1.0						
Tetrahydrofuran	BRL	U	µg/l	10.0						
Ethyl ether	BRL	U	µg/l	1.0						
Tert-amyl methyl ether	BRL	U	µg/l	1.0						
Ethyl tert-butyl ether	BRL	U	µg/l	1.0						
Di-isopropyl ether	BRL	U	µg/l	1.0						
Tert-Butanol / butyl alcohol	BRL	U	µg/l	10.0						
1,4-Dioxane	BRL	U	µg/l	20.0						
trans-1,4-Dichloro-2-butene	BRL	U	µg/l	5.0						
Ethanol	BRL	U	µg/l	500						
Surrogate: 4-Bromofluorobenzene	*30.2*		µg/l		*30.0*		*101*	*70-130*		
Surrogate: Toluene-d8	*31.4*		µg/l		*30.0*		*105*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*33.5*		µg/l		*30.0*		*112*	*70-130*		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111893 - SW846 5030 Water MS										
Blank (7111893-BLK1)										
Prepared: 26-Nov-07 Analyzed: 27-Nov-07										
Surrogate: Dibromofluoromethane	*33.0*		µg/l		*30.0*		*110*	*70-130*		
LCS (7111893-BS1)										
Prepared: 26-Nov-07 Analyzed: 27-Nov-07										
1,1,2-Trichlorotrifluoroethane (Freon 113)	18.7		µg/l		20.0		94	70-130		
Acetone	25.0		µg/l		20.0		125	0-166		
Acrylonitrile	18.6		µg/l		20.0		93	70-130		
Benzene	20.5		µg/l		20.0		102	70-130		
Bromobenzene	23.6		µg/l		20.0		118	70-130		
Bromochloromethane	22.2		µg/l		20.0		111	70-130		
Bromodichloromethane	21.4		µg/l		20.0		107	70-130		
Bromoform	22.3		µg/l		20.0		111	70-130		
Bromomethane	25.2		µg/l		20.0		126	14-172		
2-Butanone (MEK)	23.0		µg/l		20.0		115	28.6-137		
n-Butylbenzene	10.6	QC2	µg/l		20.0		53	70-130		
sec-Butylbenzene	15.0		µg/l		20.0		75	70-130		
tert-Butylbenzene	17.0		µg/l		20.0		85	70-130		
Carbon disulfide	15.6		µg/l		20.0		78	70-130		
Carbon tetrachloride	20.5		µg/l		20.0		103	70-130		
Chlorobenzene	22.0		µg/l		20.0		110	70-130		
Chloroethane	16.1		µg/l		20.0		80	59.9-130		
Chloroform	21.0		µg/l		20.0		105	70-130		
Chloromethane	16.6		µg/l		20.0		83	70-130		
2-Chlorotoluene	21.8		µg/l		20.0		109	70-130		
4-Chlorotoluene	20.4		µg/l		20.0		102	70-130		
1,2-Dibromo-3-chloropropane	18.5		µg/l		20.0		93	70-130		
Dibromochloromethane	20.9		µg/l		20.0		104	70-130		
1,2-Dibromoethane (EDB)	22.4		µg/l		20.0		112	70-130		
Dibromomethane	21.7		µg/l		20.0		108	70-130		
1,2-Dichlorobenzene	20.4		µg/l		20.0		102	70-130		
1,3-Dichlorobenzene	20.9		µg/l		20.0		105	70-130		
1,4-Dichlorobenzene	19.9		µg/l		20.0		100	70-130		
Dichlorodifluoromethane (Freon12)	17.9		µg/l		20.0		90	59.1-169		
1,1-Dichloroethane	20.2		µg/l		20.0		101	70-130		
1,2-Dichloroethane	19.0		µg/l		20.0		95	70-130		
1,1-Dichloroethene	17.7		µg/l		20.0		89	70-130		
cis-1,2-Dichloroethene	21.4		µg/l		20.0		107	70-130		
trans-1,2-Dichloroethene	19.8		µg/l		20.0		99	70-130		
1,2-Dichloropropane	19.5		µg/l		20.0		98	70-130		
1,3-Dichloropropane	21.0		µg/l		20.0		105	70-130		
2,2-Dichloropropane	20.8		µg/l		20.0		104	70-130		
1,1-Dichloropropene	18.5		µg/l		20.0		93	70-130		
cis-1,3-Dichloropropene	20.4		µg/l		20.0		102	70-130		
trans-1,3-Dichloropropene	23.4		µg/l		20.0		117	70-130		
Ethylbenzene	21.3		µg/l		20.0		107	70-130		
Hexachlorobutadiene	13.7		µg/l		20.0		69	58.8-136		
2-Hexanone (MBK)	20.8		µg/l		20.0		104	70-130		
Isopropylbenzene	19.6		µg/l		20.0		98	70-130		
4-Isopropyltoluene	14.6		µg/l		20.0		73	70-130		
Methyl tert-butyl ether	21.0		µg/l		20.0		105	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111893 - SW846 5030 Water MS										
LCS (7111893-BS1)										
Prepared: 26-Nov-07 Analyzed: 27-Nov-07										
4-Methyl-2-pentanone (MIBK)	18.8		µg/l		20.0		94	63.2-130		
Methylene chloride	18.1		µg/l		20.0		90	70-130		
Naphthalene	20.2		µg/l		20.0		101	70-130		
n-Propylbenzene	16.1		µg/l		20.0		80	70-130		
Styrene	23.0		µg/l		20.0		115	70-130		
1,1,1,2-Tetrachloroethane	23.5		µg/l		20.0		118	70-130		
1,1,2,2-Tetrachloroethane	22.1		µg/l		20.0		110	70-130		
Tetrachloroethene	21.3		µg/l		20.0		106	70-130		
Toluene	20.5		µg/l		20.0		103	70-130		
1,2,3-Trichlorobenzene	16.5		µg/l		20.0		83	70-130		
1,2,4-Trichlorobenzene	13.8	QC2	µg/l		20.0		69	70-130		
1,1,1-Trichloroethane	20.8		µg/l		20.0		104	70-130		
1,1,2-Trichloroethane	21.4		µg/l		20.0		107	70-130		
Trichloroethene	20.0		µg/l		20.0		100	70-130		
Trichlorofluoromethane (Freon 11)	17.4		µg/l		20.0		87	70-136		
1,2,3-Trichloropropane	24.8		µg/l		20.0		124	70-130		
1,2,4-Trimethylbenzene	16.6		µg/l		20.0		83	70-130		
1,3,5-Trimethylbenzene	18.6		µg/l		20.0		93	70-130		
Vinyl chloride	17.8		µg/l		20.0		89	70-130		
m,p-Xylene	43.0		µg/l		40.0		107	70-130		
o-Xylene	22.1		µg/l		20.0		110	70-130		
Tetrahydrofuran	19.8		µg/l		20.0		99	70-130		
Ethyl ether	18.6		µg/l		20.0		93	70-130		
Tert-amyl methyl ether	17.9		µg/l		20.0		90	70-130		
Ethyl tert-butyl ether	20.5		µg/l		20.0		102	70-130		
Di-isopropyl ether	17.1		µg/l		20.0		86	70-130		
Tert-Butanol / butyl alcohol	193		µg/l		200		97	70-130		
1,4-Dioxane	224		µg/l		200		112	42.2-144		
trans-1,4-Dichloro-2-butene	19.3		µg/l		20.0		97	70-130		
Ethanol	347		µg/l		400		87	70-130		
Surrogate: 4-Bromofluorobenzene	*31.1*		µg/l		*30.0*		*104*	*70-130*		
Surrogate: Toluene-d8	*30.6*		µg/l		*30.0*		*102*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*28.6*		µg/l		*30.0*		*95*	*70-130*		
Surrogate: Dibromofluoromethane	*30.0*		µg/l		*30.0*		*100*	*70-130*		
LCS Dup (7111893-BSD1)										
Prepared: 26-Nov-07 Analyzed: 27-Nov-07										
1,1,2-Trichlorotrifluoroethane (Freon 113)	17.7		µg/l		20.0		89	70-130	5	25
Acetone	25.6		µg/l		20.0		128	0-166	2	50
Acrylonitrile	19.1		µg/l		20.0		96	70-130	3	25
Benzene	19.7		µg/l		20.0		98	70-130	4	25
Bromobenzene	23.0		µg/l		20.0		115	70-130	3	25
Bromochloromethane	21.7		µg/l		20.0		108	70-130	2	25
Bromodichloromethane	21.0		µg/l		20.0		105	70-130	2	25
Bromoform	22.5		µg/l		20.0		113	70-130	1	25
Bromomethane	23.5		µg/l		20.0		117	14-172	7	50
2-Butanone (MEK)	22.6		µg/l		20.0		113	28.6-137	2	50
n-Butylbenzene	10.2	QC2	µg/l		20.0		51	70-130	4	25
sec-Butylbenzene	14.0		µg/l		20.0		70	70-130	7	25
tert-Butylbenzene	16.2		µg/l		20.0		81	70-130	5	25
Carbon disulfide	14.9		µg/l		20.0		74	70-130	5	25

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111893 - SW846 5030 Water MS										
LCS Dup (7111893-BSD1)										
Prepared: 26-Nov-07 Analyzed: 27-Nov-07										
Carbon tetrachloride	19.5		µg/l		20.0		97	70-130	5	25
Chlorobenzene	21.7		µg/l		20.0		109	70-130	1	25
Chloroethane	15.4		µg/l		20.0		77	59.9-130	5	50
Chloroform	20.2		µg/l		20.0		101	70-130	4	25
Chloromethane	16.0		µg/l		20.0		80	70-130	4	25
2-Chlorotoluene	21.8		µg/l		20.0		109	70-130	0.05	25
4-Chlorotoluene	19.9		µg/l		20.0		99	70-130	3	25
1,2-Dibromo-3-chloropropane	18.7		µg/l		20.0		93	70-130	0.9	25
Dibromochloromethane	20.7		µg/l		20.0		104	70-130	0.9	50
1,2-Dibromoethane (EDB)	22.0		µg/l		20.0		110	70-130	2	25
Dibromomethane	21.4		µg/l		20.0		107	70-130	1	25
1,2-Dichlorobenzene	20.6		µg/l		20.0		103	70-130	0.6	25
1,3-Dichlorobenzene	20.3		µg/l		20.0		101	70-130	3	25
1,4-Dichlorobenzene	19.4		µg/l		20.0		97	70-130	3	25
Dichlorodifluoromethane (Freon12)	16.8		µg/l		20.0		84	59.1-169	7	50
1,1-Dichloroethane	19.5		µg/l		20.0		98	70-130	3	25
1,2-Dichloroethane	18.9		µg/l		20.0		94	70-130	0.8	25
1,1-Dichloroethene	16.9		µg/l		20.0		85	70-130	5	25
cis-1,2-Dichloroethene	20.8		µg/l		20.0		104	70-130	3	25
trans-1,2-Dichloroethene	19.0		µg/l		20.0		95	70-130	4	25
1,2-Dichloropropane	18.6		µg/l		20.0		93	70-130	5	25
1,3-Dichloropropane	20.6		µg/l		20.0		103	70-130	2	25
2,2-Dichloropropane	19.7		µg/l		20.0		98	70-130	6	25
1,1-Dichloropropene	17.6		µg/l		20.0		88	70-130	5	25
cis-1,3-Dichloropropene	19.6		µg/l		20.0		98	70-130	4	25
trans-1,3-Dichloropropene	22.9		µg/l		20.0		114	70-130	2	25
Ethylbenzene	21.0		µg/l		20.0		105	70-130	1	25
Hexachlorobutadiene	13.1		µg/l		20.0		66	58.8-136	4	50
2-Hexanone (MBK)	21.2		µg/l		20.0		106	70-130	2	25
Isopropylbenzene	18.9		µg/l		20.0		95	70-130	4	25
4-Isopropyltoluene	13.9	QC1	µg/l		20.0		69	70-130	5	25
Methyl tert-butyl ether	21.0		µg/l		20.0		105	70-130	0.05	25
4-Methyl-2-pentanone (MIBK)	18.6		µg/l		20.0		93	63.2-130	1	50
Methylene chloride	17.7		µg/l		20.0		88	70-130	2	25
Naphthalene	20.0		µg/l		20.0		100	70-130	0.6	25
n-Propylbenzene	15.4		µg/l		20.0		77	70-130	5	25
Styrene	22.7		µg/l		20.0		113	70-130	1	25
1,1,1,2-Tetrachloroethane	23.0		µg/l		20.0		115	70-130	2	25
1,1,2,2-Tetrachloroethane	22.4		µg/l		20.0		112	70-130	1	25
Tetrachloroethene	20.5		µg/l		20.0		103	70-130	4	25
Toluene	19.8		µg/l		20.0		99	70-130	4	25
1,2,3-Trichlorobenzene	16.1		µg/l		20.0		81	70-130	3	25
1,2,4-Trichlorobenzene	13.6	QC2	µg/l		20.0		68	70-130	2	25
1,1,1-Trichloroethane	19.8		µg/l		20.0		99	70-130	5	25
1,1,2-Trichloroethane	21.0		µg/l		20.0		105	70-130	2	25
Trichloroethene	18.9		µg/l		20.0		94	70-130	6	25
Trichlorofluoromethane (Freon 11)	16.3		µg/l		20.0		82	70-136	6	50
1,2,3-Trichloropropane	24.9		µg/l		20.0		124	70-130	0.2	25
1,2,4-Trimethylbenzene	15.9		µg/l		20.0		80	70-130	4	25

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111893 - SW846 5030 Water MS										
LCS Dup (7111893-BSD1)										
Prepared: 26-Nov-07 Analyzed: 27-Nov-07										
1,3,5-Trimethylbenzene	17.9		µg/l		20.0		90	70-130	4	25
Vinyl chloride	17.0		µg/l		20.0		85	70-130	4	25
m,p-Xylene	42.4		µg/l		40.0		106	70-130	1	25
o-Xylene	21.6		µg/l		20.0		108	70-130	2	25
Tetrahydrofuran	19.3		µg/l		20.0		97	70-130	3	25
Ethyl ether	18.5		µg/l		20.0		92	70-130	0.5	50
Tert-amyl methyl ether	18.2		µg/l		20.0		91	70-130	1	25
Ethyl tert-butyl ether	20.1		µg/l		20.0		101	70-130	2	25
Di-isopropyl ether	16.8		µg/l		20.0		84	70-130	2	25
Tert-Butanol / butyl alcohol	198		µg/l		200		99	70-130	2	25
1,4-Dioxane	226		µg/l		200		113	42.2-144	0.6	25
trans-1,4-Dichloro-2-butene	19.0		µg/l		20.0		95	70-130	1	25
Ethanol	359		µg/l		400		90	70-130	3	30
Surrogate: 4-Bromofluorobenzene	*31.2*		µg/l		*30.0*		*104*	*70-130*		
Surrogate: Toluene-d8	*30.8*		µg/l		*30.0*		*103*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*28.4*		µg/l		*30.0*		*95*	*70-130*		
Surrogate: Dibromofluoromethane	*29.9*		µg/l		*30.0*		*100*	*70-130*		
Matrix Spike (7111893-MS1) **Source: SA71406-01RE1**										
Prepared: 26-Nov-07 Analyzed: 27-Nov-07										
Benzene	24.2		µg/l		20.0	BRL	121	70-130		
Chlorobenzene	25.4		µg/l		20.0	BRL	127	70-130		
1,1-Dichloroethene	20.8		µg/l		20.0	BRL	104	70-130		
Toluene	23.9		µg/l		20.0	BRL	119	70-130		
Trichloroethene	22.8		µg/l		20.0	BRL	114	70-130		
Surrogate: 4-Bromofluorobenzene	*32.2*		µg/l		*30.0*		*107*	*70-130*		
Surrogate: Toluene-d8	*30.7*		µg/l		*30.0*		*102*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*31.7*		µg/l		*30.0*		*106*	*70-130*		
Surrogate: Dibromofluoromethane	*32.6*		µg/l		*30.0*		*109*	*70-130*		
Matrix Spike Dup (7111893-MSD1) **Source: SA71406-01RE1**										
Prepared: 26-Nov-07 Analyzed: 27-Nov-07										
Benzene	23.5		µg/l		20.0	BRL	118	70-130	3	30
Chlorobenzene	24.8		µg/l		20.0	BRL	124	70-130	3	30
1,1-Dichloroethene	17.7		µg/l		20.0	BRL	89	70-130	16	30
Toluene	24.4		µg/l		20.0	BRL	122	70-130	2	30
Trichloroethene	21.6		µg/l		20.0	BRL	108	70-130	5	30
Surrogate: 4-Bromofluorobenzene	*32.2*		µg/l		*30.0*		*108*	*70-130*		
Surrogate: Toluene-d8	*31.4*		µg/l		*30.0*		*104*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*35.0*		µg/l		*30.0*		*116*	*70-130*		
Surrogate: Dibromofluoromethane	*33.7*		µg/l		*30.0*		*112*	*70-130*		

Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111475 - SW846 3510C										
Blank (7111475-BLK1)										
Prepared: 18-Nov-07 Analyzed: 20-Nov-07										
Acenaphthene	BRL	U	µg/l	2.50						
Acenaphthylene	BRL	U	µg/l	2.50						
Anthracene	BRL	U	µg/l	2.50						
Benzo (a) anthracene	BRL	U	µg/l	2.50						
Benzo (a) pyrene	BRL	U	µg/l	2.50						
Benzo (b) fluoranthene	BRL	U	µg/l	2.50						
Benzo (g,h,i) perylene	BRL	U	µg/l	2.50						
Benzo (k) fluoranthene	BRL	U	µg/l	2.50						
Chrysene	BRL	U	µg/l	2.50						
Dibenzo (a,h) anthracene	BRL	U	µg/l	2.50						
Fluoranthene	BRL	U	µg/l	2.50						
Fluorene	BRL	U	µg/l	2.50						
Indeno (1,2,3-cd) pyrene	BRL	U	µg/l	2.50						
1-Methylnaphthalene	BRL	U	µg/l	2.50						
2-Methylnaphthalene	BRL	U	µg/l	2.50						
Naphthalene	BRL	U	µg/l	2.50						
Phenanthrene	BRL	U	µg/l	2.50						
Pyrene	BRL	U	µg/l	2.50						
Surrogate: 2-Fluorobiphenyl	*33.1*		µg/l		*50.0*		*66*	*30-130*		
Surrogate: Terphenyl-dl4	*36.2*		µg/l		*50.0*		*72*	*30-130*		
LCS (7111475-BS1)										
Prepared: 18-Nov-07 Analyzed: 20-Nov-07										
Acenaphthene	39.6		µg/l	2.50	50.0		79	40-140		
Acenaphthylene	39.4		µg/l	2.50	50.0		79	40-140		
Anthracene	41.3		µg/l	2.50	50.0		83	40-140		
Benzo (a) anthracene	45.3		µg/l	2.50	50.0		91	40-140		
Benzo (a) pyrene	43.1		µg/l	2.50	50.0		86	40-140		
Benzo (b) fluoranthene	53.8		µg/l	2.50	50.0		108	40-140		
Benzo (g,h,i) perylene	43.2		µg/l	2.50	50.0		86	40-140		
Benzo (k) fluoranthene	23.8		µg/l	2.50	50.0		48	40-140		
Chrysene	38.6		µg/l	2.50	50.0		77	40-140		
Dibenzo (a,h) anthracene	41.5		µg/l	2.50	50.0		83	40-140		
Fluoranthene	41.7		µg/l	2.50	50.0		83	40-140		
Fluorene	38.7		µg/l	2.50	50.0		77	40-140		
Indeno (1,2,3-cd) pyrene	51.7		µg/l	2.50	50.0		103	40-140		
1-Methylnaphthalene	38.8		µg/l	2.50	50.0		78	40-140		
2-Methylnaphthalene	39.0		µg/l	2.50	50.0		78	40-140		
Naphthalene	38.3		µg/l	2.50	50.0		77	40-140		
Phenanthrene	42.0		µg/l	2.50	50.0		84	40-140		
Pyrene	42.3		µg/l	2.50	50.0		85	40-140		
Surrogate: 2-Fluorobiphenyl	*33.1*		µg/l		*50.0*		*66*	*30-130*		
Surrogate: Terphenyl-dl4	*36.9*		µg/l		*50.0*		*74*	*30-130*		

Total Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111877 - SW846 3005A										
Blank (7111877-BLK1)										
Prepared: 27-Nov-07 Analyzed: 04-Dec-07										
Selenium	BRL	U	mg/l	0.0150						
Antimony	BRL	U	mg/l	0.0060						
Lead	BRL	U	mg/l	0.0075						
Nickel	BRL	U	mg/l	0.0050						
Thallium	BRL	U	mg/l	0.0050						
Zinc	0.0028	J	mg/l	0.0050						
Arsenic	BRL	U	mg/l	0.0040						
Beryllium	BRL	U	mg/l	0.0020						
Copper	BRL	U	mg/l	0.0050						
Cadmium	BRL	U	mg/l	0.0025						
Silver	BRL	U	mg/l	0.0050						
Chromium	BRL	U	mg/l	0.0050						
LCS (7111877-BS1)										
Prepared: 27-Nov-07 Analyzed: 04-Dec-07										
Lead	1.27		mg/l	0.0075	1.25		101	85-115		
Zinc	1.31		mg/l	0.0050	1.25		105	85-115		
Nickel	1.29		mg/l	0.0050	1.25		103	85-115		
Thallium	1.25		mg/l	0.0050	1.25		100	85-115		
Antimony	1.21		mg/l	0.0060	1.25		97	85-115		
Selenium	1.26		mg/l	0.0150	1.25		101	85-115		
Chromium	1.29		mg/l	0.0050	1.25		103	85-115		
Cadmium	1.33		mg/l	0.0025	1.25		107	85-115		
Beryllium	1.22		mg/l	0.0020	1.25		97	85-115		
Copper	1.31		mg/l	0.0050	1.25		105	85-115		
Arsenic	1.25		mg/l	0.0040	1.25		100	85-115		
Silver	1.26		mg/l	0.0050	1.25		101	85-115		
LCS Dup (7111877-BSD1)										
Prepared: 27-Nov-07 Analyzed: 04-Dec-07										
Zinc	1.32		mg/l	0.0050	1.25		106	85-115	1	20
Lead	1.26		mg/l	0.0075	1.25		101	85-115	0.3	20
Nickel	1.29		mg/l	0.0050	1.25		103	85-115	0.2	20
Antimony	1.25		mg/l	0.0060	1.25		100	85-115	3	20
Selenium	1.24		mg/l	0.0150	1.25		99	85-115	1	20
Thallium	1.25		mg/l	0.0050	1.25		100	85-115	0.4	20
Copper	1.30		mg/l	0.0050	1.25		104	85-115	0.6	20
Chromium	1.29		mg/l	0.0050	1.25		103	85-115	0.3	20
Silver	1.26		mg/l	0.0050	1.25		101	85-115	0.3	20
Cadmium	1.33		mg/l	0.0025	1.25		106	85-115	0.4	20
Beryllium	1.20		mg/l	0.0020	1.25		96	85-115	1	20
Arsenic	1.24		mg/l	0.0040	1.25		99	85-115	0.8	20
Duplicate (7111877-DUP1) **Source: SA71097-01**										
Prepared: 27-Nov-07 Analyzed: 04-Dec-07										
Thallium	BRL	U	mg/l	0.0050		BRL				20
Selenium	BRL	U	mg/l	0.0150		BRL				20
Nickel	0.102		mg/l	0.0050		0.102			0.2	20
Lead	0.129		mg/l	0.0075		0.129			0.2	20
Antimony	0.0299		mg/l	0.0060		0.0296			1	20
Zinc	0.515		mg/l	0.0050		0.510			0.9	20

Total Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111877 - SW846 3005A										
Duplicate (7111877-DUP1) **Source: SA71097-01**										
Prepared: 27-Nov-07 Analyzed: 04-Dec-07										
Arsenic	0.0082		mg/l	0.0040		0.0074			10	20
Copper	0.388		mg/l	0.0050		0.386			0.6	20
Beryllium	BRL	U	mg/l	0.0020		BRL				20
Silver	BRL	U	mg/l	0.0050		BRL				20
Chromium	0.110		mg/l	0.0050		0.108			2	20
Cadmium	0.0030		mg/l	0.0025		0.0030			0	20
Matrix Spike (7111877-MS1) **Source: SA71111-01**										
Prepared: 27-Nov-07 Analyzed: 04-Dec-07										
Thallium	1.23		mg/l	0.0050	1.25	BRL	98	75-125		
Selenium	1.24		mg/l	0.0150	1.25	BRL	99	75-125		
Antimony	1.20		mg/l	0.0060	1.25	BRL	96	75-125		
Lead	1.27		mg/l	0.0075	1.25	BRL	101	75-125		
Nickel	1.28		mg/l	0.0050	1.25	0.0012	103	75-125		
Zinc	1.30		mg/l	0.0050	1.25	0.0148	103	75-125		
Arsenic	1.26		mg/l	0.0040	1.25	BRL	101	75-125		
Chromium	1.27		mg/l	0.0050	1.25	BRL	102	75-125		
Silver	1.27		mg/l	0.0050	1.25	BRL	101	75-125		
Copper	1.33		mg/l	0.0050	1.25	BRL	106	75-125		
Cadmium	1.33		mg/l	0.0025	1.25	0.0002	107	75-125		
Beryllium	1.22		mg/l	0.0020	1.25	BRL	98	75-125		
Matrix Spike Dup (7111877-MSD1) **Source: SA71111-01**										
Prepared: 27-Nov-07 Analyzed: 04-Dec-07										
Thallium	1.23		mg/l	0.0050	1.25	BRL	99	75-125	0.4	20
Selenium	1.25		mg/l	0.0150	1.25	BRL	100	75-125	0.4	20
Antimony	1.29		mg/l	0.0060	1.25	BRL	103	75-125	8	20
Lead	1.27		mg/l	0.0075	1.25	BRL	101	75-125	0.2	20
Zinc	1.31		mg/l	0.0050	1.25	0.0148	104	75-125	0.7	20
Nickel	1.29		mg/l	0.0050	1.25	0.0012	103	75-125	0.1	20
Chromium	1.27		mg/l	0.0050	1.25	BRL	102	75-125	0.4	20
Cadmium	1.34		mg/l	0.0025	1.25	0.0002	107	75-125	0.1	20
Beryllium	1.21		mg/l	0.0020	1.25	BRL	97	75-125	0.8	20
Silver	1.27		mg/l	0.0050	1.25	BRL	101	75-125	0	20
Copper	1.32		mg/l	0.0050	1.25	BRL	106	75-125	0.4	20
Arsenic	1.26		mg/l	0.0040	1.25	BRL	101	75-125	0.2	20
Post Spike (7111877-PS1) **Source: SA71111-01**										
Prepared: 27-Nov-07 Analyzed: 04-Dec-07										
Selenium	1.26		mg/l	0.0150	1.25	BRL	100	80-120		
Zinc	1.34		mg/l	0.0050	1.25	0.0148	106	80-120		
Antimony	1.20		mg/l	0.0060	1.25	BRL	96	80-120		
Thallium	1.24		mg/l	0.0050	1.25	BRL	99	80-120		
Nickel	1.29		mg/l	0.0050	1.25	0.0012	103	80-120		
Lead	1.27		mg/l	0.0075	1.25	BRL	102	80-120		
Copper	1.34		mg/l	0.0050	1.25	BRL	107	80-120		
Silver	1.26		mg/l	0.0050	1.25	BRL	101	80-120		
Beryllium	1.22		mg/l	0.0020	1.25	BRL	98	80-120		
Chromium	1.28		mg/l	0.0050	1.25	BRL	103	80-120		
Cadmium	1.34		mg/l	0.0025	1.25	0.0002	107	80-120		
Arsenic	1.27		mg/l	0.0040	1.25	BRL	101	80-120		

Total Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111878 - EPA200/SW7000 Series										
Blank (7111878-BLK1)										
Prepared: 27-Nov-07 Analyzed: 28-Nov-07										
Mercury	BRL	U	mg/l	0.00020						
LCS (7111878-BS1)										
Prepared: 27-Nov-07 Analyzed: 28-Nov-07										
Mercury	0.00440		mg/l	0.00020	0.00500		88	85-115		
Duplicate (7111878-DUP1) **Source: SA71097-01**										
Prepared: 27-Nov-07 Analyzed: 28-Nov-07										
Mercury	0.00009	J	mg/l	0.00020		0.00009			1	20
Matrix Spike (7111878-MS1) **Source: SA71111-01**										
Prepared: 27-Nov-07 Analyzed: 28-Nov-07										
Mercury	0.00417		mg/l	0.00020	0.00500	BRL	83	75-125		
Matrix Spike Dup (7111878-MSD1) **Source: SA71111-01**										
Prepared: 27-Nov-07 Analyzed: 28-Nov-07										
Mercury	0.00425		mg/l	0.00020	0.00500	BRL	85	75-125	2	20
Post Spike (7111878-PS1) **Source: SA71111-01**										
Prepared: 27-Nov-07 Analyzed: 28-Nov-07										
Mercury	0.00447		mg/l	0.00020	0.00500	BRL	89	85-115		

Notes and Definitions

J	Detected above the Method Detection Limit but below the Reporting Limit, therefore, result is an estimated concentration (CLP J-Flag).
QC1	Analyte out of acceptance range.
QC2	Analyte out of acceptance range in QC spike but no reportable concentration present in sample
U	Analyte included in the analysis, but not detected
BRL	Below Reporting Limit - Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
NR	Not Reported
RPD	Relative Percent Difference

A plus sign (+) in the Method Reference column indicates the method is not accredited by NELAC

Laboratory Control Sample (LCS): A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix

Matrix Spike: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure The method blank is used to document contamination resulting from the analytical process

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

Surrogate: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

Validated by:
Hanibal C. Tayeh, Ph.D.
Nicole Brown

SA71128

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HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
☒ Standard TAT - 7 to 10 business days
☐ Rush TAT - Date Needed: _____
· All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
· Samples disposed of after 60 days unless otherwise instructed.

Report To: Jacques Whitford Co., Inc.
24 Albion Rd
Suite 220
Lincoln, RI
Project Mgr.: Joe Unsworth

Invoice To: SAME
P.O. No.: _____ RQN: _____

Project No.: 1009825.04 Phase 100
Site Name: Potter Hill Mill
Location: Westerly, ~~R~~ State: RI
Sampler(s): R. Snyder

1=$Na_2S_2O_3$ (2=HCl) 3=H_2SO_4 (4=HNO_3) 5=NaOH 6=Ascorbic Acid
7=CH_3OH 8= $NaHSO_4$ 9= ICE 10= _____

DW=Drinking Water (GW=Groundwater) WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= _____ X2= _____ X3= _____

G=Grab C=Composite

QA Reporting Notes: (check if needed)
☐ Provide MA DEP MCP CAM Report
☐ Provide CT DPH RCP Report
QA/QC Reporting Level
☐ Standard ☐ No QC
☐ Other _____
State specific reporting standards:

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Preservative	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	VOC 8260	PP 13 METALS	PAH 8270
SA71128 01	MW1	11-14-07	10:00	G	GW	2,4,9	3	0		1	X	X	
02	MW2	11-14-07	09:45	G	GW	2,4,9	3	0		1	X	X	
03	MW3	11-14-07	11:05	G	GW	2,4,9	3	1		1	X	X	X
04	MW4	11-14-07	11:15	G	GW	2,4,9	3	1		1	X	X	X
05	MW5	11-14-07	12:40	G	GW	2,4,9	3	1		1	X	X	X
06	Trip Blank						1						

☐ Fax results when available to ( )
☒ E-mail to ~~[illegible]~~ JUNSWORT@Jacques.Hd
EDD Format _____

Condition upon receipt: ☐ Iced ☐ Ambient ☑ °C 5.8 Ref

Relinquished by:	Received by:	Date:	Time:
[signature]	[signature]	11/15/07	1220
Bill Hastings	[signature]	11/15/07	16:05

Ref 32.2 F

APPENDIX E

Soil Boring Logs

MONITORING WELL LOG

MW3/SS27

CLIENT **Renewable Resources, Inc.**

LOCATION **198 Potter Hill Road, Westerly, Rhode Island**

DATES: BORING **11/8/2007 to 11/8/2007** WATER LEVEL **8 ft during drilling**

PROJECT No. **1009825.**

BOREHOLE No. **MW3/SS27**

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	WELL CONSTRUCTION	SAMPLES TYPE	SAMPLES NUMBER	SAMPLES RECOVERY	SAMPLES N-VALUE OR RQD	VOC CONCENTRATION (ppm or % LEL)
		Grass/Leaf Litter						in.		
0		Topsoil: dark brown silt with sand, Damp			Flush-mount road box; Solid pipe packed in sand					
		Orange/brown fine to medium SAND and silt (SM), Damp			Solid pipe packed in Bentonite					
		Tan fine to coarse SAND with gravel (SP), Damp to Moist -trace amounts of silt			Solid pipe packed in sand	DP	1	30		NT
5		Same as above, Moist to Wet		▽		DP	2	44		NT
10		Drive casing, no samples collected.								
15					Slotted pipe packed in sand					
20										

X: Y: Driller: Alternative Subsurface Explorations; Supervisor: Rob Snyder
Rig: Truck Mounted GeoProbe 6600
DP= Direct Push Sampling Method, NT = Not Tested

Continued Next Page

MON-I 1009825-POTTER HILL MILL-ADDITIONAL SAMPLING.GPJ JW NHP.GDT 11/9/07

Jacques Whitford

MONITORING WELL LOG

MW3/SS27

CLIENT **Renewable Resources, Inc.**

LOCATION **198 Potter Hill Road, Westerly, Rhode Island**

DATES: BORING **11/8/2007 to 11/8/2007** WATER LEVEL **8 ft during drilling**

PROJECT No. **1009825.**

BOREHOLE No. **MW3/SS27**

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	WELL CONSTRUCTION	SAMPLES TYPE	SAMPLES NUMBER	SAMPLES RECOVERY	SAMPLES N-VALUE OR RQD	VOC CONCENTRATION (ppm or % LEL)
								in.		
20		Drive casing, no samples collected.			Slotted pipe packed in sand					
		Bottom of boring at 22 feet due to refusal on cobble, boulder, or bedrock.								
25										
30										
35										
40										

X: Y: Driller: Alternative Subsurface Explorations; Supervisor: Rob Snyder
Rig: Truck Mounted GeoProbe 6600
DP= Direct Push Sampling Method, NT = Not Tested

MON-I 1009825-POTTER HILL MILL-ADDITIONAL SAMPLING.GPJ JW NHP.GDT 11/9/07

MONITORING WELL LOG

MW4/SS28

CLIENT Renewable Resources, Inc.

LOCATION 198 Potter Hill Road, Westerly, Rhode Island

DATES: BORING 11/8/2007 to 11/8/2007 WATER LEVEL 8 ft during drilling

PROJECT No. 1009825.

BOREHOLE No. MW4/SS28

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	WELL CONSTRUCTION	SAMPLES TYPE	SAMPLES NUMBER	SAMPLES RECOVERY	SAMPLES N-VALUE OR RQD	VOC CONCENTRATION (ppm or % LEL)
		Weeds/Leaf Litter						in.		
0		Topsoil: dark brown silt with sand, Damp			Flush-mount road box					
		Dark Brown to orange/brown fine to medium SAND and silt (SM), Damp			Solid pipe packed in sand Solid pipe packed in Bentonite	DP	1	39		NT
		Tan fine to coarse SAND with gravel (SP), Damp to Moist -trace amounts of silt								
5		Same as above, Moist to Wet				DP	2	36		NT
		Olive/brown SILT (ML) with fine sand, Wet		▽	Solid pipe packed in sand					
10		Drive casing, no samples collected.								
15										
20										

X: Y: Driller: Alternative Subsurface Explorations; Supervisor: Rob Snyder
Rig: Truck Mounted GeoProbe 6600
DP= Direct Push Sampling Method, NT = Not Tested

Continued Next Page

MON-I 1009825-POTTER HILL MILL-ADDITIONAL SAMPLING.GPJ JW NHP.GDT 11/9/07

Jacques Whitford

MONITORING WELL LOG

MW4/SS28

CLIENT Renewable Resources, Inc.

LOCATION 198 Potter Hill Road, Westerly, Rhode Island

DATES: BORING 11/8/2007 to 11/8/2007 WATER LEVEL 8 ft during drilling

PROJECT No. 1009825.

BOREHOLE No. MW4/SS28

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	WELL CONSTRUCTION	SAMPLES TYPE	SAMPLES NUMBER	SAMPLES RECOVERY	SAMPLES N-VALUE OR RQD	VOC CONCENTRATION (ppm or % LEL)
								in.		
20		Drive casing, no samples collected.			Solid pipe packed in sand					
25					Slotted pipe packed in sand					
30										
		Bottom of boring at 33 feet due to refusal on cobble, boulder, or bedrock.								
35										
40										

X: Y: Driller: Alternative Subsurface Explorations; Supervisor: Rob Snyder
Rig: Truck Mounted GeoProbe 6600
DP= Direct Push Sampling Method, NT = Not Tested

MON-1 1009825-POTTER HILL MILL-ADDITIONAL SAMPLING.GPJ JW NHP.GDT 11/9/07

MONITORING WELL LOG

MW5/SS29

CLIENT Renewable Resources, Inc.

LOCATION 198 Potter Hill Road, Westerly, Rhode Island

DATES: BORING 11/8/2007 to 11/8/2007 WATER LEVEL 5 ft during drilling

PROJECT No. 1009825.

BOREHOLE No. MW5/SS29

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	WELL CONSTRUCTION	SAMPLES TYPE	SAMPLES NUMBER	SAMPLES RECOVERY	SAMPLES N-VALUE OR RQD	VOC CONCENTRATION (ppm or % LEL)
		Grass/Leaf Litter						in.		
0		Humus, leaf litter			Flush-mount road box					
		Topsoil: dark brown silt with sand, Damp			Solid pipe packed in sand Solid pipe packed in Bentonite					
		Light brown fine SAND and silt (SM), Damp to Moist				DP	1	36		NT
					Solid pipe packed in sand					
5		Same as above, Wet		▽						
		Gray fine SAND and silt (SM), Wet				DP	2	40		NT
		Dark brown SILT (ML) with fine sand, Wet -trace amounts of organic matter (root fibers)								
		Gray fine to coarse SAND (SP), Wet -trace amounts of gravel and silt								
10		Drive casing, no samples collected.			Slotted pipe packed in sand					
15										
		Bottom of boring at 18.5 feet due to refusal on cobble, boulder, or bedrock.								
20										

X: Y: Driller: Alternative Subsurface Explorations; Supervisor: Rob Snyder
Rig: Truck Mounted GeoProbe 6600
DP= Direct Push Sampling Method, NT = Not Tested

MON-I 1009825-POTTER HILL MILL-ADDITIONAL SAMPLING.GPJ JW NHP.GDT 11/9/07

Jacques Whitford

Engineering, Scientific, Planning and Management Consultants

24 Albion Road
Suite 220
Lincoln RI
United States 02865

Bus 401 312 8005
Fax 401 312 8010

www.jacqueswhitford.com

August 13, 2008

Rhode Island Department of Environmental Management
Office of Waste Management
Attention: Ms. Cynthia M. Gianfrancesco
235 Promenade Street
Providence, RI 02908-5767

RECEIVED
D.E.M./O.W.M.
2008 AUG 18 P 12:

RE: Supplemental Site Investigation Report
198 Potter Hill Road, Westerly, RI
Jacques Whitford Project No. 1009825

Dear Ms. Gianfrancesco:

Jacques Whitford received your letter to Renewable Resources, Inc., dated July 14, 2008. This letter is being submitted to address your comments attached to that letter.

RIDEM Comment Letter dated January 26, 2007:

1. **Comment A:** Enclosed are copies of the notices sent to abutting property owners and the Town of Westerly.

2. **Comment B:** The following is the full historic information from the July 5, 2007 letter:

   "As mentioned in the SIR, the mill has vacant for over 50 years. Information specific to this mill was limited. We have conducted extensive research on the types of chemicals which may have been used or stored at this site. The research included internet searches and visits to the National Archives in Washington D.C., Rhode Island Historic Preservation Society, libraries in Ashaway, Hope Valley and Westerly, and the American Textile Museum in Lowell, MA. There was a reference that the mill was used for "mens fabrics only", which may indicate that the dyeing was limited to blues, browns, black, and greens. Historically, mens clothing was not dyed with reds, yellows, purple, etc. Available information also indicates that the mill was considered a small mill (i.e., <20 looms).

   The vast amount of information reviewed indicates that synthetic dyes were originally developed in Europe but were not used in the United States in the textile industry until the 1960s. The mill at the site has not operated since approximately 1958. Information available also indicates that only natural fibers (i.e. wool) were dyed at the site. The process for dyeing wool typically involved a natural dye and often a mordant. The mordant was added to the wool to develop the correct chemical conditions for the dye to adhere to the wool. Many of the mordants were metal salts. Acids were also sometimes used to develop the correct chemical conditions for the dyeing process. Neither Jacques Whitford nor Dr. Edward Carrapezza discovered any information that indicates chlorinated hydrocarbons or other volatile organic compounds were ever used in the process of dyeing wool in the time period that the mill was operation. Due to the fact that only natural fibers were dyed at the site and that operations ceased in the 1950s, we believe that it is highly unlikely that chemical other than natural dyes, mordants and acids were used in the processes employed at the site."

The following is the list of occupants of the site and the approximate dates of operation:

1955-1958	Westerly Woolen Mills
1930-1955	Swift River Woolen Mills
1907-1930	Pawcatuck Woolen Mill
1885-1907	J.P. Campbell Mills
1843-1870	E&H Babcock Mills

3. **Comment #1:** The photos are attached.

4. **Comment #2:** As contained in Section 3.2 of the revised SIR, the analysis included parameters that were associated with each area of concern. In addition to the parameters identified with each area of concern, the RIDEM required additional analysis of additional soil, sediment, and groundwater samples. PCBs were not analyzed due to the fact that there was no evidence of current or historical transformers at the property or any evidence that PCBs were used in the historical processes at the subject property. All the soil samples analyzed for parameters that the RIDEM has established GA Leachability Criteria for can be used to assess compliance with the GA Leachability Criteria. Since lead was detected in soils at concentrations greater than 20 times the GA Leachability Criteria, the two soil samples with the highest total lead concentrations (SS-20 and SS-23) were analyzed by the Synthetic Precipitation Leaching Procedure to assess compliance with the GA Leachability Criteria for lead.

   It should be noted that the RIDEM has previously approved the number of soil, sediment, and groundwater samples collected and the suite of parameters included in the investigation.

5. **Comment #6**: Soil boring logs are attached.

6. **Comment #13:** See response to comment #6 below.

7. **Comment #17:** See response to comment #1 below.

8. **Comment #20:** A revised site plan is attached depicting the location of the private wells and soil samples SS-21, SS-32, and SS-33.

9. **Comment #21:** As stated in the ninth paragraph of Section 7.0, the closest water wellhead protection area is located approximately 250 feet northeast of the property. The only way for the detected contamination to have impacted offsite properties would be for the impacted soils to become airborne or through erosion onto abutting properties. There is no evidence that the impacted soils have become airborne or have been subject to erosion due to the fact they are very granular and are covered with well established vegetation. Additionally, there have been no impacts to groundwater detected, therefore, offsite properties will not be impacted by groundwater migration. Based on all available information, no offsite properties or offsite structures have been impacted by the subject property.

<u>Revised SIR Specific Comments:</u>

1. **Specific Objectives:** The objectives of this SIR are to evaluate the location, extent, and characterization of potential sources of contamination. Specific objectives include assessing potential impacts to the site from former industrial uses at the subject property including coal storage. The site is being proposed for a mix of

residential and commercial use and is located in an area with a GA groundwater classification. The SIR will assess compliance with RIDEM's Residential Direct Exposure Criteria, GA Leachability Criteria, and GA Groundwater Objectives.

2. **4.1 Soil Sampling:** The soil samples discussed in Section 4.1 were collected on October 23, 2006. The sentence should read "The samples collected on October 23, 2006 were collected using a Geoprobe that was used to install the monitoring wells, as discussed in Section 4.2."

3. **4.4 Groundwater Flow Direction, Page 7:** The following is the well gauging data:

	Well Elevation	Depth to Groundwater	Groundwater Elevation
MW-1	96.61	10.35	86.26
MW-2	97.14	10.90	86.24
MW-3	95.06	6.75	88.31
MW-4	93.23	6.50	86.73
MW-5	93.52	7.20	86.32

4. **5.0 Results, page8:** Beryllium was not detected in soil sample SS-25 at a concentration of 16.6 ppm. Arsenic was detected at a concentration of 16.6 ppm in soil sample SS-25. The highest concentration of beryllium detected was in soil sample TP5/S1 at a concentration of 0.405 ppm which is slightly greater than the RDEC of 0.40 ppm but less than the I/DEC of 1.3 ppm. The laboratory results for SS-25 from ESS Laboratory are contained in Appendix D of the SIR that confirms the analysis of soil sample SS-25. Therefore, no further action is necessary for beryllium in soils. A revised Table 4 is attached.

5. **6.0 Summary of Environmental Data, page 9:** It is beryllium that was detected at a concentration greater than the RDEC. However, as discussed in the previous response, beryllium was not detected at a concentration greater than the I/CDEC.

6. **8.0 Conclusion, page 12:** There is no evidence that a release has occurred that would impacted the buildings at the site. There is no evidence of any releases inside the buildings of any hazardous materials or petroleum product. Since there was no evidence of a release in the buildings, no samples of building materials were sampled. Additionally, there is no evidence that any releases occurred under the buildings and impacts to soils under the buildings are not impacts to manmade structures. However, as required by the RIDEM, if any of the buildings and/or foundations are removed, additional investigations may be warranted even though there is no evidence of any releases to soils under the buildings.

   As discussed previously, in the response to RIDEM comment #21, no offsite impacts are occurring. Also, as previously discussed beryllium was not detected at a concentration greater than the I/CDEC and exceedances of the GA Leachability Criteria are not a concern.

7. **9.0 Development of Remedial Alternatives:** We disagree that remedial alternative #2 is a not viable alternative as proposed. The fact that the area to be capped is located in a flood plan does not make this alternative invalid. A flood plain compensation can be completed on another location of the site or assessment of whether the impact to the flood plain is significant could also be completed. The details on how remedial alternative #2 will be implemented, including compliance with wetland regulations, will be included in the Remedial Action Work Plan (RAWP). We do not believe that it is appropriate to be completing calculations of

flood plain impacts at this point. We believe that these are details to be included in the RAWP, as the RIDEM has accepted in the past on similar projects.

All of the remedial objectives are addressed in the proposed remedial alternative. The capping of the area containing the elevated arsenic, beryllium, and lead will control all risks associated with the exceedances of the RDEC and I/CDEC. As discussed previously, there are no exceedances of the GA Leachability Criteria and no impacts to groundwater have been detected.

If you have any questions or comments regarding this letter or any other matter, please contact me at 401-312-8005.

Sincerely,
JACQUES WHITFORD COMPANY, INC.

Joseph T. Unsworth, P.E.
Project Manager

CC: Dr. Edward Carapezza, Renewable Resources

TABLE 4
SUMMARY OF SOIL ANALYSIS

Parameter	RIDEM RDEC	TP3/S1 3'-5' 4/3/06	TP5/S1 3'-5' 4/3/06	SS1 0'-2' 9/5/06	SS2 0'-2' 9/5/06	SS3 0'-2' 9/5/06	SS4 0'-2' 9/5/06	SS5 0'-2' 9/5/06	SS6 0'-2' 9/5/06	SS7 0'-2' 9/5/06	SS8 0'-2' 9/5/06	SS9 0'-2' 9/5/06	SS10 0'-2' 9/5/06	SS11 0'-2' 9/5/06	SS12 0'-2' 9/5/06	SS13 0'-2' 9/5/06
VOCs		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
SVOCs (ppm)																
Acenaphthene	43	ND	ND	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Anthracene	35	ND	ND	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Benzo(a)anthracene	0.9	ND	0.240	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Benzo(a)pyrene	0.4	ND	0.232	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Benzo(b)fluoranthene	0.9	ND	0.299	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Benzo(g,h,i)perylene	0.8	ND	0.203	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Benzo(k)fluoranthene	0.9	ND	ND	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Chrysene	0.4	ND	0.357	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Dibenzo(a,h)anthracene	0.4	ND	ND	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Fluoranthene	20	ND	0.566	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Fluorene	28	ND	ND	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Indeno(1,2,3-cd)pyrene	0.9	ND	ND	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Phenanthrene	40	ND	0.322	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Pyrene	13	ND	0.424	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Metals (ppm)																
Antimony	10	ND	ND	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Arsenic	7	4.9	**10.4**	1.71	ND	**18.9**	**19.4**	**58.9**	**22.5**	**14.7**	**8.54**	ND	ND	**14.0**	4.01	3.22
Barium	5,500	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Beryllium	0.4	0.375	**0.405**	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Cadmium	39	0.618	0.503	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Chromium	390	46.7	0.280	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Copper	3,100	73.6	23.6	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Lead	150	134	101	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Manganese	390	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Mercury	23	0.621	ND	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Nickel	1,000	6.06	9.39	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Selenium	390	ND	ND	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Silver	200	ND	ND	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Thallium	5.5	ND	ND	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Vanadium	550	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Zinc	6,000	81.8	127	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT

Notes: * RIDEM Standards from *"Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases"*
RDEC – Residential Direct Exposure Criteria
All results are in ppm
ND – Not Detected above laboratory detection limits
NT – Not Tested

TABLE 4
SUMMARY OF SOIL ANALYSIS

Parameter	RIDEM RDEC	SS14 0'-2' 9/5/06	SS15 0'-2' 9/5/06	SS16 0'-2' 9/5/06	SS17 0'-2' 9/5/06	SS18 0'-2' 10/23/06	SS19 0'-2' 10/23/06	SS20 0'-2' 10/23/06	SS21 0'-2' 10/23/06	SS22 0'-2' 10/23/06	SS23 0'-2' 10/23/06	SS24 0'-2' 10/23/06	SS25 0'-2' 11/20/06
VOCs		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
SVOCs (ppm)													
Acenaphthene	43	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Anthracene	35	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Benzo(a)anthracene	0.9	NT	NT	NT	NT	ND	ND	0.224	NT	NT	NT	NT	NT
Benzo(a)pyrene	0.4	NT	NT	NT	NT	0.186	ND	0.215	NT	NT	NT	NT	NT
Benzo(b)fluoranthene	0.9	NT	NT	NT	NT	0.249	ND	0.228	NT	NT	NT	NT	NT
Benzo(g,h,i)perylene	0.8	NT	NT	NT	NT	ND	ND	ND	NT	NT	NT	NT	NT
Benzo(k)fluoranthene	0.9	NT	NT	NT	NT	0.254	0.179	0.218	NT	NT	NT	NT	NT
Chrysene	0.4	NT	NT	NT	NT	0.230	0.231	0.266	NT	NT	NT	NT	NT
Dibenzo(a,h)anthracene	0.4	NT	NT	NT	NT	ND	ND	ND	NT	NT	NT	NT	NT
Fluoranthene	20	NT	NT	NT	NT	0.397	0.387	0.413	NT	NT	NT	NT	NT
Fluorene	28	NT	NT	NT	NT	ND	ND	ND	NT	NT	NT	NT	NT
Indeno(1,2,3-cd)pyrene	0.9	NT	NT	NT	NT	ND	ND	ND	NT	NT	NT	NT	NT
Phenanthrene	40	NT	NT	NT	NT	0.325	0.262	0.319	NT	NT	NT	NT	NT
Pyrene	13	NT	NT	NT	NT	0.334	0.312	0.424	NT	NT	NT	NT	NT
Metals (ppm)													
Antimony	10	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Arsenic	7	3.57	**7.71**	**13.1**	4.88	**10.3**	**25.8**	**21.8**	**13.5**	**20.5**	6.05	ND	16.6
Barium	5,500	NT	NT	NT	NT	60.5	68.1	116	88.8	83.8	83.9	NT	NT
Beryllium	0.4	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Cadmium	39	NT	NT	NT	NT	0.441	ND	0.325	0.341	0.417	0.428	NT	NT
Chromium	390	NT	NT	NT	NT	12.9	8.71	18.6	9.73	11.7	128	NT	NT
Copper	3,100	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Lead	150	NT	NT	NT	NT	39.6	28.1	**156**	45.2	69.8	150	NT	NT
Manganese	390	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Mercury	23	NT	NT	NT	NT	ND	0.0507	0.152	0.154	0.0512	0.516	NT	NT
Nickel	1,000	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Selenium	390	NT	NT	NT	NT	2.42	3.91	3.00	ND	2.08	ND	NT	NT
Silver	200	NT	NT	NT	NT	ND	ND	ND	3.08	ND	1.16	NT	NT
Thallium	5.5	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Vanadium	550	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Zinc	6,000	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT

Notes: * RIDEM Standards from *"Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases"*
RDEC – Residential Direct Exposure Criteria
All results are in ppm
ND – Not Detected above laboratory detection limits
NT – Not Tested

TABLE 4
SUMMARY OF SOIL ANALYSIS

Parameter	RIDEM RDEC	SS-26 0'-2' 11/20/06	SS-27 5'-7' 11/7/08	SS28 5'-7' 11/7/08	SS29 5'-7' 11/7/08	SS30 0'-2' 11/7/08	SS31 0'-2' 11/7/08	SS32 0'-2' 11/7/08	SS33 0'-2' 11/7/08
VOCs		NT	ND	ND	ND	ND	ND	NT	NT
SVOCs (ppm)									
Acenaphthene	43	NT	ND	ND	ND	ND	ND	NT	NT
Anthracene	35	NT	ND	ND	ND	ND	ND	NT	NT
Benzo(a)anthracene	0.9	NT	ND	ND	ND	ND	ND	NT	NT
Benzo(a)pyrene	0.4	NT	ND	ND	ND	ND	ND	NT	NT
Benzo(b)fluoranthene	0.9	NT	ND	ND	ND	ND	ND	NT	NT
Benzo(g,h,i)perylene	0.8	NT	ND	ND	ND	ND	ND	NT	NT
Benzo(k)fluoranthene	0.9	NT	ND	ND	ND	ND	ND	NT	NT
Chrysene	0.4	NT	ND	ND	ND	ND	ND	NT	NT
Dibenzo(a,h)anthracene	0.4	NT	ND	ND	ND	ND	ND	NT	NT
Fluoranthene	20	NT	ND	ND	ND	ND	0.184	NT	NT
Fluorene	28	NT	ND	ND	ND	ND	ND	NT	NT
Indeno(1,2,3-cd)pyrene	0.9	NT	ND	ND	ND	ND	ND	NT	NT
Phenanthrene	40	NT	ND	ND	ND	ND	ND	NT	NT
Pyrene	13	NT	ND	ND	ND	ND	ND	NT	NT
SPLP Lead (mg/L)**	0.04	NT	ND	NT	NT	NT	NT	ND	0.0201
Metals (ppm)									
Antimony	10	NT	NT	ND	ND	ND	ND	NT	NT
Arsenic	7	ND	ND	ND	ND	ND	ND	NT	NT
Barium	5,500	NT	7.93	18.1	8.09	NT	NT	NT	NT
Beryllium	0.4	NT	ND	ND	ND	ND	ND	NT	NT
Cadmium	39	NT	ND	ND	ND	0.613	ND	NT	NT
Chromium	390	NT	3.75	4.27	3.13	67.2	9.96	NT	NT
Copper	3,100	NT	2.71	1.51	ND	32.0	5.82	NT	NT
Lead	150	NT	ND	1.41	ND	140	14.8	NT	NT
Manganese	390	NT	55.2	380	168	NT	NT	NT	NT
Mercury	23	NT	ND	ND	ND	0.0355	0.100	NT	NT
Nickel	1,000	NT	ND	1.37	1.58	4.43	1.92	NT	NT
Selenium	390	NT	ND	ND	ND	ND	ND	NT	NT
Silver	200	NT	55.2	ND	ND	ND	ND	NT	NT
Thallium	5.5	NT	ND	ND	ND	ND	ND	NT	NT
Vanadium	550	NT	4.69	8.05	5.47	NT	NT	NT	NT
Zinc	6,000	NT	7.67	13.2	11.9	68.5	81.4	NT	NT

Notes:

* RIDEM Standards from *"Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases"*
** SPLP Results are compared to the GA Leachability Criteria in mg/L
RDEC – Residential Direct Exposure Criteria
All results are in ppm
ND – Not Detected above laboratory detection limits
NT – Not Tested

Jacques Whitford

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United States 02865

Bus 401 312 8005
Fax 401 312 8010

www.jacqueswhitford.com

December 20, 2006

Rhode Island Department of Environmental Management
Office of Waste Management
Attn.: Ms. Cynthia Gianfrancesco
235 Promenade Street
Providence, RI 02908-5767

RE: Former Pawcatuck Woolen Mill
198 Potter Hill Road
Westerly, RI
Jacques Whitford Company Job No. 1009825

Dear Ms. Gianfrancesco,

Please find enclosed copies of the public notice letters sent to abutters and other property owners near the above referenced property. Also attached is a list of the property owners notified and the plat maps that show the location of each of the property owners notified.

Should you have any questions or require additional information, please do not hesitate to contact the undersigned at (401) 312-8005.

Sincerely,
JACQUES WHITFORD

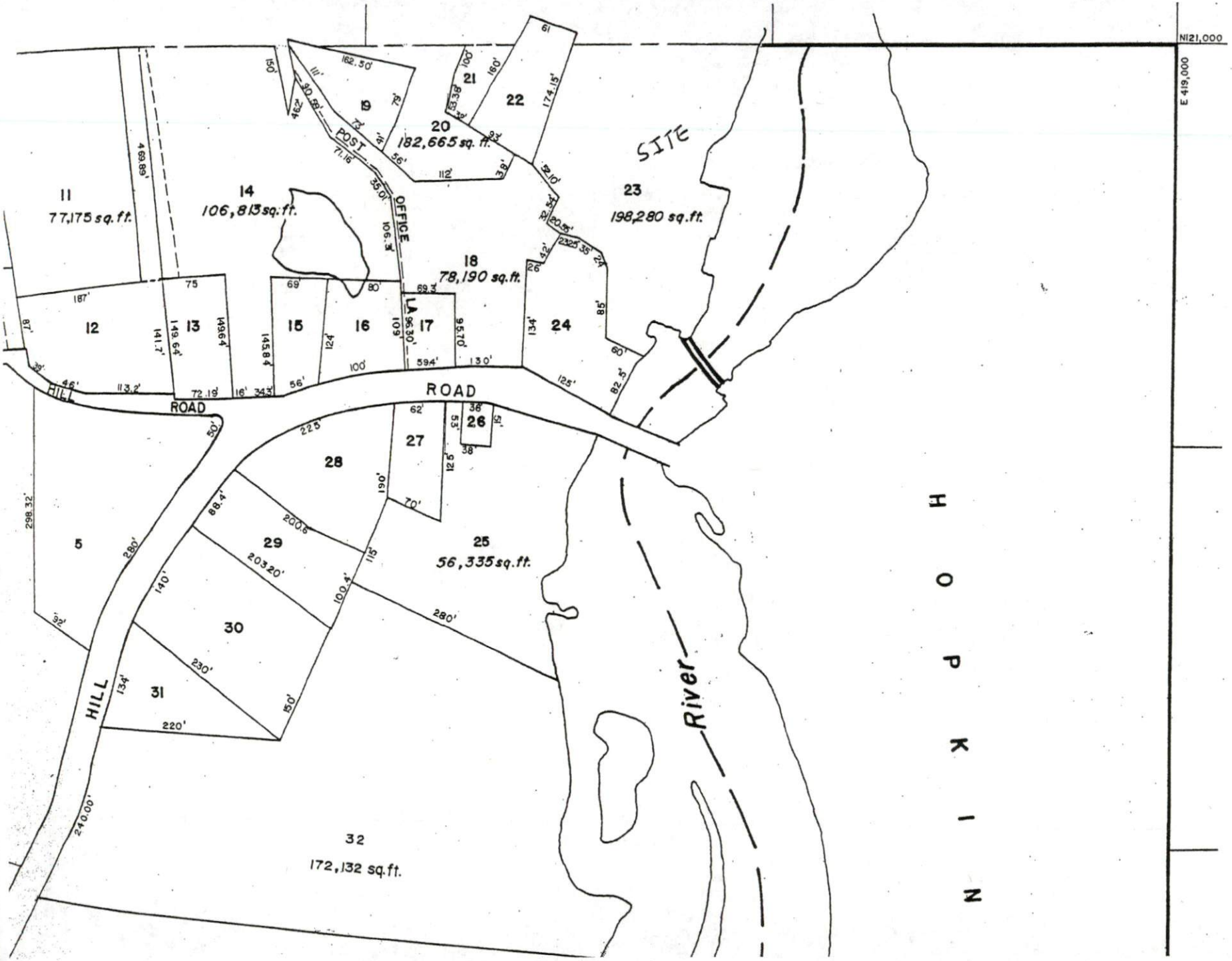
Joseph T. Unsworth P.E.
Project Manager

Jacques Whitford

An Environment of Exceptional Solutions

100% Post Consumer Content

Name	Mailing Address	City	State	Zip	Plat	Lot
Dale & Ann Edwards	17 Post Office Lane	Westerly	RI	02891	8	22
Lloyd & Ann Baker	194 Potter Hill Road	Westerly	RI	02891	8	18
Allison B. Goodsell	198 Potter Hill Road	Westerly	RI	02891	8	24,26
Richard Wurcik	30 Post Office Lane	Westerly	RI	02891	8	20
Francis J. Hunt Jr.	Buckeye Brook Road, PO BOX 209	Bradford	RI	02808	8	25
William Jacobson	15 Post Office Lane	Westerly	RI	02891	8	21
Kadir Koseuglo	69 Laurel Street	Ashaway	RI	02804	24	130
Raymond Morgan Jr.	72 Laurel Street	Ashaway	RI	02804	24	167
James A. Driscoll	70-A Laurel Street	Ashaway	RI	02804	24	168
Josia Turner	71 Laurel Street	Ashaway	RI	02804	24	131
Jeffrey Beaucamp	PO Box 1824	Westerly	RI	02804	24	132
Theodore & Betty Gardiner	PO Box 243	Ashaway	RI	02804	24	133
Thomas & Kim Dulaney	930 Groton Long Point Road	Groton	CT	06340	24	138
Charles & Karen Hammond	PO Box 126	Ashaway	RI	02804	24	139
John Ferrigno	133 River Road	Pacatuck	CT	06379	24	140
John Ferrigno	83B Laurel Street	Ashaway	RI	02804	24	141
Roy Hall	32 Maxson Street	Ashaway	RI	02804	24	142
Gilbert Macamaux	PO Box 405	Wyoming	RI	02898	24	161
Kenneth & Jody Dinwoodie	PO Box 18	Ashaway	RI	02804	24	162
Daniel & Lori Bueno	29B Maxson Street	Ashaway	RI	02804	24	162A
Timothy Ward & Marie Gentile	PO Box 211	Ashaway	RI	02804	24	165
James Hirst	Po Box 128	Ashaway	RI	02804	24	66


N121,000
E 419,000
SITE
HOPKIN
River
HILL ROAD
ROAD
POST OFFICE
LA
11
77,175 sq. ft.
12
13
14
106,813 sq. ft.
15
16
17
18
78,190 sq. ft.
19
20
182,665 sq. ft.
21
22
23
198,280 sq. ft.
24
25
56,335 sq. ft.
26
27
28
29
30
31
32
172,132 sq. ft.
5


WESTERLY
WESTERLY
NORTH STONINGTON, CONNEC
SITE
RIVER
RIVER ROAD
LAUREL STREET
MANUFACTURING
MAIN STREET
MAIN STREET
(ROUTE 3)
CHURCH STREET
BROOKDALE DRIVE
WILLIAMS STREET
EDGEWOOD AVENUE
RIDGEWOOD AVE.
RFR-80
R-1
M
1A
1B
7A
14
17
17A
17B
17C
17D
17E
17F
17G
17H
17J
17K
17L
17M
17N
17P

Jacques Whitford

Engineering, Scientific, Planning and Management Consultants

24 Albion Road
Suite 220
Lincoln RI
United States 02865

Bus 401 312 8005
Fax 401 312 8010

www.jacqueswhitford.com

December 20, 2006

Dale & Ann Edwards
17 Post Office Lane
Westerly, RI 02891

RE: Notification of Environmental Investigation on Abutting Property

To Whom It May Concern:

In accordance with the Rhode Island Department of Environmental Management (RIDEM) Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases, Rule 7.07, this letter has been written to inform you that a Site Investigation Report (SIR) has been completed and additional investigations may be completed for the property located at 198 Potter Hill Road in Westerly, RI, which is abutting to Plat 8 , Lot 22, for which you are listed as the current owner. Any questions regarding this notice can be directed to Mr. Joseph Unsworth, P.E., of Jacques Whitford Company, Inc., at (401) 312-8005.

Sincerely,
Jacques Whitford Company, Inc.

Joseph T. Unsworth, P.E.
Project Manager

Jacques Whitford

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Notification to Abutters
Site Investigation
Plat Map 8 Lot 23
198 Potter Hill Road
Westerly, Rhode Island
December 19, 2006

In accordance with the Rhode Island Department of Environmental Management's (RIDEM's) Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases (the Remediation Regulations), Jacques Whitford Company, Inc., representing the owners of the above referenced site, is providing notice to abutters that a Site Investigation Report for the above mentioned property has been completed and additional investigation activities may be completed within the next three months. The property is further designated on Plat Map 8, as Lot 23, of the Town of Westerly Tax Assessor's plat maps. The goal of the investigations is to determine if the subsurface of the subject property had been impacted by previous operations, which may have resulted in any exceedances of the RIDEM's promulgated soil and groundwater criteria. The previously completed investigation included sampling and laboratory analysis of surface and subsurface soil, as well as groundwater. The SIR was submitted to the RIDEM.

Should you desire any additional information regarding this project, please contact me at the following address/phone:

Joseph T. Unsworth, P.E.
Jacques Whitford Company, Inc.
24 Albion Road, Suite 220
Lincoln, RI 02965
(401) 312-8005

Jacques Whitford

Engineering, Scientific, Planning and Management Consultants

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Suite 220
Lincoln RI
United States 02865

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Fax 401 312 8010

www.jacqueswhitford.com

December 20, 2006

Lloyd & Ann Baker
194 Potter Hill Road
Westerly, RI 02891

RE: Notification of Environmental Investigation on Abutting Property

To Whom It May Concern:

In accordance with the Rhode Island Department of Environmental Management (RIDEM) Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases, Rule 7.07, this letter has been written to inform you that a Site Investigation Report (SIR) has been completed and additional investigations may be completed for the property located at 198 Potter Hill Road in Westerly, RI, which is abutting to Plat 8 , Lot 18, for which you are listed as the current owner. Any questions regarding this notice can be directed to Mr. Joseph Unsworth, P.E., of Jacques Whitford Company, Inc., at (401) 312-8005.

Sincerely,
Jacques Whitford Company, Inc.

Joseph T. Unsworth, P.E.
Project Manager

Jacques Whitford

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December 20, 2006

Allison B. Goodsell
198 Potter Hill Road
Westerly, RI 02891

RE: Notification of Environmental Investigation on Abutting Property

To Whom It May Concern:

In accordance with the Rhode Island Department of Environmental Management (RIDEM) Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases, Rule 7.07, this letter has been written to inform you that a Site Investigation Report (SIR) has been completed and additional investigations may be completed for the property located at 198 Potter Hill Road in Westerly, RI, which is abutting to Plat 8, Lots 24 and 26, for which you are listed as the current owner. Any questions regarding this notice can be directed to Mr. Joseph Unsworth, P.E., of Jacques Whitford Company, Inc., at (401) 312-8005.

Sincerely,
Jacques Whitford Company, Inc.

Joseph T. Unsworth, P.E.
Project Manager

Jacques Whitford

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www.jacqueswhitford.com

December 20, 2006

Richard Wurcik
30 Post Office Lane
Westerly, RI 02891

RE: Notification of Environmental Investigation on Abutting Property

To Whom It May Concern:

In accordance with the Rhode Island Department of Environmental Management (RIDEM) Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases, Rule 7.07, this letter has been written to inform you that a Site Investigation Report (SIR) has been completed and additional investigations may be completed for the property located at 198 Potter Hill Road in Westerly, RI, which is abutting to Plat 8, Lot 20, for which you are listed as the current owner. Any questions regarding this notice can be directed to Mr. Joseph Unsworth, P.E., of Jacques Whitford Company, Inc., at (401) 312-8005.

Sincerely,
Jacques Whitford Company, Inc.

Joseph T. Unsworth, P.E.
Project Manager

Jacques Whitford

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December 20, 2006

Francis J. Hunt Jr.
Buckeye Brook Road, PO BOX 209
Bradford, RI 02808

RE: Notification of Environmental Investigation on Abutting Property

To Whom It May Concern:

In accordance with the Rhode Island Department of Environmental Management (RIDEM) Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases, Rule 7.07, this letter has been written to inform you that a Site Investigation Report (SIR) has been completed and additional investigations may be completed for the property located at 198 Potter Hill Road in Westerly, RI, which is abutting to Plat 8, Lot 25, for which you are listed as the current owner. Any questions regarding this notice can be directed to Mr. Joseph Unsworth, P.E., of Jacques Whitford Company, Inc., at (401) 312-8005.

Sincerely,
Jacques Whitford Company, Inc.

Joseph T. Unsworth, P.E.
Project Manager

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December 20, 2006

William Jacobson
15 Post Office Lane
Westerly, RI 02891

RE: Notification of Environmental Investigation on Abutting Property

To Whom It May Concern:

In accordance with the Rhode Island Department of Environmental Management (RIDEM) Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases, Rule 7.07, this letter has been written to inform you that a Site Investigation Report (SIR) has been completed and additional investigations may be completed for the property located at 198 Potter Hill Road in Westerly, RI, which is abutting to Plat 8, Lot 21, for which you are listed as the current owner. Any questions regarding this notice can be directed to Mr. Joseph Unsworth, P.E., of Jacques Whitford Company, Inc., at (401) 312-8005.

Sincerely,
Jacques Whitford Company, Inc.

Joseph T. Unsworth, P.E.
Project Manager

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December 20, 2006

Dale & Ann Edwards
17 Post Office Lane
Westerly, RI 02891

RE: Notification of Environmental Investigation on Abutting Property

To Whom It May Concern:

In accordance with the Rhode Island Department of Environmental Management (RIDEM) Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases, Rule 7.07, this letter has been written to inform you that a Site Investigation Report (SIR) has been completed and additional investigations may be completed for the property located at 198 Potter Hill Road in Westerly, RI, which is abutting to Plat 8 , Lot 22, for which you are listed as the current owner. Any questions regarding this notice can be directed to Mr. Joseph Unsworth, P.E., of Jacques Whitford Company, Inc., at (401) 312-8005.

Sincerely,
Jacques Whitford Company, Inc.

Joseph T. Unsworth, P.E.
Project Manager

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December 20, 2006

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194 Potter Hill Road
Westerly, RI 02891

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Sincerely,
Jacques Whitford Company, Inc.

Joseph T. Unsworth, P.E.
Project Manager

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December 20, 2006

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198 Potter Hill Road
Westerly, RI 02891

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Sincerely,
Jacques Whitford Company, Inc.

Joseph T. Unsworth, P.E.
Project Manager

Jacques Whitford

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December 20, 2006

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30 Post Office Lane
Westerly, RI 02891

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Sincerely,
Jacques Whitford Company, Inc.

Joseph T. Unsworth, P.E.
Project Manager

Jacques Whitford

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December 20, 2006

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Buckeye Brook Road, PO BOX 209
Bradford, RI 02808

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In accordance with the Rhode Island Department of Environmental Management (RIDEM) Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases, Rule 7.07, this letter has been written to inform you that a Site Investigation Report (SIR) has been completed and additional investigations may be completed for the property located at 198 Potter Hill Road in Westerly, RI, which is abutting to Plat 8, Lot 25, for which you are listed as the current owner. Any questions regarding this notice can be directed to Mr. Joseph Unsworth, P.E., of Jacques Whitford Company, Inc., at (401) 312-8005.

Sincerely,
Jacques Whitford Company, Inc.

Joseph T. Unsworth, P.E.
Project Manager

Jacques Whitford

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December 20, 2006

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15 Post Office Lane
Westerly, RI 02891

RE: Notification of Environmental Investigation on Abutting Property

To Whom It May Concern:

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Sincerely,
Jacques Whitford Company, Inc.

Joseph T. Unsworth, P.E.
Project Manager

Jacques Whitford

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December 20, 2006

Kadir Koseuglo
69 Laurel Street
Ashaway, RI 02804

RE: Notification of Environmental Investigation on Abutting Property

To Whom It May Concern:

In accordance with the Rhode Island Department of Environmental Management (RIDEM) Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases, Rule 7.07, this letter has been written to inform you that a Site Investigation Report (SIR) has been completed and additional investigations may be completed for the property located at 198 Potter Hill Road in Westerly, RI, which is abutting to Plat 24, Lot 130, for which you are listed as the current owner. Any questions regarding this notice can be directed to Mr. Joseph Unsworth, P.E., of Jacques Whitford Company, Inc., at (401) 312-8005.

Sincerely,
Jacques Whitford Company, Inc.

Joseph T. Unsworth, P.E.
Project Manager

Jacques Whitford

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Lincoln RI
United States 02865

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www.jacqueswhitford.com

December 20, 2006

Raymond Morgan Jr.
72 Laurel Street
Ashaway, RI 02804

RE: Notification of Environmental Investigation on Abutting Property

To Whom It May Concern:

In accordance with the Rhode Island Department of Environmental Management (RIDEM) Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases, Rule 7.07, this letter has been written to inform you that a Site Investigation Report (SIR) has been completed and additional investigations may be completed for the property located at 198 Potter Hill Road in Westerly, RI, which is abutting to Plat 24, Lot 167, for which you are listed as the current owner. Any questions regarding this notice can be directed to Mr. Joseph Unsworth, P.E., of Jacques Whitford Company, Inc., at (401) 312-8005.

Sincerely,
Jacques Whitford Company, Inc.

Joseph T. Unsworth, P.E.
Project Manager

Jacques Whitford

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Jacques Whitford

Engineering, Scientific, Planning and Management Consultants

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Lincoln RI
United States 02865

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Fax 401 312 8010

www.jacqueswhitford.com

December 20, 2006

James A. Driscoll
70-A Laurel Street
Ashaway, RI 02804

RE: Notification of Environmental Investigation on Abutting Property

To Whom It May Concern:

In accordance with the Rhode Island Department of Environmental Management (RIDEM) Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases, Rule 7.07, this letter has been written to inform you that a Site Investigation Report (SIR) has been completed and additional investigations may be completed for the property located at 198 Potter Hill Road in Westerly, RI, which is abutting to Plat 24, Lot 168, for which you are listed as the current owner. Any questions regarding this notice can be directed to Mr. Joseph Unsworth, P.E., of Jacques Whitford Company, Inc., at (401) 312-8005.

Sincerely,
Jacques Whitford Company, Inc.

Joseph T. Unsworth, P.E.
Project Manager

Jacques Whitford

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Lincoln RI
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December 20, 2006

Josia Turner
71 Laurel Street
Ashaway, RI 02804

RE: Notification of Environmental Investigation on Abutting Property

To Whom It May Concern:

In accordance with the Rhode Island Department of Environmental Management (RIDEM) Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases, Rule 7.07, this letter has been written to inform you that a Site Investigation Report (SIR) has been completed and additional investigations may be completed for the property located at 198 Potter Hill Road in Westerly, RI, which is abutting to Plat 24, Lot 131, for which you are listed as the current owner. Any questions regarding this notice can be directed to Mr. Joseph Unsworth, P.E., of Jacques Whitford Company, Inc., at (401) 312-8005.

Sincerely,
Jacques Whitford Company, Inc.

Joseph T. Unsworth, P.E.
Project Manager

Jacques Whitford

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Jacques Whitford

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Lincoln RI
United States 02865

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Fax 401 312 8010

www.jacqueswhitford.com

December 20, 2006

Jeffrey Beaucamp
PO Box 1824
Westerly, RI 02804

RE: Notification of Environmental Investigation on Abutting Property

To Whom It May Concern:

In accordance with the Rhode Island Department of Environmental Management (RIDEM) Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases, Rule 7.07, this letter has been written to inform you that a Site Investigation Report (SIR) has been completed and additional investigations may be completed for the property located at 198 Potter Hill Road in Westerly, RI, which is abutting to Plat 24, Lot 132, for which you are listed as the current owner. Any questions regarding this notice can be directed to Mr. Joseph Unsworth, P.E., of Jacques Whitford Company, Inc., at (401) 312-8005.

Sincerely,
Jacques Whitford Company, Inc.

Joseph T. Unsworth, P.E.
Project Manager

Jacques Whitford

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Jacques Whitford

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Lincoln RI
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December 20, 2006

Theodore & Betty Gardiner
PO Box 243
Ashaway, RI 02804

RE: Notification of Environmental Investigation on Abutting Property

To Whom It May Concern:

In accordance with the Rhode Island Department of Environmental Management (RIDEM) Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases, Rule 7.07, this letter has been written to inform you that a Site Investigation Report (SIR) has been completed and additional investigations may be completed for the property located at 198 Potter Hill Road in Westerly, RI, which is abutting to Plat 24, Lot 133, for which you are listed as the current owner. Any questions regarding this notice can be directed to Mr. Joseph Unsworth, P.E., of Jacques Whitford Company, Inc., at (401) 312-8005.

Sincerely,
Jacques Whitford Company, Inc.

Joseph T. Unsworth, P.E.
Project Manager

Jacques Whitford

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December 20, 2006

Thomas & Kim Dulaney
930 Groton Long Point Road
Groton, CT 06340

RE: Notification of Environmental Investigation on Abutting Property

To Whom It May Concern:

In accordance with the Rhode Island Department of Environmental Management (RIDEM) Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases, Rule 7.07, this letter has been written to inform you that a Site Investigation Report (SIR) has been completed and additional investigations may be completed for the property located at 198 Potter Hill Road in Westerly, RI, which is abutting to Plat 24, Lot 138, for which you are listed as the current owner. Any questions regarding this notice can be directed to Mr. Joseph Unsworth, P.E., of Jacques Whitford Company, Inc., at (401) 312-8005.

Sincerely,
Jacques Whitford Company, Inc.

Joseph T. Unsworth, P.E.
Project Manager

Jacques Whitford

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Jacques Whitford

Engineering, Scientific, Planning and Management Consultants

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Lincoln RI
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December 20, 2006

Charles & Karen Hammond
PO Box 126
Ashaway, RI 02804

RE: Notification of Environmental Investigation on Abutting Property

To Whom It May Concern:

In accordance with the Rhode Island Department of Environmental Management (RIDEM) Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases, Rule 7.07, this letter has been written to inform you that a Site Investigation Report (SIR) has been completed and additional investigations may be completed for the property located at 198 Potter Hill Road in Westerly, RI, which is abutting to Plat 24, Lot 139, for which you are listed as the current owner. Any questions regarding this notice can be directed to Mr. Joseph Unsworth, P.E., of Jacques Whitford Company, Inc., at (401) 312-8005.

Sincerely,
Jacques Whitford Company, Inc.

Joseph T. Unsworth, P.E.
Project Manager

Jacques Whitford

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Jacques Whitford

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Lincoln RI
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Fax 401 312 8010

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December 20, 2006

John Ferrigno
133 River Road
Pacatuck, CT 06379

RE: Notification of Environmental Investigation on Abutting Property

To Whom It May Concern:

In accordance with the Rhode Island Department of Environmental Management (RIDEM) Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases, Rule 7.07, this letter has been written to inform you that a Site Investigation Report (SIR) has been completed and additional investigations may be completed for the property located at 198 Potter Hill Road in Westerly, RI, which is abutting to Plat 24, Lot 140, for which you are listed as the current owner. Any questions regarding this notice can be directed to Mr. Joseph Unsworth, P.E., of Jacques Whitford Company, Inc., at (401) 312-8005.

Sincerely,
Jacques Whitford Company, Inc.

Joseph T. Unsworth, P.E.
Project Manager

Jacques Whitford

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Jacques Whitford

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December 20, 2006

John Ferrigno
83B Laurel Street
Ashaway, RI 02804

RE: Notification of Environmental Investigation on Abutting Property

To Whom It May Concern:

In accordance with the Rhode Island Department of Environmental Management (RIDEM) Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases, Rule 7.07, this letter has been written to inform you that a Site Investigation Report (SIR) has been completed and additional investigations may be completed for the property located at 198 Potter Hill Road in Westerly, RI, which is abutting to Plat 24, Lot 141, for which you are listed as the current owner. Any questions regarding this notice can be directed to Mr. Joseph Unsworth, P.E., of Jacques Whitford Company, Inc., at (401) 312-8005.

Sincerely,
Jacques Whitford Company, Inc.

Joseph T. Unsworth, P.E.
Project Manager

Jacques Whitford

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Pipes in basement of main building



Discharge pipe in basement of main building



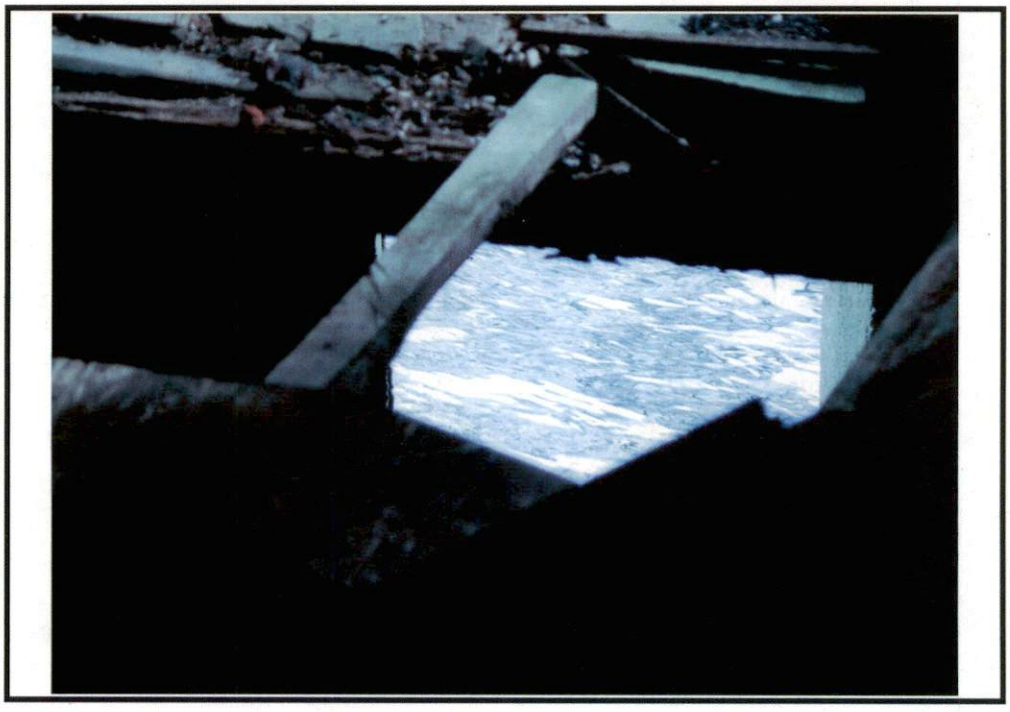
Boiler fire box – note grates and coal residue



Boilers – note coal residue in fire box area and clean out doors below



Discharge pipes along riverbank



Opening in side of wash building

Jacques Whitford

MONITORING WELL LOG

B1/MW1

CLIENT Renewable resources, Inc.

LOCATION 198 Potter Hill Road, Westerly, Rhode Island

DATES: BORING 10/23/2006 to 10/23/2006 WATER LEVEL 8 ft during drilling

PROJECT No. 1009825.

BOREHOLE No. B1/MW1

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	WELL CONSTRUCTION	SAMPLES TYPE	SAMPLES NUMBER	SAMPLES RECOVERY	SAMPLES N-VALUE OR RQD	VOC CONCENTRATION (ppm or % LEL)
		Leaf Litter						in.		
0		Humus / leaf litter			Road Box; Solid Pipe Packed in Sand					
		Topsoil: brown silt trace sand, damp								
		Tan fine to coarse SAND (SP) with gravel, moist -trace amounts of silt			Solid Pipe Packed in Bentonite; Solid Pipe Packed in Sand	DP	S-1	38		BDL
5		Same as above, moist to wet			Slotted Pipe Packed in Sand	DP	S-2	42		BDL
10		Same as above, wet				DP	S-3	52		BDL
15		Boring terminated at 15 feet.								
20										

X: Y: Driller: Aquifer Drilling & Testing; JW Field Representative: Joe Unsworth
Rig: Track-Mounted Geoprobe 6600; DP = Direct Push Method
5' X 2" Sampling shoe; BDL = Below Detection Limit

MON-I 1009825-POTTER HILL MILL- MORE ADDITIONAL SAMPLING.GPJ JW NHP.GDT 10/7/08

Jacques Whitford

MONITORING WELL LOG

B2/MW2

CLIENT Renewable resources, Inc.

PROJECT No. 1009825.

LOCATION 198 Potter Hill Road, Westerly, Rhode Island

BOREHOLE No. B2/MW2

DATES: BORING 10/23/2006 to 10/23/2006 WATER LEVEL 9 ft during drilling

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	WELL CONSTRUCTION	SAMPLES TYPE	SAMPLES NUMBER	SAMPLES RECOVERY	SAMPLES N-VALUE OR RQD	VOC CONCENTRATION (ppm or % LEL)
		Leaf Litter						in.		
0		Humus / leaf litter			Road Box; Solid Pipe Packed in Sand					
		Topsoil: brown silt trace sand, damp								
		Tan fine to coarse SAND (SP) with gravel, moist -trace amounts of silt			Solid Pipe Packed in Bentonite; Solid Pipe Packed in Sand	DP	S-1	21		BDL
5		Same as above, moist to wet		▽	Slotted Pipe Packed in Sand	DP	S-2	38		BDL
10		Same as above, wet				DP	S-3	47		BDL
15		Boring terminated at 15 feet.								
20										

X: Y: Driller: Aquifer Drilling & Testing; JW Field Representative: Joe Unsworth
Rig: Track-Mounted Geoprobe 6600; DP = Direct Push Method
5' X 2" Sampling shoe; BDL = Below Detection Limit

MON-I 1009825-POTTER HILL MILL- MORE ADDITIONAL SAMPLING.GPJ JW NHP.GDT 10/7/08

Jacques Whitford

MONITORING WELL LOG

MW3/SS27

CLIENT Renewable Resources, Inc.

PROJECT No. 1009825.

LOCATION 198 Potter Hill Road, Westerly, Rhode Island

BOREHOLE No. MW3/SS27

DATES: BORING 11/8/2007 to 11/8/2007

WATER LEVEL 8 ft during drilling

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	WELL CONSTRUCTION	SAMPLES TYPE	SAMPLES NUMBER	SAMPLES RECOVERY	SAMPLES N-VALUE OR RQD	VOC CONCENTRATION (ppm or % LEL)
		Grass/Leaf Litter						in.		
0		Topsoil: dark brown silt with sand, Damp			Flush-mount road box; Solid pipe packed in sand					
		Orange/brown fine to medium SAND and silt (SM), Damp			Solid pipe packed in Bentonite					
		Tan fine to coarse SAND with gravel (SP), Damp to Moist -trace amounts of silt			Solid pipe packed in sand	DP	1	30		NT
5		Same as above, Moist to Wet		▽		DP	2	44		NT
10		Drive casing, no samples collected.								
15					Slotted pipe packed in sand					
20										

X: Y: Driller: Alternative Subsurface Explorations; Supervisor: Rob Snyder
Rig: Truck Mounted GeoProbe 6600
DP= Direct Push Sampling Method, NT = Not Tested

Continued Next Page

MON-I 1009825-POTTER HILL MILL-ADDITIONAL SAMPLING.GPJ JW NHP.GDT 11/9/07

Jacques Whitford

MONITORING WELL LOG

MW3/SS27

CLIENT Renewable Resources, Inc.

LOCATION 198 Potter Hill Road, Westerly, Rhode Island

DATES: BORING 11/8/2007 to 11/8/2007 WATER LEVEL 8 ft during drilling

PROJECT No. 1009825.

BOREHOLE No. MW3/SS27

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	WELL CONSTRUCTION	SAMPLES TYPE	SAMPLES NUMBER	SAMPLES RECOVERY in.	SAMPLES N-VALUE OR RQD	VOC CONCENTRATION (ppm or % LEL)
20		Drive casing, no samples collected.			Slotted pipe packed in sand					
		Bottom of boring at 22 feet due to refusal on cobble, boulder, or bedrock.								
25										
30										
35										
40										

X: Y: Driller: Alternative Subsurface Explorations; Supervisor: Rob Snyder
Rig: Truck Mounted GeoProbe 6600
DP= Direct Push Sampling Method, NT = Not Tested

MON-I 1009825-POTTER HILL MILL-ADDITIONAL SAMPLING.GPJ JW NHP.GDT 11/9/07

Jacques Whitford

MONITORING WELL LOG

MW4/SS28

CLIENT Renewable Resources, Inc.

LOCATION 198 Potter Hill Road, Westerly, Rhode Island

DATES: BORING 11/8/2007 to 11/8/2007 WATER LEVEL 8 ft during drilling

PROJECT No. 1009825.

BOREHOLE No. MW4/SS28

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	WELL CONSTRUCTION	SAMPLES TYPE	SAMPLES NUMBER	SAMPLES RECOVERY	SAMPLES N-VALUE OR RQD	VOC CONCENTRATION (ppm or % LEL)
		Weeds/Leaf Litter						in.		
0		Topsoil: dark brown silt with sand, Damp			Flush-mount road box					
		Dark Brown to orange/brown fine to medium SAND and silt (SM), Damp			Solid pipe packed in sand Solid pipe packed in Bentonite	DP	1	39		NT
		Tan fine to coarse SAND with gravel (SP), Damp to Moist -trace amounts of silt								
5		Same as above, Moist to Wet				DP	2	36		NT
		Olive/brown SILT (ML) with fine sand, Wet		▽	Solid pipe packed in sand					
10		Drive casing, no samples collected.								
15										
20										

X: Y: Driller: Alternative Subsurface Explorations; Supervisor: Rob Snyder
Rig: Truck Mounted GeoProbe 6600
DP= Direct Push Sampling Method, NT = Not Tested

Continued Next Page

MON-I 1009825-POTTER HILL MILL-ADDITIONAL SAMPLING.GPJ JW NHP.GDT 11/9/07

MONITORING WELL LOG

MW4/SS28

CLIENT Renewable Resources, Inc.

LOCATION 198 Potter Hill Road, Westerly, Rhode Island

DATES: BORING 11/8/2007 to 11/8/2007 WATER LEVEL 8 ft during drilling

PROJECT No. 1009825.

BOREHOLE No. MW4/SS28

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	WELL CONSTRUCTION	SAMPLES TYPE	SAMPLES NUMBER	SAMPLES RECOVERY	SAMPLES N-VALUE OR RQD	VOC CONCENTRATION (ppm or % LEL)
								in.		
20		Drive casing, no samples collected.			Solid pipe packed in sand					
25					Slotted pipe packed in sand					
30										
		Bottom of boring at 33 feet due to refusal on cobble, boulder, or bedrock.								
35										
40										

X: Y: Driller: Alternative Subsurface Explorations; Supervisor: Rob Snyder
Rig: Truck Mounted GeoProbe 6600
DP= Direct Push Sampling Method, NT = Not Tested

MON-I 1009825-POTTER HILL MILL-ADDITIONAL SAMPLING.GPJ JW NHP.GDT 11/9/07

Jacques Whitford

MONITORING WELL LOG

MW5/SS29

CLIENT Renewable Resources, Inc.

LOCATION 198 Potter Hill Road, Westerly, Rhode Island

DATES: BORING 11/8/2007 to 11/8/2007 WATER LEVEL 5 ft during drilling

PROJECT No. 1009825.

BOREHOLE No. MW5/SS29

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	WELL CONSTRUCTION	SAMPLES TYPE	SAMPLES NUMBER	SAMPLES RECOVERY	SAMPLES N-VALUE OR RQD	VOC CONCENTRATION (ppm or % LEL)
		Grass/Leaf Litter						in.		
0		Humus, leaf litter			Flush-mount road box					
		Topsoil: dark brown silt with sand, Damp			Solid pipe packed in sand Solid pipe packed in Bentonite					
		Light brown fine SAND and silt (SM), Damp to Moist				DP	1	36		NT
					Solid pipe packed in sand					
5		Same as above, Wet		▽						
		Gray fine SAND and silt (SM), Wet				DP	2	40		NT
		Dark brown SILT (ML) with fine sand, Wet -trace amounts of organic matter (root fibers)								
		Gray fine to coarse SAND (SP), Wet -trace amounts of gravel and silt								
10		Drive casing, no samples collected.			Slotted pipe packed in sand					
15										
		Bottom of boring at 18.5 feet due to refusal on cobble, boulder, or bedrock.								
20										

X: Y: Driller: Alternative Subsurface Explorations; Supervisor: Rob Snyder
Rig: Truck Mounted GeoProbe 6600
DP= Direct Push Sampling Method, NT = Not Tested

MON-I 1009825-POTTER HILL MILL-ADDITIONAL SAMPLING.GPJ JW NHP.GDT 11/9/07

in accordance with the Remediation Regulations by December 2, 2020. Furthermore, the Department is requiring that Renewable Resources, Inc. submit a SIR Response to Comments that responds to the December 3, 2008 comments (attached) and contains a status update on the site since the last SIR submission (August 13, 2008) by February 2, 2021.

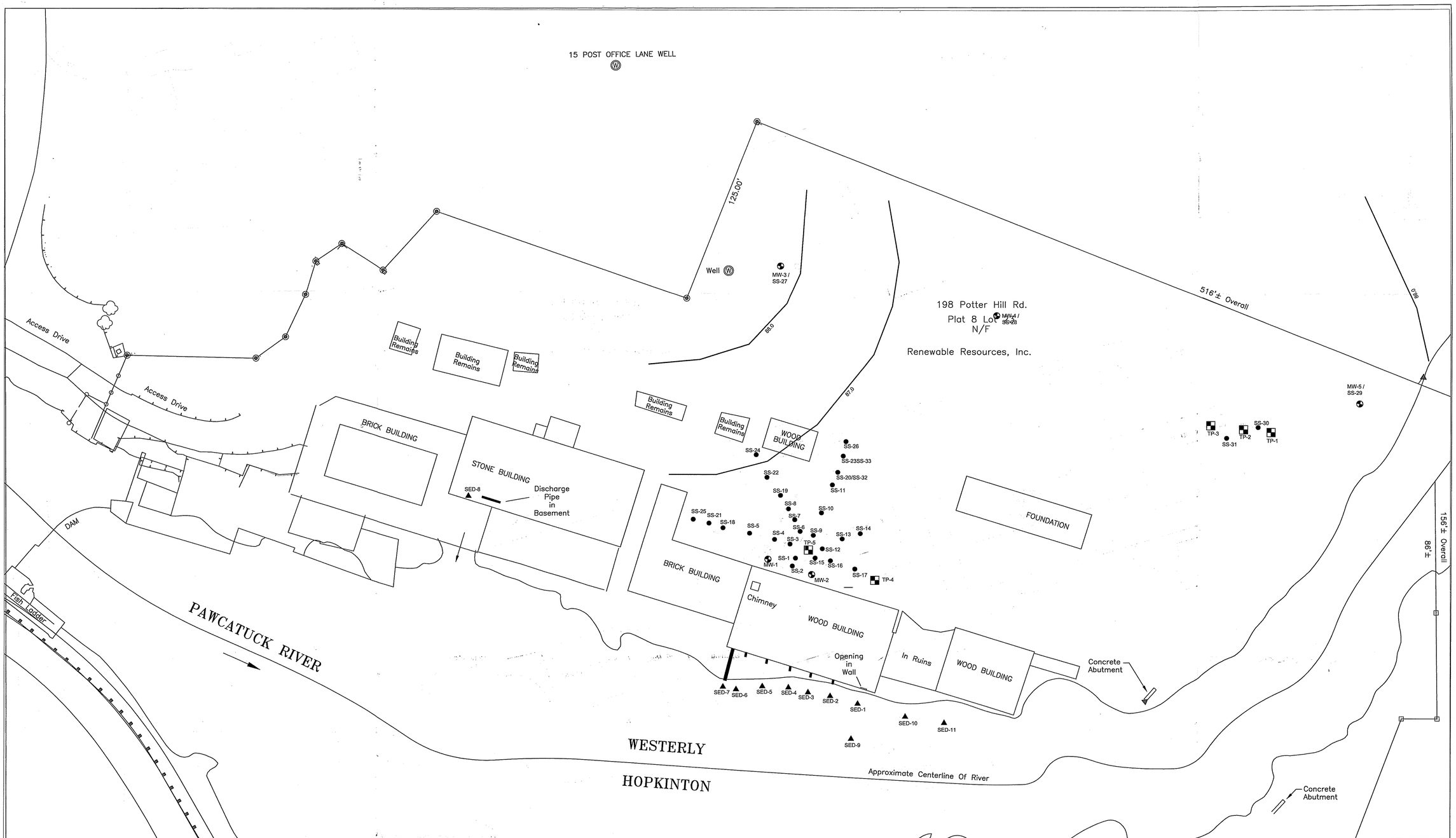
If you have any questions regarding this letter, please contact me by telephone at (401) 222-2797 ext. 2030, or by E-mail at Stephanie.Cappelli@dem.ri.gov.

Sincerely,

Stephanie Cappelli
Environmental Engineer I
Office of Land Revitalization &
Sustainable Materials Management

cc: Kelly Owens, RIDEM/LRSMM
Rachel Simpson, RIDEM/LRSMM
Town of Westerly

Attachments: SIR Comment Letter, December 3, 2008



LEGEND

- MW-1 MONITORING WELLS
- SS-1 SOIL SAMPLES
- DRINKING WATER WELL
- TP-1 TEST PITS
- SED-1 SEDIMENT SAMPLES

NOTE

1. PLAN DEVELOPED FROM AN UNTITLED, UNDATED SITE PLAN PROVIDED BY THE CLIENT IN ELECTRONIC FORMAT.
2. MONITORING WELL LOCATIONS DETERMINED IN THE FIELD BY REFERENCING EXISTING SITE FEATURES. ALL LOCATIONS ARE APPROXIMATE.

Jacques Whitford Company, Inc.

Jacques Whitford

JACQUES WHITFORD LOCATION: Lincoln, Rhode Island					DRAWING TITLE: SAMPLE LOCATION PLAN
DATE PREPARED: 1/4/08	DESIGNED BY: –	DRAWN BY: RLS	CHECKED BY: JTU	REVIEWED BY: –	POTTER HILL MILL POTTER HILL ROAD WESTERLY, RHODE ISLAND
REVISION DATE:	REVISION NO:	DRAWN BY:	CHECKED BY:	REVIEWED BY:	
PROJECT NAME/FILE NAME: Potter Hill Mill		PROJECT NUMBER/PHASE: 1009825.	SCALE: 1"=40'		DWG NO. 3
					PREPARED FOR: RENEWABLE RESOURCES

Jacques Whitford

Engineering, Scientific, Planning and Management Consultants

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March 18, 2008

RECEIVED
O.E.M. / O.W.M.
2008 MAR 31 P 3:48

Rhode Island Department of Environmental Management
Office of Waste Management
Attention: Ms. Cynthia M. Gianfrancesco
235 Promenade Street
Providence, RI 02908-5767

RE: Additional Investigation
198 Potter Hill Road, Westerly, RI
Jacques Whitford Project No. 1009825

Dear Ms. Gianfrancesco:

Jacques Whitford received your letter to Renewable Resources, Inc., dated February 29, 2008. This letter is being submitted to address your comments attached to that letter.

1. **Comment 1:** Please verify in the revised SIR that all VOC soil samples were collected via Method 5035 (i.e., Chain of Custody indicates Methanol preservative, but collection needs to be outlined or included an SOP).

   Response: All soil samples collected for VOC analysis were obtained following methods appropriate for methods 5035. Jacques Whitford is supplied with methanol preserved VOA vials that contain a pre-weighed amount of methanol. The soil samples are placed into the vials to a certain volume and weighed by the lab upon receipt of the samples to determine the soil/methanol ratio. The laboratory data sheets report any soil samples that were received outside of the appropriate ratio range. None of the soil samples were reported outside the required ratio range. This discussion will be included in the revised SIR.

2. **Comment 2:** Please indicate how monitoring wells were developed.

   Response: All monitoring wells were developed the day they are installed. Development includes high rate pumping of the wells to remove sediments in the well and constant agitation of the well during the pumping to ensure sediments that may settle on the bottom of the well are entrained and pumped from the well. Since the monitoring wells at the site had high rates of recharge, none of the wells went dry during the development and therefore no water was added to the wells. Due to the sandy soils in the subsurface at the site, the development of the monitoring wells resulted in groundwater samples with very little or no turbidity.

3. **Comment 3:** The RI Residential Direct Exposure Criteria (RDEC) is generally only applied to sediments when location of sediments is easily accessible and seasonally exposed to potential human contact. If sediments in this section of the Pawtuxet River do not meet that description then it is not appropriate to compare sediment results to RDEC. Since the Department does not have sediment criteria, the recommendation is that sediment results be compared to nationally published sediment criteria guidelines such as those published in the *Development and Evaluation of Consensus Based Sediment Quality*

4. *Guidelines for Freshwater Ecosystems*, D.D. MacDonald, et al. Please include this comparison on the revised SIR. Also, please depict the location of all discharge pipes on Figure 3.

   Response: The revised SIR includes a revised table that compares the sediment analytical results to the sediment quality guidelines. Figure 3 was revised to depict the location of the discharge pipes.

5. **Comment 4:** Regarding sediment contamination found in the river, while there may be attribution from more than one source (i.e., road runoff), the contaminants found in the river sediments are the same contaminants found in coal ash contaminated soil in the former boiler house area on the site; therefore, it can be determined that coal ash from the boiler area has contributed to sediment contamination in the river. Prevention of further contamination to the river must be addressed on the remedial alternatives for the site.

   Response: As contained in the SIR submitted to the RIDEM, the area of coal ash contaminated soils will be capped. The cap will ensure no further migration of coal ash contaminated soils to the river. As demonstrated by the results of the groundwater sampling and analysis, the coal ash related contaminants are not impacting groundwater and are not migrating to the river via groundwater migration. Therefore, elimination of erosion of the coal ash contaminated soils will prevent any further degradation of the river.

6. **Comment 5**: Tables: Please include the date each sample was collected and the units of measure.

   Response: The revised SIR will contain revised tables with dates and units of measure.

7. **Comment 6:** Laboratory Reports: Please confirm that all Reportable Detection Limits (RDL) for all analytes tested for are below applicable RIDEM Criteria as published I Tables 1-4 of the Remediation Regulations. For example, samples SS27has an RDL for 1,2-Dibromomenthane (EDB) of 31.2 ug/kg. The RDEC for this compound is 10 ppb. This should have been reported as a QA/QC issue with an explanation as to how this should be interpreted.

   Response: We reviewed all the analytical data generated as part of the SIR. The Reportable Detection Limits (RDLs) for EDB were greater than the RIDEM RDEC for soil samples and greater than the GA Groundwater Objective for groundwater samples. The RDL for benzo(a)pyrene in groundwater samples was also greater than the GA Groundwater Objective. We requested that Spectrum Laboratory re-issue the laboratory data affected by the RDLs with Method Detection Limits (MDLs). Method detection limits are the lowest concentration that the analytical equipment can detect a certain parameter. However, due to interferences and quality assurance/ quality control analysis, the RDL is the lowest concentration that parameters can be reported within a prescribed accuracy range. The MDLs for EDB in the soil and sediment samples were less than the RDEC. The MDL for EDB in groundwater samples was reported as 0.7 ppb which is slightly greater than the GA Groundwater Objective of 0.5 ppb. The MDL for benzo(a)pyrene in the groundwater samples were less than the GA Groundwater Objective of 0.2 ppb except for the groundwater samples from MW-2. The MDL for benzo(a)pyrene in the samples from MW-2 was reported as 0.212 ppb, which is slightly greater than the GA Groundwater Objective.

Neither EDB and nor benzo(a)pyrene were not reported in any soil or groundwater sample at concentrations greater than the MDLs. Due to this fact and that no other VOCs or PAHs (except MTBE in MW-4) were reported at concentrations greater than the MDLs, Jacques Whitford believes that the data generated is adequate to assume that the soils, sediments, and groundwater at the site are not impacted by EDB and the groundwater is not impacted by benzo(a)pyrene to any extent that would require further assessment or any remediation beyond that previously proposed.

Based on the results of our additional investigation, we believe that no additional testing is required. The attached Revised SIR includes all the results of the additional investigation and the comments and responses in this letter.

If you have any questions or comments regarding this letter or any other matter, please contact me at 401-312-8005.

Sincerely,
JACQUES WHITFORD COMPANY, INC.

Joseph T. Unsworth, P.E.
Project Manager

CC: Dr. Edward Carapezza, Renewable Resources

RECEIVED
D.E.M. / O.W.M.
2008 MAR 31 P 3:48

Section 7 of the "Remediation Regulations" Site Investigation Report (SIR)Checklist

Contact Name: **Jacques Whitford Co. - Joseph T. Unsworth(on behalf of OUL, LLC)**
Contact Address: **24 Albion Road, Suite 220, Lincoln, RI 02865**
Contact Telephone: **401-312-8005**

Site Name: **Pawcatuck Woollen Mill**
Site Address: **198 Potter Hill Road, Westerly, RI**

OFFICE USE ONLY
SITE INVESTIGATION REPORT (SIR)SITE:
PROJECT CODE:
SIR SUBMITTAL DATE:
CHECKLIST SUBMITTAL DATE:

DIRECTIONS: *The box to the left of each item listed below is for the administrative review of the SIR submission and is for **RIDEM USE ONLY**. Under each item listed below, cross-reference the specific sections and pages in the SIR that provide detailed information that addresses each stated requirement. Failure to include cross-references may delay review and approval. If an item is not applicable, simply state that it is not applicable and provide an explanation in the SIR.*

X 7.03.A. List specific objectives of the SIR related to characterization of the release, impacts of the release and remedy. **Section 2.0, Page 3**

X 7.03.B. Include information reported in the Notification Of Release. A copy of the release notification form should be included in the SIR. Include information relating to short-term response, if applicable. **Apendix C**

X 7.03.C. Include documentation of any past incidents or releases. **None**

X 7.03.D. Include list of prior property owners and operators, as well as sequencing of property transfers and time periods of occupancy. **Table 1 and Table 2**

X 7.03.E. Include previously existing environmental information which characterizes the contaminated-site and all information that led to the discovery of the contaminated-site. **Section 3.1 and 3.2, Phase I ESA in Appendix A, and Phase II ESA in Appendix B**

X 7.03.F. Include current uses and zoning of the contaminated site, including brief statements of operations, processes employed, waste generated, hazardous materials handled, and any residential activities on the site, if applicable. (This section should be linked to the specific objectives section demonstrating how the compounds of concern in the investigation are those that are used or may have been used on the site or are those that may have impacted the site from an off-site source.) **Section 1.0, Section 3.1, Section 3.2**

X 7.03.G. Include a locus map showing the location of the site using US Geological Survey 7.5-min quadrangle map or a copy of a section of that USGS map. **Figure 1**

X 7.03.H. Include a site plan, to scale, showing: **Figures 2**

- X Buildings **Present**
- X Activities **Present**
- X Structures **Present**
- X North Arrow **Present**
- X Wells **Present**
- X UIC Systems, septic tanks, UST, piping and other underground structures **None**
- X Outdoor hazardous materials storage and handling areas **None**
- X Extent of paved areas **Present**
- X Location of environmental samples previously taken with analytical results **Present**
- X Waste management and disposal areas **None**
- X Property Lines **Present**

X 7.03.I. Include a general characterization of the property surrounding the area including, but not limited to: **Section 1.2, page 2**

- X Location and distance to any surface water bodies within 500 ft of the site **Section 7.0, page 11**
- X Location and distance to any environmentally sensitive areas within 500 ft of the site **Section 7.0, page 12**
- X Actual sources of potable water for all properties immediately abutting the site **Section 7.0, page 11**
- X Location and distance to all public water supplies, which have been active within the previous 2 years and within one mile of the site **Section 7.0, page 11**
- X Determination as to whether the release impacts any off-site area utilized for residential or industrial/commercial property or both **Section 8.0, page 12**
- X Determination of the underlying groundwater classification and if the classification is GB, the distance to the nearest GA area **Section 7.0, page 11**

X 7.03.J. Include classifications of surface and ground water at and surrounding the site that could be impacted by a release. **Section 7.0, page 11**

X 7.03.K. Include a description of the contamination from the release, including:

Section 5.0 page 8, Section 6.0 (page 9)

X Free liquids on the surface **Section 8.0, page 12**

X LNAPL and DNAPL **Section 8.0, page 12**

X Concentrations of hazardous substances which can be shown to present an actual or potential threat to human health and any concentrations in excess of any of the remedial objectives **Sections 5.0 and 6.0**

X Impact to environmentally sensitive areas **Sections 5.0 and 6.0**

X Contamination of man-made structures **Section 8.0, page 12**

X Odors or stained soil **Section 8.0, page 12**

X Stressed vegetation **Section 8.0, page 12**

X Presence of excavated or stockpiled material and an estimate of its total volume **Section 8.0, page 12**

X Environmental sampling locations, procedures and copies of the results of any analytical testing at the site **Figure 2, Table 3, 4 and 5, Section 3.2, 4.0, and 5.0, Appendix D**

X List of hazardous substances at the site **Section 8.0, page 12**

X Discuss if the contamination falls outside of the jurisdiction of the Remediation Regulations, including but not limited to USTs, UICs, and wetlands **Section 9.2, page 13**

X 7.03.L. Include the concentration gradients of hazardous substances throughout the site for each media impacted by the release. **Tables 3, 4 and 5, and Figures 2**

X 7.03.M. Include the methodology and results of any investigation conducted to determine background concentrations of hazardous substances identified at the contaminated site. **None**

X 7.03.N. Include a listing and evaluation of the site specific hydrogeological properties which could influence the migration of hazardous substances throughout and away from the site, including but not limited to, where appropriate:

X Depth to GW **Section 7.0, Page 11**

X Presence and effects of both the natural and man-made barriers to and conduits for contaminant migration **None**

X Characterization of bedrock **Section 7.0, Page 11**

X Groundwater contours, flow rates and gradients throughout the site **Figure 2**

X 7.03.O. Include a characterization of the topography, surface water and run-off flow patterns, including the flooding potential, of the site **Section 7.0, page 11**

X 7.03.P. Include the potential for hazardous substances from the site to volatilize and any and all potential impacts of the volatilization to structures within the site. **Section 8.0, page 12**

X 7.03.Q. Include the potential for entrainment of hazardous substances from the site by wind or erosion actions. **Section 8.0, page 12**

X 7.03.R. Include detailed protocols for all fate and transport models used in the Site Investigation.
None used

X 7.03.S. Include a complete list of all samples taken, the location of all samples, parameters tested for and analytical methods used during the Site Investigation. (Be sure to include the samples locations and analytical results on a site figure). **Tables 3, 4, and 5**

X 7.03.T. Include construction plans and development procedures for all monitoring wells. Well construction must be consistent with the requirements of Appendix I of the Groundwater Quality Regulations.
Appendix E

X 7.03.U. Include procedures for the handling, storage and disposal of wastes derived from and during the investigation. **All investigation derived waste was handled in accordance with RIDEM's Guideline's for the Management of Investigation Derived Waste (Policy Memo 95-01)**

X 7.03.V. Include a quality assurance and quality control evaluation summary report for sample handling and analytical procedures, including, but not limited to, chain-of-custody procedures and sample preservation techniques. **Section 6.0, Page 9**

X 7.03.W. Include any other site-specific factor, that the Director believes, is necessary to make an accurate decision as to the appropriate remedial action to be taken at the site. **None**

X 7.04 Include Remedial Alternatives. The Site Investigation Report **must** contain a minimum of **2** remedial alternatives other than no action/natural attenuation alternative, unless this requirement iswaived by the Department. It should be clear which of these alternatives is most preferable. All alternatives must be supported by relevant data contained in the Site Investigation Report and consistent with the current and reasonably forseeable land usage, and documentation of the following:**Section 10.0, Page 14**

X Compliance with Section 8 (RISK MANGEMENT);

X Technical feasibility of the preferred remedial alternative;

X Compliance with Federal, State and local laws or other public concerns; and

X The ability of the performing party to perform the preferred remedial alternative

X 7.05 **Certification Requirements:** The Site Investigation Report and all associated progress reports must include the following statements signed by an authorized representative of the party specified:

Section 10.0, page 13

X A statement signed by an authorized representative of the person who prepared the Site Investigation Report certifying the completeness and accuracy of the information contained in that report to the best of their knowledge; and

X A statement signed by the performing party responsible for the submittal of the Site Investigation Report certifying that the report is a complete and accurate representation of the site and the release and contains all known facts surrounding the release to the best of their knowledge

X 7.06 **Progress Reports:** If the Site Investigation is not complete, include a schedule for the submission of periodic progress reports on the status of the investigation and interim reports on any milestones achieved in the project

7.07 **Public Notice:** Be prepared to implement public notice requirements per Section 7.07 and 7.09 of the Remediation Regulations when the Department deems the Site Investigation Report to be complete.

Jacques Whitford

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January 17, 2008

RECEIVED
D.E.M. / O.W.M.
2008 JAN 23 P 12:09

Rhode Island Department of Environmental Management
Office of Waste Management
Attention: Ms. Cynthia M. Gianfrancesco
235 Promenade Street
Providence, RI 02908-5767

RE: Additional Investigation
198 Potter Hill Road, Westerly, RI
Jacques Whitford Project No. 1009825

Dear Ms. Gianfrancesco:

Jacques Whitford is submitting this letter to provide the results of the additional investigation completed at the above referenced site. The additional investigation was completed as required in the following correspondence and approved in an email dated October 30, 2007:

- RIDEM letter to Renewable Resources, dated January 26, 2007
- Jacques Whitford letter to RIDEM, dated July 5, 2007
- RIDEM letter to Renewable Resources, dated July 31, 2007
- Jacques Whitford letter to RIDEM, dated August 13, 2007
- RIDEM letter to Renewable Resources, dated September 7, 2007
- Jacques Whitford letter to RIDEM, dated September 13, 2007

Soil Borings and Monitoring Well Installation

On Thursday, November 8, 2007, a truck-mounted Geoprobe 6600, operated by Alternative Subsurface Explorations of North Scituate, RI, was utilized to install three additional monitoring wells (MW-3 through Mw-5) and collect soil samples at the site. The soil samples were collected using a 2-inch outside diameter stainless steel split spoon sampler during standard penetration tests (SPT test method) at 5-foot intervals. Refer to **Figure 2** for monitoring well and soil sample locations. Soil samples were collected for lithologic classification and profiling of potential impacts. Groundwater was encountered in at depths ranging from approximately 5 feet below ground surface (bgs) to 8 feet bgs. Refusal was encountered during the installation of the monitoring wells at depths ranging from 18.5 feet bgs in MW-5 to 33 feet bgs in MW-4. Soil boring logs are attached. All retrieved samples were assessed for evidence of impacts by visual and olfactory examination. No odors or other evidence of impacts were observed in any of the soil samples collected from the borings.

A 1-inch groundwater monitoring well was installed in each boring, at depths of approximately 15 feet bgs. The wells consist of 1-inch (in) inside diameter (ID), PVC with 10 feet of 0.010-in slotted screen. The wells were then sandpacked with clean #1 Morie sand to approximately two feet above the top of the screen. A one foot bentonite seal was placed on top of the sandpack and then non-impacted soil cuttings from the boring were used to fill the hole to approximately six inches bgs. A flush mounted road box was installed on each of the wells.

Soil Sampling

As required, seven additional soil samples were collected. One soil sample was collected from each of the soil borings. Soil sample SS-27 was collected from MW-3, SS-28 from MW-4, and SS-29 from MW-5. The soil samples were collected from the 5 to 7 interval which is above the groundwater table. Soil

100% Post Consumer Content

samples SS-30 and SS-31 were collected from the area where the buried debris was removed in the northwestern area of the site. These two soil samples were collected utilizing the Geoprobe rig and were collected from 0-2 foot bgs interval. Additionally, two soil samples, identified as SS-32 and SS-33, were collected from the locations of two soil samples previously collected that contained the highest reported concentration of lead. Soil samples SS-32 and SS-33 were collected utilizing a hand auger and were collected from 0 -2 foot bgs. All the soil samples were collected in laboratory prepared containers. The samples were labeled and prepared for storage and transportation to Spectrum Analytical of Agawam, MA, a Rhode Island licensed laboratory. To retard volatilization and biodegradation, the samples were cooled to less than 4°C and stored until laboratory pickup. Chain-of-Custody (COC) protocols were followed for the transfer of samples to the laboratory. The attached figure depicts the location of each of the soil samples collected. The attached table summarizes the soil samples collected and analysis completed on each.

Groundwater Sampling

On November 14, 2007, Jacques Whitford collected groundwater samples from monitoring wells MW-1 through MW-5, which are identified on the attached figure. The groundwater samples were collected following standard *ASTM Designation D: 4448-85A* protocols utilizing a peristaltic pump and new dedicated silicone pump head tubing. This silicone tubing was attached to new, dedicated, ¼" O.D. polyethylene tubing which extended down the well to approximately the midpoint of the screen. Samples were collected in laboratory prepared containers. The samples were labeled and prepared for storage and transportation to Spectrum Analytical. To retard volatilization and biodegradation, the samples were cooled to less than 4°C and stored until laboratory pickup. COC protocols were followed for the transfer of samples to the laboratory. The results of the analysis are discussed below.

Groundwater Hydrological Survey

On November 14, 2007, Jacques Whitford conducted a groundwater elevation survey of each of the five groundwater monitoring wells sampled during this investigation. The calibrated surveying instrument used for this survey was the Wild Heerbrugg NA20 Level® with corresponding tripod and leveling staff. An arbitrary immovable benchmark was used as a reference point. Groundwater contours were calculated and plotted on the site figure, using data obtained from surveying the wells and measuring depths to groundwater. These contour lines were mathematically interpolated, and then plotted using a computer program. Based on the hydrological survey and calculated groundwater elevation contours, Groundwater at the subject property flows in an easterly/north/northeasterly direction. It flows basically toward the river at all times so it is flowing easterly toward the river in the southern section of the property and then flows more in a north and northeasterly direction as the river turns more toward the west as the river passes the north end of the property.

The attached figure depicts the calculated groundwater contours and estimated groundwater flow direction.

Sediment Sampling

A total of eleven sediment samples were collected from the Pawcatuck River. On November 7, 2007, sediment samples SED-1 through SED-8 were collected. Sediment samples SED-1 through SED-7 were collected from the point in the river adjacent to where pipes protrude from the building as depicted on the attached figure. Sediment sample SED-8 was collected from under the main building where the raceway discharges and where a pipe was

observed to potentially formerly discharge. As discussed below, metals and polynuclear aromatic hydrocarbons (PAHs) were detected in sediment sample SED-1. In order to assess the extent of impacts in the area of SED-1, sediment samples SED-9 through SED-11 were collected on December 5, 2007. All the sediment samples were collected from at about 0-1 foot below the river bottom utilizing a hand auger. The eight sediment samples obtained on November 7, 2007 were collected starting from the most downstream locations (SED-1) and collected moving upstream so that sediments disturbed would not cross contaminate subsequent samples. Samples were collected in laboratory prepared containers. The samples were labeled and prepared for storage and transportation to Spectrum Analytical. To retard volatilization and biodegradation, the samples were cooled to less than 4°C and stored until laboratory pickup. COC protocols were followed for the transfer of samples to the laboratory. The results of the analysis are discussed below.

Results of Analysis

Soils

The attached **Table 1** summarizes the results of the soil sample analysis and includes the results of the previous soil sample analytical results. No additional exceedances were detected with these additional soil test samples. As can be seen on the attached table, the only exceedances of the RIDEM Residential Direct Exposure Criteria (RDEC) are located in the area near the former boiler house where coal ash was observed in the subsurface. These exceedances are in a small bounded area as previous described in the submitted SIR. No VOCs or SVOCs were detected in soil samples SS-27, SS-28, or SS-29. Eight metals were detected in at least one of these soil samples. None of the metals were reported at concentrations greater than the applicable RDEC.

No VOCs were detected in soil samples SS-30 or SS-31. One SVOC, fluoranthene, was detected in sample SS-31 at a concentration of 0.184 parts per million (ppm) which is less than the RDEC of 20 ppm. Seven metals were detected in either SS-30 or SS-31. None of the metals were reported at concentrations greater than the applicable RDEC.

In order to assess compliance with the GA-Leachability criteria, soil samples SS-32 and SS-33 were analyzed for leachable lead following the Synthetic Precipitation Leaching Procedure (SPLP). Lead was reported in soil sample SS-33 at a concentration of 0.0201 mg/L which is less than the GA-Leachability Criteria of 0.04 mg/L. Lead was not detected in soil sample SS-32.

Groundwater

The attached **Table 2** summarizes the results of the groundwater sample analysis and includes the results of the previous soil sample analytical results. No exceedances were detected in any ground water samples, including the samples from the 2 previously installed wells and also from the additional 3 wells required since our initial SIR submission. As can be seen on the attached table, no SVOCs and only one VOC was detected in one groundwater sample. The groundwater sample collected from MW-4 contained methyl tert-butyl ether (MTBE) at concentration of 1.0 ug/L which is less than the GA Groundwater Objective of 40 ug/L. Four metals, barium, copper, nickel and zinc, were detected in at least one groundwater sample. None of the metals were reported at concentrations greater than the applicable GA Groundwater Objective.

Sediments

The attached **Table 3** summarizes the results of the sediment sample analysis. Two VOCs were detected in one sediment sample. 1,4-Dichlorobenzene was detected in sediment

sample SED-2 at a concentration of 0.111 ppm which less the RDEC of 27 ppm. Toluene was detected in SED-8 at a concentration of 0.200 ppm which is less than the RDEC of 190 ppm. Fourteen of the sixteen metals tested were detected in at least one sediment sample. Arsenic was detected in SED-1 and SED-4 at 8.68 ppm and 7.17 ppm, respectively. The RDEC for arsenic is 7.0 ppm. Beryllium was detected in SED-1 at a concentration of 0.773 ppm which is greater than the RDEC of 0.4 ppm. Lead was also detected in SED-1 at a concentration of 1,050 ppm which is greater than the REC of 150 ppm. No other metals were reported at concentrations greater than the applicable RDEC.

Several SVOCs were detected in sediment samples SED-1 and SED-8. With the exception of naphthalene, the SVOCs detected are polynuclear aromatic hydrocarbons (PAHs). Seven PAHs were detected in at least one sediment samples at a concentration greater than the applicable RDEC. The highest concentration of PAHs was detected in sample SED-1. No PAHs were detected in the five sediment samples (SED-2 through SED-6) immediately upstream of SED-1. SED-8 was collected from beneath the main building in the discharge of the raceway. In order to assess the extent of PAHs and metals in the area of SED-1, sediment samples SED-9, SED-10, and SED-11 were collected and analyzed for PAHs and metals. No metals were reported in SED-9, SED-10, or SED-11 at concentrations greater than the RDEC. The concentration of PAHs decreased significantly in SED-9 as compared to SED-1, which indicates that the PAHs in the area of SED-1 do not extend far into the river. PAHs were detected in SED-10 at concentrations similar to SED-1, however, PAHs were not detected in sample SED-11, which also indicates that the PAHs are limited to the area near SED-1 and do not extend downstream.

Summary of Results of Additional Investigation

The following are conclusions of all the environmental investigations completed at the site:

- The subject property is currently vacant but was used for textile manufacturing, specifically a woolen mill.
- Groundwater at the subject property is a GA resource. Groundwater at the subject property flows in an easterly/north/northeasterly direction. It flows basically toward the river so it is flowing easterly toward the river in the southern section of the property and then flows more in a north and northeasterly direction as the river turns more toward the west as the river passes the north end of the property.
- The subject property and surrounding area are serviced by municipal water and sewer.
- Coal was used and stored at the property.
- Metals exist in surface soils at concentrations greater than RIDEM's RDEC. The impacted soils appear to be limited to a small surface soil area adjacent to the old coal furnace and boiler building. This surface soil contains some coal ash and slag, as previously reported in the submitted SIR. No additional soil contamination was detected subsequent to initial SIR submittal and during these additional required tests.
- No impacts from the coal ash and slag to groundwater were detected.
- No other sources of groundwater contamination have been detected.
- No source of contamination was detected in the buried debris that was excavated in the northwest portion of the site or the underlying soils. .

- Elevated PAHs and metals were detected in sediments under the main building and near one former discharge. The extent of the PAHs and metals appear limited.

The source of the PAHs and metals in the sediments is not known. The suite of PAHs and metals detected does not appear to be related to the former wool dyeing operations at the site. The PAHs and metals could be the result of atmospheric deposition from burning coal (either at the site or upstream of the site) or erosion from roads, in particular the bridge over the river on Potter Hill Road. During the recent re-construction of this bridge between 2002 and 2004, it is likely that sediments impacted by road materials or other upstream sources were disturbed in the river and transported downstream. The area of SED-1 is located where there is a significant decrease in the river flow velocity which will result in particulates being deposited on the bottom of the river. The high organic content of the sediments would result in significant adsorption of the contaminants. Also, being in this low velocity area prevents the sediments from being scoured during high flow periods which may explain the decrease in concentration closer to the center of the river and near the beginning of the curve in the river. Based on the results of the sediment sampling completed, we do not believe that any remediation of the sediments is warranted.

Based on the results of our additional investigation, we believe that no additional testing is required. Upon receipt of RIDEM concurrence with these conclusions, we will revise the SIR and submit it to the RIDEM. The revised SIR will include the results of the additional investigation and the information requested and contained in the letters referenced above.

If you have any questions or comments regarding this letter or any other matter, please contact me at 401-312-8005.

Sincerely,
JACQUES WHITFORD COMPANY, INC.

Joseph T. Unsworth, P.E.
Project Manager

CC: Dr. Edward Carapezza, Renewable Resources

Additional Investigation
198 Potter Hill Road
Westerly, RI
Summary of Samples Collected and Analyzed

Sample Identification	Media	Analyte
SS-27	Soil	VOCs RIDEM 16 Metals PAHs
SS-28	Soil	VOCs RIDEM 16 Metals PAHs
SS-29	Soil	VOCs RIDEM 16 Metals PAHs
SS-30	Soil	VOCs PAHs PP13 Metals
SS-31	Soil	VOCs PAHs PP13 Metals
SS-32	Soil	SPLP Lead
SS-33	Soil	SPLP Lead
MW-1	Groundwater	VOCs PP13 Metals
MW-2	Groundwater	VOCs PP13 Metals
MW-3	Groundwater	VOCs PP13 Metals PAHs
MW-4	Groundwater	VOCs PP13 Metals PAHs
MW-5	Groundwater	VOCs PP13 Metals PAHs
SED-1	Sediment	VOCs SVOCs RIDEM 16 metals
SED-2	Sediment	VOCs SVOCs RIDEM 16 metals
SED-3	Sediment	VOCs SVOCs RIDEM 16 metals
SED-4	Sediment	VOCs SVOCs RIDEM 16 metals
SED-5	Sediment	VOCs SVOCs RIDEM 16 metals
SED-6	Sediment	VOCs SVOCs RIDEM 16 metals
SED-7	Sediment	VOCs SVOCs RIDEM 16 metals

Additional Investigation
198 Potter Hill Road
Westerly, RI
Summary of Samples Collected and Analyzed

Sample Identification	Media	Analyte
SED-8	Sediment	VOCs SVOCs RIDEM 16 metals
SED-9	Sediment	PAHs PP 13 Metals
SED-10	Sediment	PAHs PP 13 Metals
SED-11	Sediment	PAHs PP13 Metals

TABLE 1
SUMMARY OF SOIL ANALYSIS

Parameter	RIDEM RDEC	TP3/S1	TP5/S1	SS1	SS2	SS3	SS4	SS5	SS6	SS7	SS8	SS9	SS10	SS11	SS12	SS13	SS14
VOCs		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
SVOCs																	
Acenaphthene	43	ND	ND	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Anthracene	35	ND	ND	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Benzo(a)anthracene	0.9	ND	0.240	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Benzo(a)pyrene	0.4	ND	0.232	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Benzo(b)fluoranthene	0.9	ND	0.299	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Benzo(g,h,i)perylene	0.8	ND	0.203	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Benzo(k)fluoranthene	0.9	ND	ND	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Chrysene	0.4	ND	0.357	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Dibenzo(a,h)anthracene	0.4	ND	ND	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Fluoranthene	20	ND	0.566	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Fluorene	28	ND	ND	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Indeno(1,2,3-cd)pyrene	0.9	ND	ND	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Phenanthrene	40	ND	0.322	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Pyrene	13	ND	0.424	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Metals																	
Antimony	10	ND	ND	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Arsenic	7	4.9	**10.4**	1.71	ND	**18.9**	**19.4**	**58.9**	**22.5**	**14.7**	**8.54**	ND	ND	**14.0**	4.01	3.22	3.57
Barium	5,500	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Beryllium	0.4	0.375	0.405	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Cadmium	39	0.618	0.503	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Chromium	390	46.7	0.280	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Copper	3,100	73.6	23.6	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Lead	150	134	101	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Manganese	390	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Mercury	23	0.621	ND	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Nickel	1,000	6.06	9.39	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Selenium	390	ND	ND	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Silver	200	ND	ND	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Thallium	5.5	ND	ND	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Vanadium	550	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Zinc	6,000	81.8	127	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT

Notes: * RIDEM Standards from *"Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases"*
RDEC – Residential Direct Exposure Criteria
All results are in ppm
ND – Not Detected above laboratory detection limits
NT – Not Tested

TABLE 1
SUMMARY OF SOIL ANALYSIS

Parameter	RIDEM RDEC	SS14	SS15	SS16	SS17	SS18	SS19	SS20	SS21	SS22	SS23	SS24	SS25	SS26	SS27
VOCs		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	ND
SVOCs															
Acenaphthene	43	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	ND
Anthracene	35	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	ND
Benzo(a)anthracene	0.9	NT	NT	NT	NT	ND	ND	0.224	NT	NT	NT	NT	NT	NT	ND
Benzo(a)pyrene	0.4	NT	NT	NT	NT	0.186	ND	0.215	NT	NT	NT	NT	NT	NT	ND
Benzo(b)fluoranthene	0.9	NT	NT	NT	NT	0.249	ND	0.228	NT	NT	NT	NT	NT	NT	ND
Benzo(g,h,i)perylene	0.8	NT	NT	NT	NT	ND	ND	ND	NT	NT	NT	NT	NT	NT	ND
Benzo(k)fluoranthene	0.9	NT	NT	NT	NT	0.254	0.179	0.218	NT	NT	NT	NT	NT	NT	ND
Chrysene	0.4	NT	NT	NT	NT	0.230	0.231	0.266	NT	NT	NT	NT	NT	NT	ND
Dibenzo(a,h)anthracene	0.4	NT	NT	NT	NT	ND	ND	ND	NT	NT	NT	NT	NT	NT	ND
Fluoranthene	20	NT	NT	NT	NT	0.397	0.387	0.413	NT	NT	NT	NT	NT	NT	ND
Fluorene	28	NT	NT	NT	NT	ND	ND	ND	NT	NT	NT	NT	NT	NT	ND
Indeno(1,2,3-cd)pyrene	0.9	NT	NT	NT	NT	ND	ND	ND	NT	NT	NT	NT	NT	NT	ND
Phenanthrene	40	NT	NT	NT	NT	0.325	0.262	0.319	NT	NT	NT	NT	NT	NT	ND
Pyrene	13	NT	NT	NT	NT	0.334	0.312	0.424	NT	NT	NT	NT	NT	NT	ND
Metals															
Antimony	10	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Arsenic	7	3.57	**7.71**	**13.1**	4.88	**10.3**	**25.8**	**21.8**	**13.5**	**20.5**	6.05	ND	NT	NT	ND
Barium	5,500	NT	NT	NT	NT	60.5	68.1	116	88.8	83.8	83.9	NT	NT	NT	7.93
Beryllium	0.4	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	**16.6**	ND	ND
Cadmium	39	NT	NT	NT	NT	0.441	ND	0.325	0.341	0.417	0.428	NT	NT	NT	ND
Chromium	390	NT	NT	NT	NT	12.9	8.71	18.6	9.73	11.7	128	NT	NT	NT	3.75
Copper	3,100	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	2.71
Lead	150	NT	NT	NT	NT	39.6	28.1	**156**	45.2	69.8	150	NT	NT	NT	ND
Manganese	390	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	55.2
Mercury	23	NT	NT	NT	NT	ND	0.0507	0.152	0.154	0.0512	0.516	NT	NT	NT	ND
Nickel	1,000	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	ND
Selenium	390	NT	NT	NT	NT	2.42	3.91	3.00	ND	2.08	ND	NT	NT	NT	ND
Silver	200	NT	NT	NT	NT	ND	ND	ND	3.08	ND	1.16	NT	NT	NT	55.2
Thallium	5.5	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	ND
Vanadium	550	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	4.69
Zinc	6,000	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	7.67

Notes: * RIDEM Standards from *"Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases"*
RDEC – Residential Direct Exposure Criteria
All results are in ppm
ND – Not Detected above laboratory detection limits
NT – Not Tested

TABLE 1
SUMMARY OF SOIL ANALYSIS

Parameter	RIDEM RDEC	SS28	SS29	SS30	SS31	SS32	SS33
VOCs		ND	ND	ND	ND	NT	NT
SVOCs							
Acenaphthene	43	ND	ND	ND	ND	NT	NT
Anthracene	35	ND	ND	ND	ND	NT	NT
Benzo(a)anthracene	0.9	ND	ND	ND	ND	NT	NT
Benzo(a)pyrene	0.4	ND	ND	ND	ND	NT	NT
Benzo(b)fluoranthene	0.9	ND	ND	ND	ND	NT	NT
Benzo(g,h,i)perylene	0.8	ND	ND	ND	ND	NT	NT
Benzo(k)fluoranthene	0.9	ND	ND	ND	ND	NT	NT
Chrysene	0.4	ND	ND	ND	ND	NT	NT
Dibenzo(a,h)anthracene	0.4	ND	ND	ND	ND	NT	NT
Fluoranthene	20	ND	ND	ND	0.184	NT	NT
Fluorene	28	ND	ND	ND	ND	NT	NT
Indeno(1,2,3-cd)pyrene	0.9	ND	ND	ND	ND	NT	NT
Phenanthrene	40	ND	ND	ND	ND	NT	NT
Pyrene	13	ND	ND	ND	ND	NT	NT
SPLP Lead**	0.04	NT	NT	NT	NT	ND	0.0201
Metals							
Antimony	10	ND	ND	ND	ND	NT	NT
Arsenic	7	ND	ND	ND	ND	NT	NT
Barium	5,500	18.1	8.09	NT	NT	NT	NT
Beryllium	0.4	ND	ND	ND	ND	NT	NT
Cadmium	39	ND	ND	0.613	ND	NT	NT
Chromium	390	4.27	3.13	67.2	9.96	NT	NT
Copper	3,100	1.51	ND	32.0	5.82	NT	NT
Lead	150	1.41	ND	140	14.8	NT	NT
Manganese	390	380	168	NT	NT	NT	NT
Mercury	23	ND	ND	0.0355	0.100	NT	NT
Nickel	1,000	1.37	1.58	4.43	1.92	NT	NT
Selenium	390	ND	ND	ND	ND	NT	NT
Silver	200	ND	ND	ND	ND	NT	NT
Thallium	5.5	ND	ND	ND	ND	NT	NT
Vanadium	550	8.05	5.47	NT	NT	NT	NT
Zinc	6,000	13.2	11.9	68.5	81.4	NT	NT

Notes:

* RIDEM Standards from *"Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases"*

** SPLP Results are compared to the GA Leachability Criteria in mg/L

RDEC – Residential Direct Exposure Criteria

All results are in ppm

ND – Not Detected above laboratory detection limits

NT – Not Tested

Table 2

SUMMARY OF GROUNDWATER ANALYSIS

Parameter	GA Groundwater Objective	MW-1		MW-2		MW-3	MW-4	MW-5
		10/26/06	11/14/07	10/26/06	11/14/07	11/14/07	11/14/07	11/14/07
PAHS		ND	NT	ND	NT	ND	ND	ND
VOCs - MTBE	40	NT	ND	NT	ND	ND	1.0	ND
Metals								
Antimony	0.006	NT	ND	NT	ND	ND	ND	ND
Arsenic	NE	ND	ND	ND	ND	ND	ND	ND
Barium	2.0	0.02	NT	0.0166	NT	NT	NT	NT
Beryllium	0.004	NT	ND	NT	ND	ND	ND	ND
Cadmium	0.005	ND	ND	ND	ND	ND	ND	ND
Chromium	0.1	ND	ND	ND	ND	ND	ND	ND
Copper	NE	NT	0.011	NT	ND	ND	0.0061	ND
Lead	0.015	ND	ND	ND	ND	ND	ND	ND
Mercury	0.002	ND	ND	ND	ND	ND	ND	ND
Nickel	0.1	NT	0.0068	NT	0.0060	ND	0.0097	ND
Selenium	0.05	ND	ND	ND	ND	ND	ND	ND
Silver	NE	ND	ND	ND	ND	ND	ND	ND
Thallium	0.002	NT	ND	NT	ND	ND	ND	ND
Zinc	NE	NT	0.0703	NT	0.0926	0.0274	0.0532	0.0223

TABLE 3

SUMMARY OF SEDIMENT SAMPLE ANALYSIs

Parameter	RIDEM RDEC	SED-1	SED-2	SED-3	SED-4	SED-5	SED-6	SED-7	SED-8	SED-9	SED-10	SED-11
VOCs												
1,4-Dichlorobenzene	27	ND	0.111	ND	ND	ND	ND	ND	ND	NT	NT	NT
Toluene	190	ND	ND	ND	ND	ND	ND	ND	0.200	NT	NT	NT
SVOCs												
Acenaphthene	43	1.85	ND	ND	ND	ND	ND	ND	ND	0.194	0.823	ND
Acenaphthylene	23	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.187	ND
Anthracene	35	1.62	ND	ND	ND	ND	ND	ND	ND	0.198	1.21	ND
Benzo(a)anthracene	0.9	**4.25**	ND	ND	ND	ND	ND	ND	**3.52**	0.458	**3.32**	ND
Benzo(a)pyrene	0.4	**3.63**	ND	ND	ND	ND	ND	ND	**3.54**	**0.432**	**2.89**	ND
Benzo(b)fluoranthene	0.9	**3.18**	ND	ND	ND	ND	ND	ND	**3.65**	0.365	**3.00**	ND
Benzo(g,h,i)perylene	0.8	**1.32**	ND	ND	ND	ND	ND	ND	**1.62**	0.240	**1.63**	ND
Benzo(k)fluoranthene	0.9	**2.89**	ND	ND	ND	ND	ND	ND	**3.56**	0.385	**1.73**	ND
Chrysene	0.4	**4.03**	ND	ND	ND	ND	ND	ND	4.19	0.473	2.91	ND
Dibenzo(a,h)anthracene	0.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.398	ND
Dibenzofuran	NE	1.34	ND	ND	ND	ND	ND	ND	ND	NT	NT	NT
Fluoranthene	20	11.1	ND	ND	ND	ND	ND	0.392	7.85	1.25	7.07	ND
Fluorene	28	1.61	ND	ND	ND	ND	ND	ND	ND	ND	0.731	ND
Indeno(1,2,3-cd)pyrene	0.9	**1.72**	ND	ND	ND	ND	ND	ND	**1.75**	0.293	**1.95**	ND
Naphthalene	54	1.40	ND	ND	ND	ND	ND	ND	ND	ND	0.468	ND
Phenanthrene	40	10.5	ND	ND	ND	ND	ND	ND	2.92	0.943	5.88	ND
Pyrene	13	8.76	ND	ND	ND	ND	ND	0.273	6.85	0.934	5.48	ND
Metals												
Antimony	10	4.67	ND	ND	ND	ND	ND	ND	ND	NT	NT	ND
Arsenic	7	**8.68**	6.10	2.03	**7.17**	ND	ND	4.87	ND	3.72	1.72	ND
Barium	5,500	67.5	59.8	9.52	35.1	22.9	20.6	48.4	27.4	27.1	22.9	NT
Beryllium	0.4	**0.773**	ND	ND	ND	ND	ND	ND	ND	NT	NT	ND
Cadmium	39	1.15	ND	ND	ND	ND	ND	ND	ND	ND	NT	ND
Chromium	390	126	78.5	15.6	139	134	73.0	48.8	25.0	30.2	27.4	2.01
Copper	3,100	1,410	34.4	7.96	34.0	31.1	47.5	141	18.1	NT	NT	ND
Lead	150	**1,050**	28.8	17.0	75.6	35.7	62.7	101	51.0	26.2	116	ND
Manganese	390	86.6	107	62.2	72.2	59.5	74.0	91.9	64.6	NT	NT	NT
Nickel	1,000	9.72	6.48	1.52	5.99	6.00	2.94	3.54	2.50	NT	NT	NT
Mercury	23	2.23	3.06	0.166	3.77	0.159	0.410	0.215	0.303	0.0602	0.245	ND
Selenium	390	ND	ND	ND	ND	ND	ND	ND	ND	2.38	2.89	ND
Silver	200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Thallium	5.5	ND	ND	ND	ND	ND	ND	ND	ND	NT	NT	ND
Vanadium	550	16.7	18.9	5.14	14.2	9.53	8.04	7.20	7.21	NT	NT	NT
Zinc	6,000	261	44.3	25.6	1,280	176	70.7	70.0	75.4	NT	NT	4.72

Jacques Whitford

MONITORING WELL LOG

MW3/SS27

CLIENT Renewable Resources, Inc.

PROJECT No. 1009825.

LOCATION 198 Potter Hill Road, Westerly, Rhode Island

BOREHOLE No. MW3/SS27

DATES: BORING 11/8/2007 to 11/8/2007

WATER LEVEL 8 ft during drilling

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	WELL CONSTRUCTION	SAMPLES TYPE	SAMPLES NUMBER	SAMPLES RECOVERY	SAMPLES N-VALUE OR RQD	VOC CONCENTRATION (ppm or % LEL)
		Grass/Leaf Litter						in.		
0		Topsoil: dark brown silt with sand, Damp			Flush-mount road box; Solid pipe packed in sand					
		Orange/brown fine to medium SAND and silt (SM), Damp			Solid pipe packed in Bentonite					
		Tan fine to coarse SAND with gravel (SP), Damp to Moist -trace amounts of silt				DP	1	30		NT
5					Solid pipe packed in sand					
		Same as above, Moist to Wet		▽		DP	2	44		NT
10		Drive casing, no samples collected.								
15					Slotted pipe packed in sand					
20										

X: Y: Driller: Alternative Subsurface Explorations; Supervisor: Rob Snyder
Rig: Truck Mounted GeoProbe 6600
DP= Direct Push Sampling Method, NT = Not Tested

Continued Next Page

MON-I 1009825-POTTER HILL MILL-ADDITIONAL SAMPLING.GPJ JW NHP.GDT 11/9/07

Jacques Whitford

MONITORING WELL LOG

MW3/SS27

CLIENT Renewable Resources, Inc.

LOCATION 198 Potter Hill Road, Westerly, Rhode Island

DATES: BORING 11/8/2007 to 11/8/2007 WATER LEVEL 8 ft during drilling

PROJECT No. 1009825.

BOREHOLE No. MW3/SS27

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	WELL CONSTRUCTION	SAMPLES TYPE	SAMPLES NUMBER	SAMPLES RECOVERY	SAMPLES N-VALUE OR RQD	VOC CONCENTRATION (ppm or % LEL)
								in.		
20		Drive casing, no samples collected.			Slotted pipe packed in sand					
		Bottom of boring at 22 feet due to refusal on cobble, boulder, or bedrock.								
25										
30										
35										
40										

X: Y: Driller: Alternative Subsurface Explorations; Supervisor: Rob Snyder
Rig: Truck Mounted GeoProbe 6600
DP= Direct Push Sampling Method, NT = Not Tested

MON-I 1009825-POTTER HILL MILL-ADDITIONAL SAMPLING.GPJ JW NHP.GDT 11/9/07

MONITORING WELL LOG

MW4/SS28

CLIENT Renewable Resources, Inc.

LOCATION 198 Potter Hill Road, Westerly, Rhode Island

DATES: BORING 11/8/2007 to 11/8/2007 WATER LEVEL 8 ft during drilling

PROJECT No. 1009825.

BOREHOLE No. MW4/SS28

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	WELL CONSTRUCTION	SAMPLES TYPE	SAMPLES NUMBER	SAMPLES RECOVERY	SAMPLES N-VALUE OR RQD	VOC CONCENTRATION (ppm or % LEL)
		Weeds/Leaf Litter						in.		
0		Topsoil: dark brown silt with sand, Damp			Flush-mount road box					
		Dark Brown to orange/brown fine to medium SAND and silt (SM), Damp			Solid pipe packed in sand Solid pipe packed in Bentonite	DP	1	39		NT
		Tan fine to coarse SAND with gravel (SP), Damp to Moist -trace amounts of silt								
5		Same as above, Moist to Wet				DP	2	36		NT
		Olive/brown SILT (ML) with fine sand, Wet		▽	Solid pipe packed in sand					
10		Drive casing, no samples collected.								
15										
20										

X: Y: Driller: Alternative Subsurface Explorations; Supervisor: Rob Snyder
Rig: Truck Mounted GeoProbe 6600
DP= Direct Push Sampling Method, NT = Not Tested

Continued Next Page

MON-I 1009825-POTTER HILL MILL-ADDITIONAL SAMPLING.GPJ JW NHP.GDT 11/9/07

Jacques Whitford

MONITORING WELL LOG

MW4/SS28

CLIENT Renewable Resources, Inc.

LOCATION 198 Potter Hill Road, Westerly, Rhode Island

DATES: BORING 11/8/2007 to 11/8/2007 WATER LEVEL 8 ft during drilling

PROJECT No. 1009825.

BOREHOLE No. MW4/SS28

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	WELL CONSTRUCTION	SAMPLES TYPE	SAMPLES NUMBER	SAMPLES RECOVERY in.	SAMPLES N-VALUE OR RQD	VOC CONCENTRATION (ppm or % LEL)
20		Drive casing, no samples collected.			Solid pipe packed in sand					
25					Slotted pipe packed in sand					
30										
		Bottom of boring at 33 feet due to refusal on cobble, boulder, or bedrock.								
35										
40										

X: Y: Driller: Alternative Subsurface Explorations; Supervisor: Rob Snyder
Rig: Truck Mounted GeoProbe 6600
DP= Direct Push Sampling Method, NT = Not Tested

MON-I 1009825-POTTER HILL MILL-ADDITIONAL SAMPLING.GPJ JW NHP.GDT 11/9/07

MONITORING WELL LOG

MW5/SS29

CLIENT Renewable Resources, Inc.

LOCATION 198 Potter Hill Road, Westerly, Rhode Island

DATES: BORING 11/8/2007 to 11/8/2007 WATER LEVEL 5 ft during drilling

PROJECT No. 1009825.

BOREHOLE No. MW5/SS29

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	WELL CONSTRUCTION	SAMPLES TYPE	SAMPLES NUMBER	SAMPLES RECOVERY	SAMPLES N-VALUE OR RQD	VOC CONCENTRATION (ppm or % LEL)
		Grass/Leaf Litter						in.		
0		Humus, leaf litter			Flush-mount road box					
		Topsoil: dark brown silt with sand, Damp			Solid pipe packed in sand Solid pipe packed in Bentonite					
		Light brown fine SAND and silt (SM), Damp to Moist				DP	1	36		NT
					Solid pipe packed in sand					
5		Same as above, Wet		▽						
		Gray fine SAND and silt (SM), Wet				DP	2	40		NT
		Dark brown SILT (ML) with fine sand, Wet -trace amounts of organic matter (root fibers)								
		Gray fine to coarse SAND (SP), Wet -trace amounts of gravel and silt								
10		Drive casing, no samples collected.			Slotted pipe packed in sand					
15										
		Bottom of boring at 18.5 feet due to refusal on cobble, boulder, or bedrock.								
20										

X: Y: Driller: Alternative Subsurface Explorations; Supervisor: Rob Snyder
Rig: Truck Mounted GeoProbe 6600
DP= Direct Push Sampling Method, NT = Not Tested

MON-I 1009825-POTTER HILL MILL-ADDITIONAL SAMPLING.GPJ JW NHP.GDT 11/9/07

Report Date:
06-Dec-07 14:54

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

Jacques Whitford Company, Inc.
24 Albion Rd, Suite 220
Lincoln, RI 02865
Attn: Joe Unsworth

Project: Potter Hill Mill - Westerly, RI
Project 1009825.04 Phase 100

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SA71128-01	MW1	Ground Water	14-Nov-07 10:00	15-Nov-07 16:28
SA71128-02	MW2	Ground Water	14-Nov-07 09:45	15-Nov-07 16:28
SA71128-03	MW3	Ground Water	14-Nov-07 11:05	15-Nov-07 16:28
SA71128-04	MW4	Ground Water	14-Nov-07 11:15	15-Nov-07 16:28
SA71128-05	MW5	Ground Water	14-Nov-07 12:40	15-Nov-07 16:28
SA71128-06	Trip Blank	Aqueous	14-Nov-07 00:00	15-Nov-07 16:28

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.
All applicable NELAC requirements have been met
Please note that this report contains 32 pages of analytical data plus Chain of Custody document(s).
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Florida # E87600/E87936
Maine # MA138
New Hampshire # 2538/2972
New Jersey # MA011/MA012
New York # 11393/11840
Rhode Island # 98
USDA # S-51435
Vermont # VT-11393

ACCREDITED IN ACCORDANCE WITH nelac

Authorized by:

Hanibal C. Tayeh, Ph.D.
President/Laboratory Director

Technical Reviewer's Initial:

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Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW1 SA71128-01	1009825.04 Phase 100	Ground Water	14-Nov-07 10:00	15-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds											
Volatile Organic Compounds											
Prepared by method SW846 5030 Water MS											
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon	BRL		µg/l	1.0	1	SW 846 8260B	20-Nov-07	21-Nov-07	7111621	jld
67-64-1	Acetone	BRL		µg/l	10.0	1	"	"	"	"	"
107-13-1	Acrylonitrile	BRL		µg/l	1.0	1	"	"	"	"	"
71-43-2	Benzene	BRL		µg/l	1.0	1	"	"	"	"	"
108-86-1	Bromobenzene	BRL		µg/l	1.0	1	"	"	"	"	"
74-97-5	Bromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	"
75-27-4	Bromodichloromethane	BRL		µg/l	1.0	1	"	"	"	"	"
75-25-2	Bromoform	BRL		µg/l	1.0	1	"	"	"	"	"
74-83-9	Bromomethane	BRL		µg/l	2.0	1	"	"	"	"	"
78-93-3	2-Butanone (MEK)	BRL		µg/l	10.0	1	"	"	"	"	"
104-51-8	n-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"
135-98-8	sec-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"
98-06-6	tert-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"
75-15-0	Carbon disulfide	BRL		µg/l	5.0	1	"	"	"	"	"
56-23-5	Carbon tetrachloride	BRL		µg/l	1.0	1	"	"	"	"	"
108-90-7	Chlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"
75-00-3	Chloroethane	BRL		µg/l	2.0	1	"	"	"	"	"
67-66-3	Chloroform	BRL		µg/l	1.0	1	"	"	"	"	"
74-87-3	Chloromethane	BRL		µg/l	2.0	1	"	"	"	"	"
95-49-8	2-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	"
106-43-4	4-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/l	2.0	1	"	"	"	"	"
124-48-1	Dibromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	"
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	1.0	1	"	"	"	"	"
74-95-3	Dibromomethane	BRL		µg/l	1.0	1	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0	1	"	"	"	"	"
75-34-3	1,1-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	"
107-06-2	1,2-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	"
75-35-4	1,1-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	"
156-59-2	cis-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	"
78-87-5	1,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	"
142-28-9	1,3-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	"
594-20-7	2,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	"
563-58-6	1,1-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	"
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	"
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	"
100-41-4	Ethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL		µg/l	1.0	1	"	"	"	"	"
591-78-6	2-Hexanone (MBK)	BRL		µg/l	10.0	1	"	"	"	"	"
98-82-8	Isopropylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"
99-87-6	4-Isopropyltoluene	BRL		µg/l	1.0	1	"	"	"	"	"
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0	1	"	"	"	"	"
75-09-2	Methylene chloride	BRL		µg/l	5.0	1	"	"	"	"	"
91-20-3	Naphthalene	BRL		µg/l	1.0	1	"	"	"	"	"
103-65-1	n-Propylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW1 SA71128-01	1009825.04 Phase 100	Ground Water	14-Nov-07 10:00	15-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds											
Volatile Organic Compounds											
Prepared by method SW846 5030 Water MS											
100-42-5	Styrene	BRL		µg/l	1.0	1	SW 846 8260B	20-Nov-07	21-Nov-07	7111621	jld
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0	1	"	"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	1.0	1	"	"	"	"	"
127-18-4	Tetrachloroethene	BRL		µg/l	1.0	1	"	"	"	"	"
108-88-3	Toluene	BRL		µg/l	1.0	1	"	"	"	"	"
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"
71-55-6	1,1,1-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	"
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	"
79-01-6	Trichloroethene	BRL		µg/l	1.0	1	"	"	"	"	"
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0	1	"	"	"	"	"
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	1.0	1	"	"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"
75-01-4	Vinyl chloride	BRL		µg/l	1.0	1	"	"	"	"	"
1330-20-7	m,p-Xylene	BRL		µg/l	2.0	1	"	"	"	"	"
95-47-6	o-Xylene	BRL		µg/l	1.0	1	"	"	"	"	"
109-99-9	Tetrahydrofuran	BRL		µg/l	10.0	1	"	"	"	"	"
60-29-7	Ethyl ether	BRL		µg/l	1.0	1	"	"	"	"	"
994-05-8	Tert-amyl methyl ether	BRL		µg/l	1.0	1	"	"	"	"	"
637-92-3	Ethyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	"
108-20-3	Di-isopropyl ether	BRL		µg/l	1.0	1	"	"	"	"	"
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/l	10.0	1	"	"	"	"	"
123-91-1	1,4-Dioxane	BRL		µg/l	20.0	1	"	"	"	"	"
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/l	5.0	1	"	"	"	"	"
64-17-5	Ethanol	BRL		µg/l	500	1	"	"	"	"	"
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*102*		*70-130 %*			"	"	"	"	"
2037-26-5	*Toluene-d8*	*104*		*70-130 %*			"	"	"	"	"
17060-07-0	*1,2-Dichloroethane-d4*	*94*		*70-130 %*			"	"	"	"	"
1868-53-7	*Dibromofluoromethane*	*104*		*70-130 %*			"	"	"	"	"
Total Metals by EPA 6000/7000 Series Methods											
7440-22-4	Silver	BRL		mg/l	0.0050	1	SW846 6010B	27-Nov-07	04-Dec-07	7111877	SA
7440-38-2	Arsenic	BRL		mg/l	0.0040	1	"	"	"	"	"
7440-41-7	Beryllium	BRL		mg/l	0.0020	1	"	"	"	"	"
7440-43-9	Cadmium	BRL		mg/l	0.0025	1	"	"	"	"	"
7440-47-3	Chromium	BRL		mg/l	0.0050	1	"	"	"	"	"
7440-50-8	Copper	0.0110		mg/l	0.0050	1	"	"	"	"	"
7440-02-0	Nickel	0.0068		mg/l	0.0050	1	"	"	"	"	"
7439-92-1	Lead	BRL		mg/l	0.0075	1	"	"	"	"	"
7440-36-0	Antimony	BRL		mg/l	0.0060	1	"	"	28-Nov-07	"	TBG
7782-49-2	Selenium	BRL		mg/l	0.0150	1	"	"	04-Dec-07	"	SA
7440-28-0	Thallium	BRL		mg/l	0.0050	1	"	"	"	"	"
7440-66-6	Zinc	0.0703		mg/l	0.0050	1	"	"	"	"	"
Total Metals by EPA 200 Series Methods											
7439-97-6	Mercury	BRL		mg/l	0.00020	1	EPA 245.1/7470A	27-Nov-07	28-Nov-07	7111878	CRM

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW2 SA71128-02	1009825.04 Phase 100	Ground Water	14-Nov-07 09:45	15-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds											
Volatile Organic Compounds											
Prepared by method SW846 5030 Water MS											
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon	BRL		µg/l	1.0	1	SW 846 8260B	20-Nov-07	21-Nov-07	7111621	jld
67-64-1	Acetone	BRL		µg/l	10.0	1	"	"	"	"	"
107-13-1	Acrylonitrile	BRL		µg/l	1.0	1	"	"	"	"	"
71-43-2	Benzene	BRL		µg/l	1.0	1	"	"	"	"	"
108-86-1	Bromobenzene	BRL		µg/l	1.0	1	"	"	"	"	"
74-97-5	Bromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	"
75-27-4	Bromodichloromethane	BRL		µg/l	1.0	1	"	"	"	"	"
75-25-2	Bromoform	BRL		µg/l	1.0	1	"	"	"	"	"
74-83-9	Bromomethane	BRL		µg/l	2.0	1	"	"	"	"	"
78-93-3	2-Butanone (MEK)	BRL		µg/l	10.0	1	"	"	"	"	"
104-51-8	n-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"
135-98-8	sec-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"
98-06-6	tert-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"
75-15-0	Carbon disulfide	BRL		µg/l	5.0	1	"	"	"	"	"
56-23-5	Carbon tetrachloride	BRL		µg/l	1.0	1	"	"	"	"	"
108-90-7	Chlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"
75-00-3	Chloroethane	BRL		µg/l	2.0	1	"	"	"	"	"
67-66-3	Chloroform	BRL		µg/l	1.0	1	"	"	"	"	"
74-87-3	Chloromethane	BRL		µg/l	2.0	1	"	"	"	"	"
95-49-8	2-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	"
106-43-4	4-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/l	2.0	1	"	"	"	"	"
124-48-1	Dibromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	"
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	1.0	1	"	"	"	"	"
74-95-3	Dibromomethane	BRL		µg/l	1.0	1	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0	1	"	"	"	"	"
75-34-3	1,1-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	"
107-06-2	1,2-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	"
75-35-4	1,1-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	"
156-59-2	cis-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	"
78-87-5	1,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	"
142-28-9	1,3-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	"
594-20-7	2,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	"
563-58-6	1,1-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	"
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	"
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	"
100-41-4	Ethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL		µg/l	1.0	1	"	"	"	"	"
591-78-6	2-Hexanone (MBK)	BRL		µg/l	10.0	1	"	"	"	"	"
98-82-8	Isopropylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"
99-87-6	4-Isopropyltoluene	BRL		µg/l	1.0	1	"	"	"	"	"
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0	1	"	"	"	"	"
75-09-2	Methylene chloride	BRL		µg/l	5.0	1	"	"	"	"	"
91-20-3	Naphthalene	BRL		µg/l	1.0	1	"	"	"	"	"
103-65-1	n-Propylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW2 SA71128-02	1009825.04 Phase 100	Ground Water	14-Nov-07 09:45	15-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds											
Volatile Organic Compounds											
Prepared by method SW846 5030 Water MS											
100-42-5	Styrene	BRL		µg/l	1.0	1	SW 846 8260B	20-Nov-07	21-Nov-07	7111621	jld
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0	1	"	"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	1.0	1	"	"	"	"	"
127-18-4	Tetrachloroethene	BRL		µg/l	1.0	1	"	"	"	"	"
108-88-3	Toluene	BRL		µg/l	1.0	1	"	"	"	"	"
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"
71-55-6	1,1,1-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	"
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	"
79-01-6	Trichloroethene	BRL		µg/l	1.0	1	"	"	"	"	"
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0	1	"	"	"	"	"
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	1.0	1	"	"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"
75-01-4	Vinyl chloride	BRL		µg/l	1.0	1	"	"	"	"	"
1330-20-7	m,p-Xylene	BRL		µg/l	2.0	1	"	"	"	"	"
95-47-6	o-Xylene	BRL		µg/l	1.0	1	"	"	"	"	"
109-99-9	Tetrahydrofuran	BRL		µg/l	10.0	1	"	"	"	"	"
60-29-7	Ethyl ether	BRL		µg/l	1.0	1	"	"	"	"	"
994-05-8	Tert-amyl methyl ether	BRL		µg/l	1.0	1	"	"	"	"	"
637-92-3	Ethyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	"
108-20-3	Di-isopropyl ether	BRL		µg/l	1.0	1	"	"	"	"	"
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/l	10.0	1	"	"	"	"	"
123-91-1	1,4-Dioxane	BRL		µg/l	20.0	1	"	"	"	"	"
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/l	5.0	1	"	"	"	"	"
64-17-5	Ethanol	BRL		µg/l	500	1	"	"	"	"	"
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*103*		*70-130 %*			"	"	"	"	"
2037-26-5	*Toluene-d8*	*103*		*70-130 %*			"	"	"	"	"
17060-07-0	*1,2-Dichloroethane-d4*	*94*		*70-130 %*			"	"	"	"	"
1868-53-7	*Dibromofluoromethane*	*103*		*70-130 %*			"	"	"	"	"
Total Metals by EPA 6000/7000 Series Methods											
7440-22-4	Silver	BRL		mg/l	0.0050	1	SW846 6010B	27-Nov-07	04-Dec-07	7111877	SA
7440-38-2	Arsenic	BRL		mg/l	0.0040	1	"	"	"	"	"
7440-41-7	Beryllium	BRL		mg/l	0.0020	1	"	"	"	"	"
7440-43-9	Cadmium	BRL		mg/l	0.0025	1	"	"	"	"	"
7440-47-3	Chromium	BRL		mg/l	0.0050	1	"	"	"	"	"
7440-50-8	Copper	BRL		mg/l	0.0050	1	"	"	"	"	"
7440-02-0	Nickel	0.0060		mg/l	0.0050	1	"	"	"	"	"
7439-92-1	Lead	BRL		mg/l	0.0075	1	"	"	"	"	"
7440-36-0	Antimony	BRL		mg/l	0.0060	1	"	"	29-Nov-07	"	TBG
7782-49-2	Selenium	BRL		mg/l	0.0150	1	"	"	04-Dec-07	"	SA
7440-28-0	Thallium	BRL		mg/l	0.0050	1	"	"	"	"	"
7440-66-6	Zinc	0.0926		mg/l	0.0050	1	"	"	"	"	"
Total Metals by EPA 200 Series Methods											
7439-97-6	Mercury	BRL		mg/l	0.00020	1	EPA 245.1/7470A	27-Nov-07	28-Nov-07	7111878	CRM

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW3 SA71128-03	1009825.04 Phase 100	Ground Water	14-Nov-07 11:05	15-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds											
Volatile Organic Compounds											
Prepared by method SW846 5030 Water MS											
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon	BRL		µg/l	1.0	1	SW 846 8260B	20-Nov-07	21-Nov-07	7111621	jld
67-64-1	Acetone	BRL		µg/l	10.0	1	"	"	"	"	"
107-13-1	Acrylonitrile	BRL		µg/l	1.0	1	"	"	"	"	"
71-43-2	Benzene	BRL		µg/l	1.0	1	"	"	"	"	"
108-86-1	Bromobenzene	BRL		µg/l	1.0	1	"	"	"	"	"
74-97-5	Bromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	"
75-27-4	Bromodichloromethane	BRL		µg/l	1.0	1	"	"	"	"	"
75-25-2	Bromoform	BRL		µg/l	1.0	1	"	"	"	"	"
74-83-9	Bromomethane	BRL		µg/l	2.0	1	"	"	"	"	"
78-93-3	2-Butanone (MEK)	BRL		µg/l	10.0	1	"	"	"	"	"
104-51-8	n-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"
135-98-8	sec-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"
98-06-6	tert-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"
75-15-0	Carbon disulfide	BRL		µg/l	5.0	1	"	"	"	"	"
56-23-5	Carbon tetrachloride	BRL		µg/l	1.0	1	"	"	"	"	"
108-90-7	Chlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"
75-00-3	Chloroethane	BRL		µg/l	2.0	1	"	"	"	"	"
67-66-3	Chloroform	BRL		µg/l	1.0	1	"	"	"	"	"
74-87-3	Chloromethane	BRL		µg/l	2.0	1	"	"	"	"	"
95-49-8	2-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	"
106-43-4	4-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/l	2.0	1	"	"	"	"	"
124-48-1	Dibromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	"
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	1.0	1	"	"	"	"	"
74-95-3	Dibromomethane	BRL		µg/l	1.0	1	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0	1	"	"	"	"	"
75-34-3	1,1-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	"
107-06-2	1,2-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	"
75-35-4	1,1-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	"
156-59-2	cis-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	"
78-87-5	1,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	"
142-28-9	1,3-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	"
594-20-7	2,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	"
563-58-6	1,1-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	"
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	"
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	"
100-41-4	Ethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL		µg/l	1.0	1	"	"	"	"	"
591-78-6	2-Hexanone (MBK)	BRL		µg/l	10.0	1	"	"	"	"	"
98-82-8	Isopropylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"
99-87-6	4-Isopropyltoluene	BRL		µg/l	1.0	1	"	"	"	"	"
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0	1	"	"	"	"	"
75-09-2	Methylene chloride	BRL		µg/l	5.0	1	"	"	"	"	"
91-20-3	Naphthalene	BRL		µg/l	1.0	1	"	"	"	"	"
103-65-1	n-Propylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW3 SA71128-03	1009825.04 Phase 100	Ground Water	14-Nov-07 11:05	15-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds											
Volatile Organic Compounds											
Prepared by method SW846 5030 Water MS											
100-42-5	Styrene	BRL		µg/l	1.0	1	SW 846 8260B	20-Nov-07	21-Nov-07	7111621	jld
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0	1	"	"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	1.0	1	"	"	"	"	"
127-18-4	Tetrachloroethene	BRL		µg/l	1.0	1	"	"	"	"	"
108-88-3	Toluene	BRL		µg/l	1.0	1	"	"	"	"	"
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"
71-55-6	1,1,1-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	"
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	"
79-01-6	Trichloroethene	BRL		µg/l	1.0	1	"	"	"	"	"
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0	1	"	"	"	"	"
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	1.0	1	"	"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"
75-01-4	Vinyl chloride	BRL		µg/l	1.0	1	"	"	"	"	"
1330-20-7	m,p-Xylene	BRL		µg/l	2.0	1	"	"	"	"	"
95-47-6	o-Xylene	BRL		µg/l	1.0	1	"	"	"	"	"
109-99-9	Tetrahydrofuran	BRL		µg/l	10.0	1	"	"	"	"	"
60-29-7	Ethyl ether	BRL		µg/l	1.0	1	"	"	"	"	"
994-05-8	Tert-amyl methyl ether	BRL		µg/l	1.0	1	"	"	"	"	"
637-92-3	Ethyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	"
108-20-3	Di-isopropyl ether	BRL		µg/l	1.0	1	"	"	"	"	"
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/l	10.0	1	"	"	"	"	"
123-91-1	1,4-Dioxane	BRL		µg/l	20.0	1	"	"	"	"	"
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/l	5.0	1	"	"	"	"	"
64-17-5	Ethanol	BRL		µg/l	500	1	"	"	"	"	"
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*101*		*70-130 %*			"	"	"	"	"
2037-26-5	*Toluene-d8*	*102*		*70-130 %*			"	"	"	"	"
17060-07-0	*1,2-Dichloroethane-d4*	*95*		*70-130 %*			"	"	"	"	"
1868-53-7	*Dibromofluoromethane*	*104*		*70-130 %*			"	"	"	"	"
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3510C											
83-32-9	Acenaphthene	BRL		µg/l	5.26	1	SW846 8270C	18-Nov-07	20-Nov-07	7111475	M.B
208-96-8	Acenaphthylene	BRL		µg/l	5.26	1	"	"	"	"	"
120-12-7	Anthracene	BRL		µg/l	5.26	1	"	"	"	"	"
56-55-3	Benzo (a) anthracene	BRL		µg/l	5.26	1	"	"	"	"	"
50-32-8	Benzo (a) pyrene	BRL		µg/l	5.26	1	"	"	"	"	"
205-99-2	Benzo (b) fluoranthene	BRL		µg/l	5.26	1	"	"	"	"	"
191-24-2	Benzo (g,h,i) perylene	BRL		µg/l	5.26	1	"	"	"	"	"
207-08-9	Benzo (k) fluoranthene	BRL		µg/l	5.26	1	"	"	"	"	"
218-01-9	Chrysene	BRL		µg/l	5.26	1	"	"	"	"	"
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/l	5.26	1	"	"	"	"	"
206-44-0	Fluoranthene	BRL		µg/l	5.26	1	"	"	"	"	"
86-73-7	Fluorene	BRL		µg/l	5.26	1	"	"	"	"	"
193-39-5	Indeno (1,2,3-cd) pyrene	BRL		µg/l	5.26	1	"	"	"	"	"
90-12-0	1-Methylnaphthalene	BRL		µg/l	5.26	1	"	"	"	"	"
91-57-6	2-Methylnaphthalene	BRL		µg/l	5.26	1	"	"	"	"	"
91-20-3	Naphthalene	BRL		µg/l	5.26	1	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW3 SA71128-03	1009825.04 Phase 100	Ground Water	14-Nov-07 11:05	15-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3510C											
85-01-8	Phenanthrene	BRL		µg/l	5.26	1	SW846 8270C	18-Nov-07	20-Nov-07	7111475	M.B
129-00-0	Pyrene	BRL		µg/l	5.26	1	"	"	"	"	"
Surrogate recoveries:											
321-60-8	*2-Fluorobiphenyl*	*92*		*30-130 %*			"	"	"	"	"
1718-51-0	*Terphenyl-dl4*	*99*		*30-130 %*			"	"	"	"	"
Total Metals by EPA 6000/7000 Series Methods											
7440-22-4	Silver	BRL		mg/l	0.0050	1	SW846 6010B	27-Nov-07	04-Dec-07	7111877	SA
7440-38-2	Arsenic	BRL		mg/l	0.0040	1	"	"	"	"	"
7440-41-7	Beryllium	BRL		mg/l	0.0020	1	"	"	"	"	"
7440-43-9	Cadmium	BRL		mg/l	0.0025	1	"	"	"	"	"
7440-47-3	Chromium	BRL		mg/l	0.0050	1	"	"	"	"	"
7440-50-8	Copper	BRL		mg/l	0.0050	1	"	"	"	"	"
7440-02-0	Nickel	BRL		mg/l	0.0050	1	"	"	"	"	"
7439-92-1	Lead	BRL		mg/l	0.0075	1	"	"	"	"	"
7440-36-0	Antimony	BRL		mg/l	0.0060	1	"	"	29-Nov-07	"	TBG
7782-49-2	Selenium	BRL		mg/l	0.0150	1	"	"	04-Dec-07	"	SA
7440-28-0	Thallium	BRL		mg/l	0.0050	1	"	"	"	"	"
7440-66-6	Zinc	0.0274		mg/l	0.0050	1	"	"	"	"	"
Total Metals by EPA 200 Series Methods											
7439-97-6	Mercury	BRL		mg/l	0.00020	1	EPA 245.1/7470A	27-Nov-07	28-Nov-07	7111878	CRM

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW4 SA71128-04	1009825.04 Phase 100	Ground Water	14-Nov-07 11:15	15-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds											
Volatile Organic Compounds											
Prepared by method SW846 5030 Water MS											
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon	BRL		µg/l	1.0	1	SW 846 8260B	20-Nov-07	21-Nov-07	7111621	jld
67-64-1	Acetone	BRL		µg/l	10.0	1	"	"	"	"	"
107-13-1	Acrylonitrile	BRL		µg/l	1.0	1	"	"	"	"	"
71-43-2	Benzene	BRL		µg/l	1.0	1	"	"	"	"	"
108-86-1	Bromobenzene	BRL		µg/l	1.0	1	"	"	"	"	"
74-97-5	Bromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	"
75-27-4	Bromodichloromethane	BRL		µg/l	1.0	1	"	"	"	"	"
75-25-2	Bromoform	BRL		µg/l	1.0	1	"	"	"	"	"
74-83-9	Bromomethane	BRL		µg/l	2.0	1	"	"	"	"	"
78-93-3	2-Butanone (MEK)	BRL		µg/l	10.0	1	"	"	"	"	"
104-51-8	n-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"
135-98-8	sec-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"
98-06-6	tert-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"
75-15-0	Carbon disulfide	BRL		µg/l	5.0	1	"	"	"	"	"
56-23-5	Carbon tetrachloride	BRL		µg/l	1.0	1	"	"	"	"	"
108-90-7	Chlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"
75-00-3	Chloroethane	BRL		µg/l	2.0	1	"	"	"	"	"
67-66-3	Chloroform	BRL		µg/l	1.0	1	"	"	"	"	"
74-87-3	Chloromethane	BRL		µg/l	2.0	1	"	"	"	"	"
95-49-8	2-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	"
106-43-4	4-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/l	2.0	1	"	"	"	"	"
124-48-1	Dibromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	"
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	1.0	1	"	"	"	"	"
74-95-3	Dibromomethane	BRL		µg/l	1.0	1	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0	1	"	"	"	"	"
75-34-3	1,1-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	"
107-06-2	1,2-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	"
75-35-4	1,1-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	"
156-59-2	cis-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	"
78-87-5	1,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	"
142-28-9	1,3-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	"
594-20-7	2,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	"
563-58-6	1,1-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	"
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	"
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	"
100-41-4	Ethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL		µg/l	1.0	1	"	"	"	"	"
591-78-6	2-Hexanone (MBK)	BRL		µg/l	10.0	1	"	"	"	"	"
98-82-8	Isopropylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"
99-87-6	4-Isopropyltoluene	BRL		µg/l	1.0	1	"	"	"	"	"
1634-04-4	Methyl tert-butyl ether	1.0		µg/l	1.0	1	"	"	"	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0	1	"	"	"	"	"
75-09-2	Methylene chloride	BRL		µg/l	5.0	1	"	"	"	"	"
91-20-3	Naphthalene	BRL		µg/l	1.0	1	"	"	"	"	"
103-65-1	n-Propylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW4 SA71128-04	1009825.04 Phase 100	Ground Water	14-Nov-07 11:15	15-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds											
Volatile Organic Compounds											
Prepared by method SW846 5030 Water MS											
100-42-5	Styrene	BRL		µg/l	1.0	1	SW 846 8260B	20-Nov-07	21-Nov-07	7111621	jld
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0	1	"	"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	1.0	1	"	"	"	"	"
127-18-4	Tetrachloroethene	BRL		µg/l	1.0	1	"	"	"	"	"
108-88-3	Toluene	BRL		µg/l	1.0	1	"	"	"	"	"
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"
71-55-6	1,1,1-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	"
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	"
79-01-6	Trichloroethene	BRL		µg/l	1.0	1	"	"	"	"	"
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0	1	"	"	"	"	"
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	1.0	1	"	"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"
75-01-4	Vinyl chloride	BRL		µg/l	1.0	1	"	"	"	"	"
1330-20-7	m,p-Xylene	BRL		µg/l	2.0	1	"	"	"	"	"
95-47-6	o-Xylene	BRL		µg/l	1.0	1	"	"	"	"	"
109-99-9	Tetrahydrofuran	BRL		µg/l	10.0	1	"	"	"	"	"
60-29-7	Ethyl ether	BRL		µg/l	1.0	1	"	"	"	"	"
994-05-8	Tert-amyl methyl ether	BRL		µg/l	1.0	1	"	"	"	"	"
637-92-3	Ethyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	"
108-20-3	Di-isopropyl ether	BRL		µg/l	1.0	1	"	"	"	"	"
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/l	10.0	1	"	"	"	"	"
123-91-1	1,4-Dioxane	BRL		µg/l	20.0	1	"	"	"	"	"
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/l	5.0	1	"	"	"	"	"
64-17-5	Ethanol	BRL		µg/l	500	1	"	"	"	"	"
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*101*		*70-130 %*			"	"	"	"	"
2037-26-5	*Toluene-d8*	*103*		*70-130 %*			"	"	"	"	"
17060-07-0	*1,2-Dichloroethane-d4*	*95*		*70-130 %*			"	"	"	"	"
1868-53-7	*Dibromofluoromethane*	*105*		*70-130 %*			"	"	"	"	"
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3510C											
83-32-9	Acenaphthene	BRL		µg/l	5.26	1	SW846 8270C	18-Nov-07	20-Nov-07	7111475	M.B
208-96-8	Acenaphthylene	BRL		µg/l	5.26	1	"	"	"	"	"
120-12-7	Anthracene	BRL		µg/l	5.26	1	"	"	"	"	"
56-55-3	Benzo (a) anthracene	BRL		µg/l	5.26	1	"	"	"	"	"
50-32-8	Benzo (a) pyrene	BRL		µg/l	5.26	1	"	"	"	"	"
205-99-2	Benzo (b) fluoranthene	BRL		µg/l	5.26	1	"	"	"	"	"
191-24-2	Benzo (g,h,i) perylene	BRL		µg/l	5.26	1	"	"	"	"	"
207-08-9	Benzo (k) fluoranthene	BRL		µg/l	5.26	1	"	"	"	"	"
218-01-9	Chrysene	BRL		µg/l	5.26	1	"	"	"	"	"
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/l	5.26	1	"	"	"	"	"
206-44-0	Fluoranthene	BRL		µg/l	5.26	1	"	"	"	"	"
86-73-7	Fluorene	BRL		µg/l	5.26	1	"	"	"	"	"
193-39-5	Indeno (1,2,3-cd) pyrene	BRL		µg/l	5.26	1	"	"	"	"	"
90-12-0	1-Methylnaphthalene	BRL		µg/l	5.26	1	"	"	"	"	"
91-57-6	2-Methylnaphthalene	BRL		µg/l	5.26	1	"	"	"	"	"
91-20-3	Naphthalene	BRL		µg/l	5.26	1	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW4 SA71128-04	1009825.04 Phase 100	Ground Water	14-Nov-07 11:15	15-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3510C											
85-01-8	Phenanthrene	BRL		µg/l	5.26	1	SW846 8270C	18-Nov-07	20-Nov-07	7111475	M.B
129-00-0	Pyrene	BRL		µg/l	5.26	1	"	"	"	"	"
Surrogate recoveries:											
321-60-8	*2-Fluorobiphenyl*	*80*		*30-130 %*			"	"	"	"	"
1718-51-0	*Terphenyl-dl4*	*89*		*30-130 %*			"	"	"	"	"
Total Metals by EPA 6000/7000 Series Methods											
7440-22-4	Silver	BRL		mg/l	0.0050	1	SW846 6010B	27-Nov-07	04-Dec-07	7111877	SA
7440-38-2	Arsenic	BRL		mg/l	0.0040	1	"	"	"	"	"
7440-41-7	Beryllium	BRL		mg/l	0.0020	1	"	"	"	"	"
7440-43-9	Cadmium	BRL		mg/l	0.0025	1	"	"	"	"	"
7440-47-3	Chromium	BRL		mg/l	0.0050	1	"	"	"	"	"
7440-50-8	Copper	0.0061		mg/l	0.0050	1	"	"	"	"	"
7440-02-0	Nickel	0.0097		mg/l	0.0050	1	"	"	"	"	"
7439-92-1	Lead	BRL		mg/l	0.0075	1	"	"	"	"	"
7440-36-0	Antimony	BRL		mg/l	0.0060	1	"	"	29-Nov-07	"	TBG
7782-49-2	Selenium	BRL		mg/l	0.0150	1	"	"	04-Dec-07	"	SA
7440-28-0	Thallium	BRL		mg/l	0.0050	1	"	"	"	"	"
7440-66-6	Zinc	0.0532		mg/l	0.0050	1	"	"	"	"	"
Total Metals by EPA 200 Series Methods											
7439-97-6	Mercury	BRL		mg/l	0.00020	1	EPA 245.1/7470A	27-Nov-07	28-Nov-07	7111878	CRM

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW5 SA71128-05	1009825.04 Phase 100	Ground Water	14-Nov-07 12:40	15-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds											
Volatile Organic Compounds											
Prepared by method SW846 5030 Water MS											
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon	BRL		µg/l	1.0	1	SW 846 8260B	20-Nov-07	21-Nov-07	7111621	jld
67-64-1	Acetone	BRL		µg/l	10.0	1	"	"	"	"	"
107-13-1	Acrylonitrile	BRL		µg/l	1.0	1	"	"	"	"	"
71-43-2	Benzene	BRL		µg/l	1.0	1	"	"	"	"	"
108-86-1	Bromobenzene	BRL		µg/l	1.0	1	"	"	"	"	"
74-97-5	Bromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	"
75-27-4	Bromodichloromethane	BRL		µg/l	1.0	1	"	"	"	"	"
75-25-2	Bromoform	BRL		µg/l	1.0	1	"	"	"	"	"
74-83-9	Bromomethane	BRL		µg/l	2.0	1	"	"	"	"	"
78-93-3	2-Butanone (MEK)	BRL		µg/l	10.0	1	"	"	"	"	"
104-51-8	n-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"
135-98-8	sec-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"
98-06-6	tert-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"
75-15-0	Carbon disulfide	BRL		µg/l	5.0	1	"	"	"	"	"
56-23-5	Carbon tetrachloride	BRL		µg/l	1.0	1	"	"	"	"	"
108-90-7	Chlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"
75-00-3	Chloroethane	BRL		µg/l	2.0	1	"	"	"	"	"
67-66-3	Chloroform	BRL		µg/l	1.0	1	"	"	"	"	"
74-87-3	Chloromethane	BRL		µg/l	2.0	1	"	"	"	"	"
95-49-8	2-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	"
106-43-4	4-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/l	2.0	1	"	"	"	"	"
124-48-1	Dibromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	"
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	1.0	1	"	"	"	"	"
74-95-3	Dibromomethane	BRL		µg/l	1.0	1	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0	1	"	"	"	"	"
75-34-3	1,1-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	"
107-06-2	1,2-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	"
75-35-4	1,1-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	"
156-59-2	cis-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	"
78-87-5	1,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	"
142-28-9	1,3-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	"
594-20-7	2,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	"
563-58-6	1,1-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	"
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	"
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	"
100-41-4	Ethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL		µg/l	1.0	1	"	"	"	"	"
591-78-6	2-Hexanone (MBK)	BRL		µg/l	10.0	1	"	"	"	"	"
98-82-8	Isopropylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"
99-87-6	4-Isopropyltoluene	BRL		µg/l	1.0	1	"	"	"	"	"
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0	1	"	"	"	"	"
75-09-2	Methylene chloride	BRL		µg/l	5.0	1	"	"	"	"	"
91-20-3	Naphthalene	BRL		µg/l	1.0	1	"	"	"	"	"
103-65-1	n-Propylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW5 SA71128-05	1009825.04 Phase 100	Ground Water	14-Nov-07 12:40	15-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds											
Volatile Organic Compounds											
Prepared by method SW846 5030 Water MS											
100-42-5	Styrene	BRL		µg/l	1.0	1	SW 846 8260B	20-Nov-07	21-Nov-07	7111621	jld
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0	1	"	"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	1.0	1	"	"	"	"	"
127-18-4	Tetrachloroethene	BRL		µg/l	1.0	1	"	"	"	"	"
108-88-3	Toluene	BRL		µg/l	1.0	1	"	"	"	"	"
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"
71-55-6	1,1,1-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	"
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	"
79-01-6	Trichloroethene	BRL		µg/l	1.0	1	"	"	"	"	"
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0	1	"	"	"	"	"
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	1.0	1	"	"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"
75-01-4	Vinyl chloride	BRL		µg/l	1.0	1	"	"	"	"	"
1330-20-7	m,p-Xylene	BRL		µg/l	2.0	1	"	"	"	"	"
95-47-6	o-Xylene	BRL		µg/l	1.0	1	"	"	"	"	"
109-99-9	Tetrahydrofuran	BRL		µg/l	10.0	1	"	"	"	"	"
60-29-7	Ethyl ether	BRL		µg/l	1.0	1	"	"	"	"	"
994-05-8	Tert-amyl methyl ether	BRL		µg/l	1.0	1	"	"	"	"	"
637-92-3	Ethyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	"
108-20-3	Di-isopropyl ether	BRL		µg/l	1.0	1	"	"	"	"	"
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/l	10.0	1	"	"	"	"	"
123-91-1	1,4-Dioxane	BRL		µg/l	20.0	1	"	"	"	"	"
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/l	5.0	1	"	"	"	"	"
64-17-5	Ethanol	BRL		µg/l	500	1	"	"	"	"	"
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*102*		*70-130 %*			"	"	"	"	"
2037-26-5	*Toluene-d8*	*103*		*70-130 %*			"	"	"	"	"
17060-07-0	*1,2-Dichloroethane-d4*	*95*		*70-130 %*			"	"	"	"	"
1868-53-7	*Dibromofluoromethane*	*106*		*70-130 %*			"	"	"	"	"
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3510C											
83-32-9	Acenaphthene	BRL		µg/l	5.56	1	SW846 8270C	18-Nov-07	20-Nov-07	7111475	M.B
208-96-8	Acenaphthylene	BRL		µg/l	5.56	1	"	"	"	"	"
120-12-7	Anthracene	BRL		µg/l	5.56	1	"	"	"	"	"
56-55-3	Benzo (a) anthracene	BRL		µg/l	5.56	1	"	"	"	"	"
50-32-8	Benzo (a) pyrene	BRL		µg/l	5.56	1	"	"	"	"	"
205-99-2	Benzo (b) fluoranthene	BRL		µg/l	5.56	1	"	"	"	"	"
191-24-2	Benzo (g,h,i) perylene	BRL		µg/l	5.56	1	"	"	"	"	"
207-08-9	Benzo (k) fluoranthene	BRL		µg/l	5.56	1	"	"	"	"	"
218-01-9	Chrysene	BRL		µg/l	5.56	1	"	"	"	"	"
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/l	5.56	1	"	"	"	"	"
206-44-0	Fluoranthene	BRL		µg/l	5.56	1	"	"	"	"	"
86-73-7	Fluorene	BRL		µg/l	5.56	1	"	"	"	"	"
193-39-5	Indeno (1,2,3-cd) pyrene	BRL		µg/l	5.56	1	"	"	"	"	"
90-12-0	1-Methylnaphthalene	BRL		µg/l	5.56	1	"	"	"	"	"
91-57-6	2-Methylnaphthalene	BRL		µg/l	5.56	1	"	"	"	"	"
91-20-3	Naphthalene	BRL		µg/l	5.56	1	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW5 SA71128-05	1009825.04 Phase 100	Ground Water	14-Nov-07 12:40	15-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3510C											
85-01-8	Phenanthrene	BRL		µg/l	5.56	1	SW846 8270C	18-Nov-07	20-Nov-07	7111475	M.B
129-00-0	Pyrene	BRL		µg/l	5.56	1	"	"	"	"	"
Surrogate recoveries:											
321-60-8	*2-Fluorobiphenyl*	*83*		*30-130 %*			"	"	"	"	"
1718-51-0	*Terphenyl-dl4*	*90*		*30-130 %*			"	"	"	"	"
Total Metals by EPA 6000/7000 Series Methods											
7440-22-4	Silver	BRL		mg/l	0.0050	1	SW846 6010B	27-Nov-07	04-Dec-07	7111877	SA
7440-38-2	Arsenic	BRL		mg/l	0.0040	1	"	"	"	"	"
7440-41-7	Beryllium	BRL		mg/l	0.0020	1	"	"	"	"	"
7440-43-9	Cadmium	BRL		mg/l	0.0025	1	"	"	"	"	"
7440-47-3	Chromium	BRL		mg/l	0.0050	1	"	"	"	"	"
7440-50-8	Copper	BRL		mg/l	0.0050	1	"	"	"	"	"
7440-02-0	Nickel	BRL		mg/l	0.0050	1	"	"	"	"	"
7439-92-1	Lead	BRL		mg/l	0.0075	1	"	"	"	"	"
7440-36-0	Antimony	BRL		mg/l	0.0060	1	"	"	29-Nov-07	"	TBG
7782-49-2	Selenium	BRL		mg/l	0.0150	1	"	"	04-Dec-07	"	SA
7440-28-0	Thallium	BRL		mg/l	0.0050	1	"	"	"	"	"
7440-66-6	Zinc	0.0223		mg/l	0.0050	1	"	"	"	"	"
Total Metals by EPA 200 Series Methods											
7439-97-6	Mercury	BRL		mg/l	0.00020	1	EPA 245.1/7470A	27-Nov-07	28-Nov-07	7111878	CRM

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Trip Blank SA71128-06	1009825.04 Phase 100	Aqueous	14-Nov-07 00:00	15-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds											
Volatile Organic Compounds											
Prepared by method SW846 5030 Water MS											
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon	BRL		µg/l	1.0	1	SW 846 8260B	26-Nov-07	27-Nov-07	7111893	adu
67-64-1	Acetone	BRL		µg/l	10.0	1	"	"	"	"	"
107-13-1	Acrylonitrile	BRL		µg/l	1.0	1	"	"	"	"	"
71-43-2	Benzene	BRL		µg/l	1.0	1	"	"	"	"	"
108-86-1	Bromobenzene	BRL		µg/l	1.0	1	"	"	"	"	"
74-97-5	Bromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	"
75-27-4	Bromodichloromethane	BRL		µg/l	1.0	1	"	"	"	"	"
75-25-2	Bromoform	BRL		µg/l	1.0	1	"	"	"	"	"
74-83-9	Bromomethane	BRL		µg/l	2.0	1	"	"	"	"	"
78-93-3	2-Butanone (MEK)	BRL		µg/l	10.0	1	"	"	"	"	"
104-51-8	n-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"
135-98-8	sec-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"
98-06-6	tert-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"
75-15-0	Carbon disulfide	BRL		µg/l	5.0	1	"	"	"	"	"
56-23-5	Carbon tetrachloride	BRL		µg/l	1.0	1	"	"	"	"	"
108-90-7	Chlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"
75-00-3	Chloroethane	BRL		µg/l	2.0	1	"	"	"	"	"
67-66-3	Chloroform	BRL		µg/l	1.0	1	"	"	"	"	"
74-87-3	Chloromethane	BRL		µg/l	2.0	1	"	"	"	"	"
95-49-8	2-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	"
106-43-4	4-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/l	2.0	1	"	"	"	"	"
124-48-1	Dibromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	"
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	1.0	1	"	"	"	"	"
74-95-3	Dibromomethane	BRL		µg/l	1.0	1	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0	1	"	"	"	"	"
75-34-3	1,1-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	"
107-06-2	1,2-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	"
75-35-4	1,1-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	"
156-59-2	cis-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	"
78-87-5	1,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	"
142-28-9	1,3-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	"
594-20-7	2,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	"
563-58-6	1,1-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	"
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	"
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	"
100-41-4	Ethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL		µg/l	1.0	1	"	"	"	"	"
591-78-6	2-Hexanone (MBK)	BRL		µg/l	10.0	1	"	"	"	"	"
98-82-8	Isopropylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"
99-87-6	4-Isopropyltoluene	BRL		µg/l	1.0	1	"	"	"	"	"
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0	1	"	"	"	"	"
75-09-2	Methylene chloride	BRL		µg/l	5.0	1	"	"	"	"	"
91-20-3	Naphthalene	BRL		µg/l	1.0	1	"	"	"	"	"
103-65-1	n-Propylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Trip Blank SA71128-06	1009825.04 Phase 100	Aqueous	14-Nov-07 00:00	15-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds											
Volatile Organic Compounds											
Prepared by method SW846 5030 Water MS											
100-42-5	Styrene	BRL		µg/l	1.0	1	SW 846 8260B	26-Nov-07	27-Nov-07	7111893	adu
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0	1	"	"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	1.0	1	"	"	"	"	"
127-18-4	Tetrachloroethene	BRL		µg/l	1.0	1	"	"	"	"	"
108-88-3	Toluene	BRL		µg/l	1.0	1	"	"	"	"	"
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"
71-55-6	1,1,1-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	"
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	"
79-01-6	Trichloroethene	BRL		µg/l	1.0	1	"	"	"	"	"
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0	1	"	"	"	"	"
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	1.0	1	"	"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"
75-01-4	Vinyl chloride	BRL		µg/l	1.0	1	"	"	"	"	"
1330-20-7	m,p-Xylene	BRL		µg/l	2.0	1	"	"	"	"	"
95-47-6	o-Xylene	BRL		µg/l	1.0	1	"	"	"	"	"
109-99-9	Tetrahydrofuran	BRL		µg/l	10.0	1	"	"	"	"	"
60-29-7	Ethyl ether	BRL		µg/l	1.0	1	"	"	"	"	"
994-05-8	Tert-amyl methyl ether	BRL		µg/l	1.0	1	"	"	"	"	"
637-92-3	Ethyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	"
108-20-3	Di-isopropyl ether	BRL		µg/l	1.0	1	"	"	"	"	"
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/l	10.0	1	"	"	"	"	"
123-91-1	1,4-Dioxane	BRL		µg/l	20.0	1	"	"	"	"	"
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/l	5.0	1	"	"	"	"	"
64-17-5	Ethanol	BRL		µg/l	500	1	"	"	"	"	"
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*103*		*70-130 %*			"	"	"	"	"
2037-26-5	*Toluene-d8*	*107*		*70-130 %*			"	"	"	"	"
17060-07-0	*1,2-Dichloroethane-d4*	*127*		*70-130 %*			"	"	"	"	"
1868-53-7	*Dibromofluoromethane*	*116*		*70-130 %*			"	"	"	"	"

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111621 - SW846 5030 Water MS										
Blank (7111621-BLK1)										
Prepared & Analyzed: 20-Nov-07										
1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/l	1.0						
Acetone	BRL		µg/l	10.0						
Acrylonitrile	BRL		µg/l	1.0						
Benzene	BRL		µg/l	1.0						
Bromobenzene	BRL		µg/l	1.0						
Bromochloromethane	BRL		µg/l	1.0						
Bromodichloromethane	BRL		µg/l	1.0						
Bromoform	BRL		µg/l	1.0						
Bromomethane	BRL		µg/l	2.0						
2-Butanone (MEK)	BRL		µg/l	10.0						
n-Butylbenzene	BRL		µg/l	1.0						
sec-Butylbenzene	BRL		µg/l	1.0						
tert-Butylbenzene	BRL		µg/l	1.0						
Carbon disulfide	BRL		µg/l	5.0						
Carbon tetrachloride	BRL		µg/l	1.0						
Chlorobenzene	BRL		µg/l	1.0						
Chloroethane	BRL		µg/l	2.0						
Chloroform	BRL		µg/l	1.0						
Chloromethane	BRL		µg/l	2.0						
2-Chlorotoluene	BRL		µg/l	1.0						
4-Chlorotoluene	BRL		µg/l	1.0						
1,2-Dibromo-3-chloropropane	BRL		µg/l	2.0						
Dibromochloromethane	BRL		µg/l	1.0						
1,2-Dibromoethane (EDB)	BRL		µg/l	1.0						
Dibromomethane	BRL		µg/l	1.0						
1,2-Dichlorobenzene	BRL		µg/l	1.0						
1,3-Dichlorobenzene	BRL		µg/l	1.0						
1,4-Dichlorobenzene	BRL		µg/l	1.0						
Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0						
1,1-Dichloroethane	BRL		µg/l	1.0						
1,2-Dichloroethane	BRL		µg/l	1.0						
1,1-Dichloroethene	BRL		µg/l	1.0						
cis-1,2-Dichloroethene	BRL		µg/l	1.0						
trans-1,2-Dichloroethene	BRL		µg/l	1.0						
1,2-Dichloropropane	BRL		µg/l	1.0						
1,3-Dichloropropane	BRL		µg/l	1.0						
2,2-Dichloropropane	BRL		µg/l	1.0						
1,1-Dichloropropene	BRL		µg/l	1.0						
cis-1,3-Dichloropropene	BRL		µg/l	1.0						
trans-1,3-Dichloropropene	BRL		µg/l	1.0						
Ethylbenzene	BRL		µg/l	1.0						
Hexachlorobutadiene	BRL		µg/l	1.0						
2-Hexanone (MBK)	BRL		µg/l	10.0						
Isopropylbenzene	BRL		µg/l	1.0						
4-Isopropyltoluene	BRL		µg/l	1.0						
Methyl tert-butyl ether	BRL		µg/l	1.0						
4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0						
Methylene chloride	BRL		µg/l	5.0						
Naphthalene	BRL		µg/l	1.0						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111621 - SW846 5030 Water MS										
Blank (7111621-BLK1)										
Prepared & Analyzed: 20-Nov-07										
n-Propylbenzene	BRL		µg/l	1.0						
Styrene	BRL		µg/l	1.0						
1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0						
1,1,2,2-Tetrachloroethane	BRL		µg/l	1.0						
Tetrachloroethene	BRL		µg/l	1.0						
Toluene	BRL		µg/l	1.0						
1,2,3-Trichlorobenzene	BRL		µg/l	1.0						
1,2,4-Trichlorobenzene	BRL		µg/l	1.0						
1,1,1-Trichloroethane	BRL		µg/l	1.0						
1,1,2-Trichloroethane	BRL		µg/l	1.0						
Trichloroethene	BRL		µg/l	1.0						
Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0						
1,2,3-Trichloropropane	BRL		µg/l	1.0						
1,2,4-Trimethylbenzene	BRL		µg/l	1.0						
1,3,5-Trimethylbenzene	BRL		µg/l	1.0						
Vinyl chloride	BRL		µg/l	1.0						
m,p-Xylene	BRL		µg/l	2.0						
o-Xylene	BRL		µg/l	1.0						
Tetrahydrofuran	BRL		µg/l	10.0						
Ethyl ether	BRL		µg/l	1.0						
Tert-amyl methyl ether	BRL		µg/l	1.0						
Ethyl tert-butyl ether	BRL		µg/l	1.0						
Di-isopropyl ether	BRL		µg/l	1.0						
Tert-Butanol / butyl alcohol	BRL		µg/l	10.0						
1,4-Dioxane	BRL		µg/l	20.0						
trans-1,4-Dichloro-2-butene	BRL		µg/l	5.0						
Ethanol	BRL		µg/l	500						
Surrogate: 4-Bromofluorobenzene	*50.6*		µg/l		*50.0*		*101*	*70-130*		
Surrogate: Toluene-d8	*51.1*		µg/l		*50.0*		*102*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*47.7*		µg/l		*50.0*		*95*	*70-130*		
Surrogate: Dibromofluoromethane	*51.9*		µg/l		*50.0*		*104*	*70-130*		
LCS (7111621-BS1)										
Prepared: 20-Nov-07 Analyzed: 21-Nov-07										
1,1,2-Trichlorotrifluoroethane (Freon 113)	21.8		µg/l		20.0		109	70-130		
Acetone	14.8		µg/l		20.0		74	0-166		
Acrylonitrile	17.5		µg/l		20.0		88	70-130		
Benzene	18.7		µg/l		20.0		93	70-130		
Bromobenzene	21.0		µg/l		20.0		105	70-130		
Bromochloromethane	21.0		µg/l		20.0		105	70-130		
Bromodichloromethane	19.2		µg/l		20.0		96	70-130		
Bromoform	18.5		µg/l		20.0		92	70-130		
Bromomethane	17.9		µg/l		20.0		89	14-172		
2-Butanone (MEK)	15.3		µg/l		20.0		76	28.6-137		
n-Butylbenzene	17.0		µg/l		20.0		85	70-130		
sec-Butylbenzene	19.9		µg/l		20.0		99	70-130		
tert-Butylbenzene	20.2		µg/l		20.0		101	70-130		
Carbon disulfide	20.7		µg/l		20.0		103	70-130		
Carbon tetrachloride	20.7		µg/l		20.0		103	70-130		
Chlorobenzene	20.2		µg/l		20.0		101	70-130		
Chloroethane	16.3		µg/l		20.0		82	59.9-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111621 - SW846 5030 Water MS										
LCS (7111621-BS1)										
Prepared: 20-Nov-07 Analyzed: 21-Nov-07										
Chloroform	18.8		µg/l		20.0		94	70-130		
Chloromethane	18.2		µg/l		20.0		91	70-130		
2-Chlorotoluene	19.3		µg/l		20.0		96	70-130		
4-Chlorotoluene	19.5		µg/l		20.0		98	70-130		
1,2-Dibromo-3-chloropropane	15.0		µg/l		20.0		75	70-130		
Dibromochloromethane	19.2		µg/l		20.0		96	70-130		
1,2-Dibromoethane (EDB)	20.0		µg/l		20.0		100	70-130		
Dibromomethane	19.5		µg/l		20.0		98	70-130		
1,2-Dichlorobenzene	18.1		µg/l		20.0		90	70-130		
1,3-Dichlorobenzene	21.4		µg/l		20.0		107	70-130		
1,4-Dichlorobenzene	18.1		µg/l		20.0		90	70-130		
Dichlorodifluoromethane (Freon12)	21.0		µg/l		20.0		105	59.1-169		
1,1-Dichloroethane	18.7		µg/l		20.0		94	70-130		
1,2-Dichloroethane	17.3		µg/l		20.0		86	70-130		
1,1-Dichloroethene	19.0		µg/l		20.0		95	70-130		
cis-1,2-Dichloroethene	20.4		µg/l		20.0		102	70-130		
trans-1,2-Dichloroethene	19.7		µg/l		20.0		98	70-130		
1,2-Dichloropropane	17.9		µg/l		20.0		90	70-130		
1,3-Dichloropropane	18.6		µg/l		20.0		93	70-130		
2,2-Dichloropropane	15.2		µg/l		20.0		76	70-130		
1,1-Dichloropropene	17.8		µg/l		20.0		89	70-130		
cis-1,3-Dichloropropene	17.3		µg/l		20.0		86	70-130		
trans-1,3-Dichloropropene	17.2		µg/l		20.0		86	70-130		
Ethylbenzene	19.1		µg/l		20.0		96	70-130		
Hexachlorobutadiene	16.8		µg/l		20.0		84	58.8-136		
2-Hexanone (MBK)	15.2		µg/l		20.0		76	70-130		
Isopropylbenzene	18.3		µg/l		20.0		92	70-130		
4-Isopropyltoluene	17.8		µg/l		20.0		89	70-130		
Methyl tert-butyl ether	17.4		µg/l		20.0		87	70-130		
4-Methyl-2-pentanone (MIBK)	16.1		µg/l		20.0		81	63.2-130		
Methylene chloride	18.5		µg/l		20.0		92	70-130		
Naphthalene	18.7		µg/l		20.0		94	70-130		
n-Propylbenzene	19.3		µg/l		20.0		96	70-130		
Styrene	20.5		µg/l		20.0		103	70-130		
1,1,1,2-Tetrachloroethane	20.2		µg/l		20.0		101	70-130		
1,1,2,2-Tetrachloroethane	17.9		µg/l		20.0		89	70-130		
Tetrachloroethene	20.9		µg/l		20.0		105	70-130		
Toluene	19.1		µg/l		20.0		96	70-130		
1,2,3-Trichlorobenzene	18.2		µg/l		20.0		91	70-130		
1,2,4-Trichlorobenzene	18.2		µg/l		20.0		91	70-130		
1,1,1-Trichloroethane	19.5		µg/l		20.0		97	70-130		
1,1,2-Trichloroethane	19.3		µg/l		20.0		96	70-130		
Trichloroethene	19.0		µg/l		20.0		95	70-130		
Trichlorofluoromethane (Freon 11)	19.9		µg/l		20.0		100	70-136		
1,2,3-Trichloropropane	19.9		µg/l		20.0		100	70-130		
1,2,4-Trimethylbenzene	20.6		µg/l		20.0		103	70-130		
1,3,5-Trimethylbenzene	20.1		µg/l		20.0		101	70-130		
Vinyl chloride	21.3		µg/l		20.0		107	70-130		
m,p-Xylene	39.6		µg/l		40.0		99	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111621 - SW846 5030 Water MS										
LCS (7111621-BS1)										
Prepared: 20-Nov-07 Analyzed: 21-Nov-07										
o-Xylene	20.8		µg/l		20.0		104	70-130		
Tetrahydrofuran	15.6		µg/l		20.0		78	70-130		
Ethyl ether	19.1		µg/l		20.0		95	70-130		
Tert-amyl methyl ether	17.1		µg/l		20.0		85	70-130		
Ethyl tert-butyl ether	18.3		µg/l		20.0		92	70-130		
Di-isopropyl ether	17.4		µg/l		20.0		87	70-130		
Tert-Butanol / butyl alcohol	154		µg/l		200		77	70-130		
1,4-Dioxane	194		µg/l		200		97	42.2-144		
trans-1,4-Dichloro-2-butene	14.6		µg/l		20.0		73	70-130		
Ethanol	352		µg/l		400		88	70-130		
Surrogate: 4-Bromofluorobenzene	*53.5*		µg/l		*50.0*		*107*	*70-130*		
Surrogate: Toluene-d8	*51.9*		µg/l		*50.0*		*104*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*46.8*		µg/l		*50.0*		*94*	*70-130*		
Surrogate: Dibromofluoromethane	*52.0*		µg/l		*50.0*		*104*	*70-130*		
LCS Dup (7111621-BSD1)										
Prepared: 20-Nov-07 Analyzed: 21-Nov-07										
1,1,2-Trichlorotrifluoroethane (Freon 113)	21.0		µg/l		20.0		105	70-130	3	25
Acetone	15.0		µg/l		20.0		75	0-166	2	50
Acrylonitrile	17.7		µg/l		20.0		89	70-130	1	25
Benzene	18.4		µg/l		20.0		92	70-130	1	25
Bromobenzene	20.9		µg/l		20.0		105	70-130	0.4	25
Bromochloromethane	20.6		µg/l		20.0		103	70-130	2	25
Bromodichloromethane	19.0		µg/l		20.0		95	70-130	0.6	25
Bromoform	18.1		µg/l		20.0		90	70-130	2	25
Bromomethane	18.8		µg/l		20.0		94	14-172	5	50
2-Butanone (MEK)	15.4		µg/l		20.0		77	28.6-137	0.7	50
n-Butylbenzene	16.2		µg/l		20.0		81	70-130	5	25
sec-Butylbenzene	19.6		µg/l		20.0		98	70-130	1	25
tert-Butylbenzene	20.1		µg/l		20.0		100	70-130	0.4	25
Carbon disulfide	20.4		µg/l		20.0		102	70-130	1	25
Carbon tetrachloride	20.9		µg/l		20.0		104	70-130	1	25
Chlorobenzene	20.0		µg/l		20.0		100	70-130	0.6	25
Chloroethane	16.0		µg/l		20.0		80	59.9-130	2	50
Chloroform	18.9		µg/l		20.0		95	70-130	0.8	25
Chloromethane	17.8		µg/l		20.0		89	70-130	2	25
2-Chlorotoluene	19.2		µg/l		20.0		96	70-130	0.8	25
4-Chlorotoluene	19.3		µg/l		20.0		96	70-130	1	25
1,2-Dibromo-3-chloropropane	14.7		µg/l		20.0		74	70-130	2	25
Dibromochloromethane	19.2		µg/l		20.0		96	70-130	0	50
1,2-Dibromoethane (EDB)	19.9		µg/l		20.0		100	70-130	0.6	25
Dibromomethane	19.0		µg/l		20.0		95	70-130	3	25
1,2-Dichlorobenzene	18.0		µg/l		20.0		90	70-130	0.7	25
1,3-Dichlorobenzene	21.2		µg/l		20.0		106	70-130	1	25
1,4-Dichlorobenzene	17.6		µg/l		20.0		88	70-130	3	25
Dichlorodifluoromethane (Freon12)	20.4		µg/l		20.0		102	59.1-169	3	50
1,1-Dichloroethane	18.4		µg/l		20.0		92	70-130	2	25
1,2-Dichloroethane	17.3		µg/l		20.0		87	70-130	0.5	25
1,1-Dichloroethene	18.8		µg/l		20.0		94	70-130	1	25
cis-1,2-Dichloroethene	20.5		µg/l		20.0		102	70-130	0.2	25
trans-1,2-Dichloroethene	19.6		µg/l		20.0		98	70-130	0.7	25

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111621 - SW846 5030 Water MS										
LCS Dup (7111621-BSD1)										
Prepared: 20-Nov-07 Analyzed: 21-Nov-07										
1,2-Dichloropropane	17.8		µg/l		20.0		89	70-130	0.4	25
1,3-Dichloropropane	18.6		µg/l		20.0		93	70-130	0.4	25
2,2-Dichloropropane	15.0		µg/l		20.0		75	70-130	1	25
1,1-Dichloropropene	17.5		µg/l		20.0		87	70-130	2	25
cis-1,3-Dichloropropene	17.1		µg/l		20.0		86	70-130	0.8	25
trans-1,3-Dichloropropene	17.1		µg/l		20.0		86	70-130	0.6	25
Ethylbenzene	19.0		µg/l		20.0		95	70-130	0.7	25
Hexachlorobutadiene	16.1		µg/l		20.0		80	58.8-136	4	50
2-Hexanone (MBK)	14.9		µg/l		20.0		74	70-130	2	25
Isopropylbenzene	18.4		µg/l		20.0		92	70-130	0.2	25
4-Isopropyltoluene	17.1		µg/l		20.0		86	70-130	4	25
Methyl tert-butyl ether	17.5		µg/l		20.0		88	70-130	0.7	25
4-Methyl-2-pentanone (MIBK)	15.9		µg/l		20.0		80	63.2-130	1	50
Methylene chloride	18.7		µg/l		20.0		93	70-130	1	25
Naphthalene	17.8		µg/l		20.0		89	70-130	5	25
n-Propylbenzene	18.8		µg/l		20.0		94	70-130	3	25
Styrene	20.5		µg/l		20.0		102	70-130	0.1	25
1,1,1,2-Tetrachloroethane	20.1		µg/l		20.0		100	70-130	0.7	25
1,1,2,2-Tetrachloroethane	17.8		µg/l		20.0		89	70-130	0.6	25
Tetrachloroethene	20.5		µg/l		20.0		103	70-130	2	25
Toluene	18.9		µg/l		20.0		95	70-130	0.9	25
1,2,3-Trichlorobenzene	17.8		µg/l		20.0		89	70-130	2	25
1,2,4-Trichlorobenzene	17.7		µg/l		20.0		88	70-130	3	25
1,1,1-Trichloroethane	19.0		µg/l		20.0		95	70-130	2	25
1,1,2-Trichloroethane	19.1		µg/l		20.0		95	70-130	1	25
Trichloroethene	19.0		µg/l		20.0		95	70-130	0	25
Trichlorofluoromethane (Freon 11)	19.3		µg/l		20.0		96	70-136	3	50
1,2,3-Trichloropropane	19.6		µg/l		20.0		98	70-130	1	25
1,2,4-Trimethylbenzene	20.2		µg/l		20.0		101	70-130	2	25
1,3,5-Trimethylbenzene	19.8		µg/l		20.0		99	70-130	2	25
Vinyl chloride	21.4		µg/l		20.0		107	70-130	0.05	25
m,p-Xylene	39.5		µg/l		40.0		99	70-130	0.3	25
o-Xylene	20.4		µg/l		20.0		102	70-130	2	25
Tetrahydrofuran	15.5		µg/l		20.0		78	70-130	0.6	25
Ethyl ether	18.7		µg/l		20.0		93	70-130	2	50
Tert-amyl methyl ether	17.4		µg/l		20.0		87	70-130	2	25
Ethyl tert-butyl ether	18.6		µg/l		20.0		93	70-130	2	25
Di-isopropyl ether	17.4		µg/l		20.0		87	70-130	0.3	25
Tert-Butanol / butyl alcohol	156		µg/l		200		78	70-130	1	25
1,4-Dioxane	196		µg/l		200		98	42.2-144	0.6	25
trans-1,4-Dichloro-2-butene	14.7		µg/l		20.0		74	70-130	1	25
Ethanol	352		µg/l		400		88	70-130	0.03	30
Surrogate: 4-Bromofluorobenzene	*54.2*		µg/l		*50.0*		*108*	*70-130*		
Surrogate: Toluene-d8	*51.9*		µg/l		*50.0*		*104*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*46.4*		µg/l		*50.0*		*93*	*70-130*		
Surrogate: Dibromofluoromethane	*51.8*		µg/l		*50.0*		*104*	*70-130*		
Matrix Spike (7111621-MS1) **Source: SA71128-01**										
Prepared: 20-Nov-07 Analyzed: 21-Nov-07										
Benzene	15.8		µg/l		20.0	BRL	79	70-130		
Chlorobenzene	17.4		µg/l		20.0	BRL	87	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111621 - SW846 5030 Water MS										
Matrix Spike (7111621-MS1) Source: SA71128-01										
Prepared: 20-Nov-07 Analyzed: 21-Nov-07										
1,1-Dichloroethene	17.5		µg/l		20.0	BRL	88	70-130		
Toluene	16.3		µg/l		20.0	BRL	82	70-130		
Trichloroethene	17.2		µg/l		20.0	BRL	86	70-130		
Surrogate: 4-Bromofluorobenzene	*51.6*		µg/l		*50.0*		*103*	*70-130*		
Surrogate: Toluene-d8	*51.5*		µg/l		*50.0*		*103*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*47.2*		µg/l		*50.0*		*94*	*70-130*		
Surrogate: Dibromofluoromethane	*52.5*		µg/l		*50.0*		*105*	*70-130*		
Matrix Spike Dup (7111621-MSD1) Source: SA71128-01										
Prepared: 20-Nov-07 Analyzed: 21-Nov-07										
Benzene	15.8		µg/l		20.0	BRL	79	70-130	0	30
Chlorobenzene	17.4		µg/l		20.0	BRL	87	70-130	0.5	30
1,1-Dichloroethene	17.8		µg/l		20.0	BRL	89	70-130	2	30
Toluene	16.6		µg/l		20.0	BRL	83	70-130	2	30
Trichloroethene	17.2		µg/l		20.0	BRL	86	70-130	0.2	30
Surrogate: 4-Bromofluorobenzene	*51.7*		µg/l		*50.0*		*103*	*70-130*		
Surrogate: Toluene-d8	*51.7*		µg/l		*50.0*		*103*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*47.3*		µg/l		*50.0*		*95*	*70-130*		
Surrogate: Dibromofluoromethane	*52.3*		µg/l		*50.0*		*105*	*70-130*		
Batch 7111893 - SW846 5030 Water MS										
Blank (7111893-BLK1)										
Prepared: 26-Nov-07 Analyzed: 27-Nov-07										
1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/l	1.0						
Acetone	BRL		µg/l	10.0						
Acrylonitrile	BRL		µg/l	1.0						
Benzene	BRL		µg/l	1.0						
Bromobenzene	BRL		µg/l	1.0						
Bromochloromethane	BRL		µg/l	1.0						
Bromodichloromethane	BRL		µg/l	1.0						
Bromoform	BRL		µg/l	1.0						
Bromomethane	BRL		µg/l	2.0						
2-Butanone (MEK)	BRL		µg/l	10.0						
n-Butylbenzene	BRL		µg/l	1.0						
sec-Butylbenzene	BRL		µg/l	1.0						
tert-Butylbenzene	BRL		µg/l	1.0						
Carbon disulfide	BRL		µg/l	5.0						
Carbon tetrachloride	BRL		µg/l	1.0						
Chlorobenzene	BRL		µg/l	1.0						
Chloroethane	BRL		µg/l	2.0						
Chloroform	BRL		µg/l	1.0						
Chloromethane	BRL		µg/l	2.0						
2-Chlorotoluene	BRL		µg/l	1.0						
4-Chlorotoluene	BRL		µg/l	1.0						
1,2-Dibromo-3-chloropropane	BRL		µg/l	2.0						
Dibromochloromethane	BRL		µg/l	1.0						
1,2-Dibromoethane (EDB)	BRL		µg/l	1.0						
Dibromomethane	BRL		µg/l	1.0						
1,2-Dichlorobenzene	BRL		µg/l	1.0						
1,3-Dichlorobenzene	BRL		µg/l	1.0						
1,4-Dichlorobenzene	BRL		µg/l	1.0						
Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0						

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111893 - SW846 5030 Water MS										
Blank (7111893-BLK1)										
Prepared: 26-Nov-07 Analyzed: 27-Nov-07										
1,1-Dichloroethane	BRL		µg/l	1.0						
1,2-Dichloroethane	BRL		µg/l	1.0						
1,1-Dichloroethene	BRL		µg/l	1.0						
cis-1,2-Dichloroethene	BRL		µg/l	1.0						
trans-1,2-Dichloroethene	BRL		µg/l	1.0						
1,2-Dichloropropane	BRL		µg/l	1.0						
1,3-Dichloropropane	BRL		µg/l	1.0						
2,2-Dichloropropane	BRL		µg/l	1.0						
1,1-Dichloropropene	BRL		µg/l	1.0						
cis-1,3-Dichloropropene	BRL		µg/l	1.0						
trans-1,3-Dichloropropene	BRL		µg/l	1.0						
Ethylbenzene	BRL		µg/l	1.0						
Hexachlorobutadiene	BRL		µg/l	1.0						
2-Hexanone (MBK)	BRL		µg/l	10.0						
Isopropylbenzene	BRL		µg/l	1.0						
4-Isopropyltoluene	BRL		µg/l	1.0						
Methyl tert-butyl ether	BRL		µg/l	1.0						
4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0						
Methylene chloride	BRL		µg/l	5.0						
Naphthalene	BRL		µg/l	1.0						
n-Propylbenzene	BRL		µg/l	1.0						
Styrene	BRL		µg/l	1.0						
1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0						
1,1,2,2-Tetrachloroethane	BRL		µg/l	1.0						
Tetrachloroethene	BRL		µg/l	1.0						
Toluene	BRL		µg/l	1.0						
1,2,3-Trichlorobenzene	BRL		µg/l	1.0						
1,2,4-Trichlorobenzene	BRL		µg/l	1.0						
1,1,1-Trichloroethane	BRL		µg/l	1.0						
1,1,2-Trichloroethane	BRL		µg/l	1.0						
Trichloroethene	BRL		µg/l	1.0						
Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0						
1,2,3-Trichloropropane	BRL		µg/l	1.0						
1,2,4-Trimethylbenzene	BRL		µg/l	1.0						
1,3,5-Trimethylbenzene	BRL		µg/l	1.0						
Vinyl chloride	BRL		µg/l	1.0						
m,p-Xylene	BRL		µg/l	2.0						
o-Xylene	BRL		µg/l	1.0						
Tetrahydrofuran	BRL		µg/l	10.0						
Ethyl ether	BRL		µg/l	1.0						
Tert-amyl methyl ether	BRL		µg/l	1.0						
Ethyl tert-butyl ether	BRL		µg/l	1.0						
Di-isopropyl ether	BRL		µg/l	1.0						
Tert-Butanol / butyl alcohol	BRL		µg/l	10.0						
1,4-Dioxane	BRL		µg/l	20.0						
trans-1,4-Dichloro-2-butene	BRL		µg/l	5.0						
Ethanol	BRL		µg/l	500						
Surrogate: 4-Bromofluorobenzene	*30.2*		µg/l		*30.0*		*101*	*70-130*		
Surrogate: Toluene-d8	*31.4*		µg/l		*30.0*		*105*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*33.5*		µg/l		*30.0*		*112*	*70-130*		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111893 - SW846 5030 Water MS										
Blank (7111893-BLK1)										
Prepared: 26-Nov-07 Analyzed: 27-Nov-07										
Surrogate: Dibromofluoromethane	*33.0*		µg/l		*30.0*		*110*	*70-130*		
LCS (7111893-BS1)										
Prepared: 26-Nov-07 Analyzed: 27-Nov-07										
1,1,2-Trichlorotrifluoroethane (Freon 113)	18.7		µg/l		20.0		94	70-130		
Acetone	25.0		µg/l		20.0		125	0-166		
Acrylonitrile	18.6		µg/l		20.0		93	70-130		
Benzene	20.5		µg/l		20.0		102	70-130		
Bromobenzene	23.6		µg/l		20.0		118	70-130		
Bromochloromethane	22.2		µg/l		20.0		111	70-130		
Bromodichloromethane	21.4		µg/l		20.0		107	70-130		
Bromoform	22.3		µg/l		20.0		111	70-130		
Bromomethane	25.2		µg/l		20.0		126	14-172		
2-Butanone (MEK)	23.0		µg/l		20.0		115	28.6-137		
n-Butylbenzene	10.6	QC2	µg/l		20.0		53	70-130		
sec-Butylbenzene	15.0		µg/l		20.0		75	70-130		
tert-Butylbenzene	17.0		µg/l		20.0		85	70-130		
Carbon disulfide	15.6		µg/l		20.0		78	70-130		
Carbon tetrachloride	20.5		µg/l		20.0		103	70-130		
Chlorobenzene	22.0		µg/l		20.0		110	70-130		
Chloroethane	16.1		µg/l		20.0		80	59.9-130		
Chloroform	21.0		µg/l		20.0		105	70-130		
Chloromethane	16.6		µg/l		20.0		83	70-130		
2-Chlorotoluene	21.8		µg/l		20.0		109	70-130		
4-Chlorotoluene	20.4		µg/l		20.0		102	70-130		
1,2-Dibromo-3-chloropropane	18.5		µg/l		20.0		93	70-130		
Dibromochloromethane	20.9		µg/l		20.0		104	70-130		
1,2-Dibromoethane (EDB)	22.4		µg/l		20.0		112	70-130		
Dibromomethane	21.7		µg/l		20.0		108	70-130		
1,2-Dichlorobenzene	20.4		µg/l		20.0		102	70-130		
1,3-Dichlorobenzene	20.9		µg/l		20.0		105	70-130		
1,4-Dichlorobenzene	19.9		µg/l		20.0		100	70-130		
Dichlorodifluoromethane (Freon12)	17.9		µg/l		20.0		90	59.1-169		
1,1-Dichloroethane	20.2		µg/l		20.0		101	70-130		
1,2-Dichloroethane	19.0		µg/l		20.0		95	70-130		
1,1-Dichloroethene	17.7		µg/l		20.0		89	70-130		
cis-1,2-Dichloroethene	21.4		µg/l		20.0		107	70-130		
trans-1,2-Dichloroethene	19.8		µg/l		20.0		99	70-130		
1,2-Dichloropropane	19.5		µg/l		20.0		98	70-130		
1,3-Dichloropropane	21.0		µg/l		20.0		105	70-130		
2,2-Dichloropropane	20.8		µg/l		20.0		104	70-130		
1,1-Dichloropropene	18.5		µg/l		20.0		93	70-130		
cis-1,3-Dichloropropene	20.4		µg/l		20.0		102	70-130		
trans-1,3-Dichloropropene	23.4		µg/l		20.0		117	70-130		
Ethylbenzene	21.3		µg/l		20.0		107	70-130		
Hexachlorobutadiene	13.7		µg/l		20.0		69	58.8-136		
2-Hexanone (MBK)	20.8		µg/l		20.0		104	70-130		
Isopropylbenzene	19.6		µg/l		20.0		98	70-130		
4-Isopropyltoluene	14.6		µg/l		20.0		73	70-130		
Methyl tert-butyl ether	21.0		µg/l		20.0		105	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111893 - SW846 5030 Water MS										
LCS (7111893-BS1)										
Prepared: 26-Nov-07 Analyzed: 27-Nov-07										
4-Methyl-2-pentanone (MIBK)	18.8		µg/l		20.0		94	63.2-130		
Methylene chloride	18.1		µg/l		20.0		90	70-130		
Naphthalene	20.2		µg/l		20.0		101	70-130		
n-Propylbenzene	16.1		µg/l		20.0		80	70-130		
Styrene	23.0		µg/l		20.0		115	70-130		
1,1,1,2-Tetrachloroethane	23.5		µg/l		20.0		118	70-130		
1,1,2,2-Tetrachloroethane	22.1		µg/l		20.0		110	70-130		
Tetrachloroethene	21.3		µg/l		20.0		106	70-130		
Toluene	20.5		µg/l		20.0		103	70-130		
1,2,3-Trichlorobenzene	16.5		µg/l		20.0		83	70-130		
1,2,4-Trichlorobenzene	13.8	QC2	µg/l		20.0		69	70-130		
1,1,1-Trichloroethane	20.8		µg/l		20.0		104	70-130		
1,1,2-Trichloroethane	21.4		µg/l		20.0		107	70-130		
Trichloroethene	20.0		µg/l		20.0		100	70-130		
Trichlorofluoromethane (Freon 11)	17.4		µg/l		20.0		87	70-136		
1,2,3-Trichloropropane	24.8		µg/l		20.0		124	70-130		
1,2,4-Trimethylbenzene	16.6		µg/l		20.0		83	70-130		
1,3,5-Trimethylbenzene	18.6		µg/l		20.0		93	70-130		
Vinyl chloride	17.8		µg/l		20.0		89	70-130		
m,p-Xylene	43.0		µg/l		40.0		107	70-130		
o-Xylene	22.1		µg/l		20.0		110	70-130		
Tetrahydrofuran	19.8		µg/l		20.0		99	70-130		
Ethyl ether	18.6		µg/l		20.0		93	70-130		
Tert-amyl methyl ether	17.9		µg/l		20.0		90	70-130		
Ethyl tert-butyl ether	20.5		µg/l		20.0		102	70-130		
Di-isopropyl ether	17.1		µg/l		20.0		86	70-130		
Tert-Butanol / butyl alcohol	193		µg/l		200		97	70-130		
1,4-Dioxane	224		µg/l		200		112	42.2-144		
trans-1,4-Dichloro-2-butene	19.3		µg/l		20.0		97	70-130		
Ethanol	347		µg/l		400		87	70-130		
Surrogate: 4-Bromofluorobenzene	*31.1*		µg/l		*30.0*		*104*	*70-130*		
Surrogate: Toluene-d8	*30.6*		µg/l		*30.0*		*102*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*28.6*		µg/l		*30.0*		*95*	*70-130*		
Surrogate: Dibromofluoromethane	*30.0*		µg/l		*30.0*		*100*	*70-130*		
LCS Dup (7111893-BSD1)										
Prepared: 26-Nov-07 Analyzed: 27-Nov-07										
1,1,2-Trichlorotrifluoroethane (Freon 113)	17.7		µg/l		20.0		89	70-130	5	25
Acetone	25.6		µg/l		20.0		128	0-166	2	50
Acrylonitrile	19.1		µg/l		20.0		96	70-130	3	25
Benzene	19.7		µg/l		20.0		98	70-130	4	25
Bromobenzene	23.0		µg/l		20.0		115	70-130	3	25
Bromochloromethane	21.7		µg/l		20.0		108	70-130	2	25
Bromodichloromethane	21.0		µg/l		20.0		105	70-130	2	25
Bromoform	22.5		µg/l		20.0		113	70-130	1	25
Bromomethane	23.5		µg/l		20.0		117	14-172	7	50
2-Butanone (MEK)	22.6		µg/l		20.0		113	28.6-137	2	50
n-Butylbenzene	10.2	QC2	µg/l		20.0		51	70-130	4	25
sec-Butylbenzene	14.0		µg/l		20.0		70	70-130	7	25
tert-Butylbenzene	16.2		µg/l		20.0		81	70-130	5	25
Carbon disulfide	14.9		µg/l		20.0		74	70-130	5	25

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111893 - SW846 5030 Water MS										
LCS Dup (7111893-BSD1)										
Prepared: 26-Nov-07 Analyzed: 27-Nov-07										
Carbon tetrachloride	19.5		µg/l		20.0		97	70-130	5	25
Chlorobenzene	21.7		µg/l		20.0		109	70-130	1	25
Chloroethane	15.4		µg/l		20.0		77	59.9-130	5	50
Chloroform	20.2		µg/l		20.0		101	70-130	4	25
Chloromethane	16.0		µg/l		20.0		80	70-130	4	25
2-Chlorotoluene	21.8		µg/l		20.0		109	70-130	0.05	25
4-Chlorotoluene	19.9		µg/l		20.0		99	70-130	3	25
1,2-Dibromo-3-chloropropane	18.7		µg/l		20.0		93	70-130	0.9	25
Dibromochloromethane	20.7		µg/l		20.0		104	70-130	0.9	50
1,2-Dibromoethane (EDB)	22.0		µg/l		20.0		110	70-130	2	25
Dibromomethane	21.4		µg/l		20.0		107	70-130	1	25
1,2-Dichlorobenzene	20.6		µg/l		20.0		103	70-130	0.6	25
1,3-Dichlorobenzene	20.3		µg/l		20.0		101	70-130	3	25
1,4-Dichlorobenzene	19.4		µg/l		20.0		97	70-130	3	25
Dichlorodifluoromethane (Freon12)	16.8		µg/l		20.0		84	59.1-169	7	50
1,1-Dichloroethane	19.5		µg/l		20.0		98	70-130	3	25
1,2-Dichloroethane	18.9		µg/l		20.0		94	70-130	0.8	25
1,1-Dichloroethene	16.9		µg/l		20.0		85	70-130	5	25
cis-1,2-Dichloroethene	20.8		µg/l		20.0		104	70-130	3	25
trans-1,2-Dichloroethene	19.0		µg/l		20.0		95	70-130	4	25
1,2-Dichloropropane	18.6		µg/l		20.0		93	70-130	5	25
1,3-Dichloropropane	20.6		µg/l		20.0		103	70-130	2	25
2,2-Dichloropropane	19.7		µg/l		20.0		98	70-130	6	25
1,1-Dichloropropene	17.6		µg/l		20.0		88	70-130	5	25
cis-1,3-Dichloropropene	19.6		µg/l		20.0		98	70-130	4	25
trans-1,3-Dichloropropene	22.9		µg/l		20.0		114	70-130	2	25
Ethylbenzene	21.0		µg/l		20.0		105	70-130	1	25
Hexachlorobutadiene	13.1		µg/l		20.0		66	58.8-136	4	50
2-Hexanone (MBK)	21.2		µg/l		20.0		106	70-130	2	25
Isopropylbenzene	18.9		µg/l		20.0		95	70-130	4	25
4-Isopropyltoluene	13.9	QC1	µg/l		20.0		69	70-130	5	25
Methyl tert-butyl ether	21.0		µg/l		20.0		105	70-130	0.05	25
4-Methyl-2-pentanone (MIBK)	18.6		µg/l		20.0		93	63.2-130	1	50
Methylene chloride	17.7		µg/l		20.0		88	70-130	2	25
Naphthalene	20.0		µg/l		20.0		100	70-130	0.6	25
n-Propylbenzene	15.4		µg/l		20.0		77	70-130	5	25
Styrene	22.7		µg/l		20.0		113	70-130	1	25
1,1,1,2-Tetrachloroethane	23.0		µg/l		20.0		115	70-130	2	25
1,1,2,2-Tetrachloroethane	22.4		µg/l		20.0		112	70-130	1	25
Tetrachloroethene	20.5		µg/l		20.0		103	70-130	4	25
Toluene	19.8		µg/l		20.0		99	70-130	4	25
1,2,3-Trichlorobenzene	16.1		µg/l		20.0		81	70-130	3	25
1,2,4-Trichlorobenzene	13.6	QC2	µg/l		20.0		68	70-130	2	25
1,1,1-Trichloroethane	19.8		µg/l		20.0		99	70-130	5	25
1,1,2-Trichloroethane	21.0		µg/l		20.0		105	70-130	2	25
Trichloroethene	18.9		µg/l		20.0		94	70-130	6	25
Trichlorofluoromethane (Freon 11)	16.3		µg/l		20.0		82	70-136	6	50
1,2,3-Trichloropropane	24.9		µg/l		20.0		124	70-130	0.2	25
1,2,4-Trimethylbenzene	15.9		µg/l		20.0		80	70-130	4	25

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111893 - SW846 5030 Water MS										
LCS Dup (7111893-BSD1)										
Prepared: 26-Nov-07 Analyzed: 27-Nov-07										
1,3,5-Trimethylbenzene	17.9		µg/l		20.0		90	70-130	4	25
Vinyl chloride	17.0		µg/l		20.0		85	70-130	4	25
m,p-Xylene	42.4		µg/l		40.0		106	70-130	1	25
o-Xylene	21.6		µg/l		20.0		108	70-130	2	25
Tetrahydrofuran	19.3		µg/l		20.0		97	70-130	3	25
Ethyl ether	18.5		µg/l		20.0		92	70-130	0.5	50
Tert-amyl methyl ether	18.2		µg/l		20.0		91	70-130	1	25
Ethyl tert-butyl ether	20.1		µg/l		20.0		101	70-130	2	25
Di-isopropyl ether	16.8		µg/l		20.0		84	70-130	2	25
Tert-Butanol / butyl alcohol	198		µg/l		200		99	70-130	2	25
1,4-Dioxane	226		µg/l		200		113	42.2-144	0.6	25
trans-1,4-Dichloro-2-butene	19.0		µg/l		20.0		95	70-130	1	25
Ethanol	359		µg/l		400		90	70-130	3	30
Surrogate: 4-Bromofluorobenzene	*31.2*		µg/l		*30.0*		*104*	*70-130*		
Surrogate: Toluene-d8	*30.8*		µg/l		*30.0*		*103*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*28.4*		µg/l		*30.0*		*95*	*70-130*		
Surrogate: Dibromofluoromethane	*29.9*		µg/l		*30.0*		*100*	*70-130*		
Matrix Spike (7111893-MS1) **Source: SA71406-01RE1**										
Prepared: 26-Nov-07 Analyzed: 27-Nov-07										
Benzene	24.2		µg/l		20.0	BRL	121	70-130		
Chlorobenzene	25.4		µg/l		20.0	BRL	127	70-130		
1,1-Dichloroethene	20.8		µg/l		20.0	BRL	104	70-130		
Toluene	23.9		µg/l		20.0	BRL	119	70-130		
Trichloroethene	22.8		µg/l		20.0	BRL	114	70-130		
Surrogate: 4-Bromofluorobenzene	*32.2*		µg/l		*30.0*		*107*	*70-130*		
Surrogate: Toluene-d8	*30.7*		µg/l		*30.0*		*102*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*31.7*		µg/l		*30.0*		*106*	*70-130*		
Surrogate: Dibromofluoromethane	*32.6*		µg/l		*30.0*		*109*	*70-130*		
Matrix Spike Dup (7111893-MSD1) **Source: SA71406-01RE1**										
Prepared: 26-Nov-07 Analyzed: 27-Nov-07										
Benzene	23.5		µg/l		20.0	BRL	118	70-130	3	30
Chlorobenzene	24.8		µg/l		20.0	BRL	124	70-130	3	30
1,1-Dichloroethene	17.7		µg/l		20.0	BRL	89	70-130	16	30
Toluene	24.4		µg/l		20.0	BRL	122	70-130	2	30
Trichloroethene	21.6		µg/l		20.0	BRL	108	70-130	5	30
Surrogate: 4-Bromofluorobenzene	*32.2*		µg/l		*30.0*		*108*	*70-130*		
Surrogate: Toluene-d8	*31.4*		µg/l		*30.0*		*104*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*35.0*		µg/l		*30.0*		*116*	*70-130*		
Surrogate: Dibromofluoromethane	*33.7*		µg/l		*30.0*		*112*	*70-130*		

Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111475 - SW846 3510C										
Blank (7111475-BLK1)										
Prepared: 18-Nov-07 Analyzed: 20-Nov-07										
Acenaphthene	BRL		µg/l	2.50						
Acenaphthylene	BRL		µg/l	2.50						
Anthracene	BRL		µg/l	2.50						
Benzo (a) anthracene	BRL		µg/l	2.50						
Benzo (a) pyrene	BRL		µg/l	2.50						
Benzo (b) fluoranthene	BRL		µg/l	2.50						
Benzo (g,h,i) perylene	BRL		µg/l	2.50						
Benzo (k) fluoranthene	BRL		µg/l	2.50						
Chrysene	BRL		µg/l	2.50						
Dibenzo (a,h) anthracene	BRL		µg/l	2.50						
Fluoranthene	BRL		µg/l	2.50						
Fluorene	BRL		µg/l	2.50						
Indeno (1,2,3-cd) pyrene	BRL		µg/l	2.50						
1-Methylnaphthalene	BRL		µg/l	2.50						
2-Methylnaphthalene	BRL		µg/l	2.50						
Naphthalene	BRL		µg/l	2.50						
Phenanthrene	BRL		µg/l	2.50						
Pyrene	BRL		µg/l	2.50						
Surrogate: 2-Fluorobiphenyl	*33.1*		µg/l		*50.0*		*66*	*30-130*		
Surrogate: Terphenyl-dl4	*36.2*		µg/l		*50.0*		*72*	*30-130*		
LCS (7111475-BS1)										
Prepared: 18-Nov-07 Analyzed: 20-Nov-07										
Acenaphthene	39.6		µg/l	2.50	50.0		79	40-140		
Acenaphthylene	39.4		µg/l	2.50	50.0		79	40-140		
Anthracene	41.3		µg/l	2.50	50.0		83	40-140		
Benzo (a) anthracene	45.3		µg/l	2.50	50.0		91	40-140		
Benzo (a) pyrene	43.1		µg/l	2.50	50.0		86	40-140		
Benzo (b) fluoranthene	53.8		µg/l	2.50	50.0		108	40-140		
Benzo (g,h,i) perylene	43.2		µg/l	2.50	50.0		86	40-140		
Benzo (k) fluoranthene	23.8		µg/l	2.50	50.0		48	40-140		
Chrysene	38.6		µg/l	2.50	50.0		77	40-140		
Dibenzo (a,h) anthracene	41.5		µg/l	2.50	50.0		83	40-140		
Fluoranthene	41.7		µg/l	2.50	50.0		83	40-140		
Fluorene	38.7		µg/l	2.50	50.0		77	40-140		
Indeno (1,2,3-cd) pyrene	51.7		µg/l	2.50	50.0		103	40-140		
1-Methylnaphthalene	38.8		µg/l	2.50	50.0		78	40-140		
2-Methylnaphthalene	39.0		µg/l	2.50	50.0		78	40-140		
Naphthalene	38.3		µg/l	2.50	50.0		77	40-140		
Phenanthrene	42.0		µg/l	2.50	50.0		84	40-140		
Pyrene	42.3		µg/l	2.50	50.0		85	40-140		
Surrogate: 2-Fluorobiphenyl	*33.1*		µg/l		*50.0*		*66*	*30-130*		
Surrogate: Terphenyl-dl4	*36.9*		µg/l		*50.0*		*74*	*30-130*		

Total Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111877 - SW846 3005A										
Blank (7111877-BLK1)										
Prepared: 27-Nov-07 Analyzed: 04-Dec-07										
Nickel	BRL		mg/l	0.0050						
Selenium	BRL		mg/l	0.0150						
Lead	BRL		mg/l	0.0075						
Zinc	BRL		mg/l	0.0050						
Antimony	BRL		mg/l	0.0060						
Thallium	BRL		mg/l	0.0050						
Cadmium	BRL		mg/l	0.0025						
Silver	BRL		mg/l	0.0050						
Copper	BRL		mg/l	0.0050						
Chromium	BRL		mg/l	0.0050						
Arsenic	BRL		mg/l	0.0040						
Beryllium	BRL		mg/l	0.0020						
LCS (7111877-BS1)										
Prepared: 27-Nov-07 Analyzed: 04-Dec-07										
Nickel	1.29		mg/l	0.0050	1.25		103	85-115		
Lead	1.27		mg/l	0.0075	1.25		101	85-115		
Selenium	1.26		mg/l	0.0150	1.25		101	85-115		
Zinc	1.31		mg/l	0.0050	1.25		105	85-115		
Antimony	1.21		mg/l	0.0060	1.25		97	85-115		
Thallium	1.25		mg/l	0.0050	1.25		100	85-115		
Silver	1.26		mg/l	0.0050	1.25		101	85-115		
Arsenic	1.25		mg/l	0.0040	1.25		100	85-115		
Copper	1.31		mg/l	0.0050	1.25		105	85-115		
Chromium	1.29		mg/l	0.0050	1.25		103	85-115		
Cadmium	1.33		mg/l	0.0025	1.25		107	85-115		
Beryllium	1.22		mg/l	0.0020	1.25		97	85-115		
LCS Dup (7111877-BSD1)										
Prepared: 27-Nov-07 Analyzed: 04-Dec-07										
Thallium	1.25		mg/l	0.0050	1.25		100	85-115	0.4	20
Zinc	1.32		mg/l	0.0050	1.25		106	85-115	1	20
Antimony	1.25		mg/l	0.0060	1.25		100	85-115	3	20
Selenium	1.24		mg/l	0.0150	1.25		99	85-115	1	20
Nickel	1.29		mg/l	0.0050	1.25		103	85-115	0.2	20
Lead	1.26		mg/l	0.0075	1.25		101	85-115	0.3	20
Copper	1.30		mg/l	0.0050	1.25		104	85-115	0.6	20
Chromium	1.29		mg/l	0.0050	1.25		103	85-115	0.3	20
Cadmium	1.33		mg/l	0.0025	1.25		106	85-115	0.4	20
Silver	1.26		mg/l	0.0050	1.25		101	85-115	0.3	20
Arsenic	1.24		mg/l	0.0040	1.25		99	85-115	0.8	20
Beryllium	1.20		mg/l	0.0020	1.25		96	85-115	1	20
Duplicate (7111877-DUP1) Source: SA71097-01										
Prepared: 27-Nov-07 Analyzed: 04-Dec-07										
Lead	0.129		mg/l	0.0075		0.129			0.2	20
Antimony	0.0299		mg/l	0.0060		0.0296			1	20
Nickel	0.102		mg/l	0.0050		0.102			0.2	20
Zinc	0.515		mg/l	0.0050		0.510			0.9	20
Selenium	BRL		mg/l	0.0150		BRL				20
Thallium	BRL		mg/l	0.0050		BRL				20

Total Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111877 - SW846 3005A										
Duplicate (7111877-DUP1) **Source: SA71097-01**										
Prepared: 27-Nov-07 Analyzed: 04-Dec-07										
Cadmium	0.0030		mg/l	0.0025		0.0030			0	20
Silver	BRL		mg/l	0.0050		BRL				20
Arsenic	0.0082		mg/l	0.0040		0.0074			10	20
Chromium	0.110		mg/l	0.0050		0.108			2	20
Copper	0.388		mg/l	0.0050		0.386			0.6	20
Beryllium	BRL		mg/l	0.0020		BRL				20
Matrix Spike (7111877-MS1) **Source: SA71111-01**										
Prepared: 27-Nov-07 Analyzed: 04-Dec-07										
Selenium	1.24		mg/l	0.0150	1.25	BRL	99	75-125		
Antimony	1.20		mg/l	0.0060	1.25	BRL	96	75-125		
Thallium	1.23		mg/l	0.0050	1.25	BRL	98	75-125		
Nickel	1.28		mg/l	0.0050	1.25	0.0012	103	75-125		
Zinc	1.30		mg/l	0.0050	1.25	0.0148	103	75-125		
Lead	1.27		mg/l	0.0075	1.25	BRL	101	75-125		
Beryllium	1.22		mg/l	0.0020	1.25	BRL	98	75-125		
Chromium	1.27		mg/l	0.0050	1.25	BRL	102	75-125		
Arsenic	1.26		mg/l	0.0040	1.25	BRL	101	75-125		
Cadmium	1.33		mg/l	0.0025	1.25	0.0002	107	75-125		
Silver	1.27		mg/l	0.0050	1.25	BRL	101	75-125		
Copper	1.33		mg/l	0.0050	1.25	BRL	106	75-125		
Matrix Spike Dup (7111877-MSD1) **Source: SA71111-01**										
Prepared: 27-Nov-07 Analyzed: 04-Dec-07										
Nickel	1.29		mg/l	0.0050	1.25	0.0012	103	75-125	0.1	20
Zinc	1.31		mg/l	0.0050	1.25	0.0148	104	75-125	0.7	20
Lead	1.27		mg/l	0.0075	1.25	BRL	101	75-125	0.2	20
Antimony	1.29		mg/l	0.0060	1.25	BRL	103	75-125	8	20
Selenium	1.25		mg/l	0.0150	1.25	BRL	100	75-125	0.4	20
Thallium	1.23		mg/l	0.0050	1.25	BRL	99	75-125	0.4	20
Arsenic	1.26		mg/l	0.0040	1.25	BRL	101	75-125	0.2	20
Silver	1.27		mg/l	0.0050	1.25	BRL	101	75-125	0	20
Chromium	1.27		mg/l	0.0050	1.25	BRL	102	75-125	0.4	20
Cadmium	1.34		mg/l	0.0025	1.25	0.0002	107	75-125	0.1	20
Copper	1.32		mg/l	0.0050	1.25	BRL	106	75-125	0.4	20
Beryllium	1.21		mg/l	0.0020	1.25	BRL	97	75-125	0.8	20
Post Spike (7111877-PS1) **Source: SA71111-01**										
Prepared: 27-Nov-07 Analyzed: 04-Dec-07										
Selenium	1.26		mg/l	0.0150	1.25	BRL	100	80-120		
Antimony	1.20		mg/l	0.0060	1.25	BRL	96	80-120		
Lead	1.27		mg/l	0.0075	1.25	BRL	102	80-120		
Thallium	1.24		mg/l	0.0050	1.25	BRL	99	80-120		
Nickel	1.29		mg/l	0.0050	1.25	0.0012	103	80-120		
Zinc	1.34		mg/l	0.0050	1.25	0.0148	106	80-120		
Beryllium	1.22		mg/l	0.0020	1.25	BRL	98	80-120		
Cadmium	1.34		mg/l	0.0025	1.25	0.0002	107	80-120		
Silver	1.26		mg/l	0.0050	1.25	BRL	101	80-120		
Chromium	1.28		mg/l	0.0050	1.25	BRL	103	80-120		
Copper	1.34		mg/l	0.0050	1.25	BRL	107	80-120		
Arsenic	1.27		mg/l	0.0040	1.25	BRL	101	80-120		

Total Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111878 - EPA200/SW7000 Series										
Blank (7111878-BLK1)										
Prepared: 27-Nov-07 Analyzed: 28-Nov-07										
Mercury	BRL		mg/l	0.00020						
LCS (7111878-BS1)										
Prepared: 27-Nov-07 Analyzed: 28-Nov-07										
Mercury	0.00440		mg/l	0.00020	0.00500		88	85-115		
Duplicate (7111878-DUP1) **Source: SA71097-01**										
Prepared: 27-Nov-07 Analyzed: 28-Nov-07										
Mercury	0.00009	J	mg/l	0.00020		0.00009			1	20
Matrix Spike (7111878-MS1) **Source: SA71111-01**										
Prepared: 27-Nov-07 Analyzed: 28-Nov-07										
Mercury	0.00417		mg/l	0.00020	0.00500	BRL	83	75-125		
Matrix Spike Dup (7111878-MSD1) **Source: SA71111-01**										
Prepared: 27-Nov-07 Analyzed: 28-Nov-07										
Mercury	0.00425		mg/l	0.00020	0.00500	BRL	85	75-125	2	20
Post Spike (7111878-PS1) **Source: SA71111-01**										
Prepared: 27-Nov-07 Analyzed: 28-Nov-07										
Mercury	0.00447		mg/l	0.00020	0.00500	BRL	89	85-115		

Notes and Definitions

QC1	Analyte out of acceptance range.
QC2	Analyte out of acceptance range in QC spike but no reportable concentration present in sample
BRL	Below Reporting Limit - Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
NR	Not Reported
RPD	Relative Percent Difference
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).

A plus sign (+) in the Method Reference column indicates the method is not accredited by NELAC

Laboratory Control Sample (LCS): A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix

Matrix Spike: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure The method blank is used to document contamination resulting from the analytical process

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

Surrogate: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

Validated by:
Hanibal C. Tayeh, Ph.D.
Nicole Brown

SA71128 CK

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
- [x] Standard TAT - 7 to 10 business days
- [ ] Rush TAT - Date Needed: _____
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: Jacques Whitford Co., Inc.
24 Albion Rd
Suite 220
Lincoln, RE
Project Mgr.: Joe Unsworth

Invoice To: SAME

P.O. No.: _____ RQN: _____

Project No.: 1009825.04 Phase 100
Site Name: Potter Hill Mill
Location: Westerly, RI State: RI
Sampler(s): R. Snyder

1=Na_2S2O_3 (2=HCl) 3=H_2SO_4 (4=HNO_3) 5=NaOH 6=Ascorbic Acid
7=CH_3OH 8=$NaHSO_4$ 9=ICE 10=_____

DW=Drinking Water (GW=Groundwater) WW=Wastewater
O=Oil SW=Surface Water SO=Soil SL=Sludge A=Air
X1=_____ X2=_____ X3=_____

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Preservative	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analyses: VOC 8260	PP 13 METALS	PAH 8270	QA Reporting Notes: (check if needed)
SA71128-01	MW1	11-14-07	10:00	G	GW	2,4,9	3	0		1	X	X		☐ Provide MA DEP MCP CAM Report
02	MW2	11-14-07	09:45	G	GW	2,4,9	3	0		1	X	X		☐ Provide CT DPH RCP Report
03	MW3	11-14-07	11:05	G	GW	2,4,9	3	1		1	X	X	X	**QA/QC Reporting Level**
04	MW4	11-14-07	11:15	G	GW	2,4,9	3	1		1	X	X	X	☐ Standard ☐ No QC
05	MW5	11-14-07	12:40	G	GW	2,4,9	3	1		1	X	X	X	☐ Other _____
06	Trip Blank						1							State specific reporting standards:

☐ Fax results when available to (____) _____
☒ E-mail to ~~JTUNSWORTH~~ JUNSWORT@JacquesWhitford
EDD Format _____

Condition upon receipt: ☐ Iced ☐ Ambient ☑ C 5.8 Rep

Relinquished by:	Received by:	Date:	Time:
		11/15/07	1220
Bill Hastings		11/16/07	0735

Rep 32.2 F

Report Date:
26-Nov-07 14:39

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

Jacques Whitford Company, Inc.
24 Albion Rd, Suite 220
Lincoln, RI 02865
Attn: Joe Unsworth

Project: Potter Hill Mill - Westerly, RI
Project 1009825.04/100

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SA70868-01	Sed 1	Soil	08-Nov-07 00:00	09-Nov-07 15:55
SA70868-02	Sed 2	Soil	08-Nov-07 00:00	09-Nov-07 15:55
SA70868-03	Sed 3	Soil	08-Nov-07 00:00	09-Nov-07 15:55
SA70868-04	Sed 4	Soil	08-Nov-07 00:00	09-Nov-07 15:55
SA70868-05	Sed 5	Soil	08-Nov-07 00:00	09-Nov-07 15:55
SA70868-06	Sed 6	Soil	08-Nov-07 00:00	09-Nov-07 15:55
SA70868-07	Sed 7	Soil	08-Nov-07 00:00	09-Nov-07 15:55
SA70868-08	Sed 8	Soil	08-Nov-07 00:00	09-Nov-07 15:55
SA70868-09	SS-27	Soil	08-Nov-07 00:00	09-Nov-07 15:55
SA70868-10	SS-28	Soil	08-Nov-07 00:00	09-Nov-07 15:55
SA70868-11	SS-29	Soil	08-Nov-07 00:00	09-Nov-07 15:55
SA70868-12	SS-30	Soil	08-Nov-07 00:00	09-Nov-07 15:55
SA70868-13	SS-31	Soil	08-Nov-07 00:00	09-Nov-07 15:55
SA70868-14	SS-32	Soil	08-Nov-07 00:00	09-Nov-07 15:55
SA70868-15	SS-33	Soil	08-Nov-07 00:00	09-Nov-07 15:55

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.
All applicable NELAC requirements have been met
Please note that this report contains 81 pages of analytical data plus Chain of Custody document(s).
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New Jersey # MA011/MA012
New York # 11393/11840
Rhode Island # 98
USDA # S-51435
Vermont # VT-11393

ACCREDITED IN ACCORDANCE WITH nelac

Authorized by:



Hanibal C. Tayeh, Ph.D.
President/Laboratory Director

Technical Reviewer's Initial:

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Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 1 SA70868-01	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds											
	VOC Extraction	Field extracted		N/A		1	VOC Soil Extraction	12-Nov-07	12-Nov-07	7111029	DG
Volatile Organic Compounds											
Prepared by method SW846 5030 Soil (high level)											
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon	BRL		µg/kg dry	89.5	50	SW 846 8260B	15-Nov-07	16-Nov-07	7111331	adu
67-64-1	Acetone	BRL		µg/kg dry	895	50	"	"	"	"	"
107-13-1	Acrylonitrile	BRL		µg/kg dry	89.5	50	"	"	"	"	"
71-43-2	Benzene	BRL		µg/kg dry	89.5	50	"	"	"	"	"
108-86-1	Bromobenzene	BRL		µg/kg dry	89.5	50	"	"	"	"	"
74-97-5	Bromochloromethane	BRL		µg/kg dry	89.5	50	"	"	"	"	"
75-27-4	Bromodichloromethane	BRL		µg/kg dry	89.5	50	"	"	"	"	"
75-25-2	Bromoform	BRL		µg/kg dry	89.5	50	"	"	"	"	"
74-83-9	Bromomethane	BRL		µg/kg dry	179	50	"	"	"	"	"
78-93-3	2-Butanone (MEK)	BRL		µg/kg dry	895	50	"	"	"	"	"
104-51-8	n-Butylbenzene	BRL		µg/kg dry	89.5	50	"	"	"	"	"
135-98-8	sec-Butylbenzene	BRL		µg/kg dry	89.5	50	"	"	"	"	"
98-06-6	tert-Butylbenzene	BRL		µg/kg dry	89.5	50	"	"	"	"	"
75-15-0	Carbon disulfide	BRL		µg/kg dry	447	50	"	"	"	"	"
56-23-5	Carbon tetrachloride	BRL		µg/kg dry	89.5	50	"	"	"	"	"
108-90-7	Chlorobenzene	BRL		µg/kg dry	89.5	50	"	"	"	"	"
75-00-3	Chloroethane	BRL		µg/kg dry	179	50	"	"	"	"	"
67-66-3	Chloroform	BRL		µg/kg dry	89.5	50	"	"	"	"	"
74-87-3	Chloromethane	BRL		µg/kg dry	179	50	"	"	"	"	"
95-49-8	2-Chlorotoluene	BRL		µg/kg dry	89.5	50	"	"	"	"	"
106-43-4	4-Chlorotoluene	BRL		µg/kg dry	89.5	50	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/kg dry	179	50	"	"	"	"	"
124-48-1	Dibromochloromethane	BRL		µg/kg dry	89.5	50	"	"	"	"	"
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/kg dry	89.5	50	"	"	"	"	"
74-95-3	Dibromomethane	BRL		µg/kg dry	89.5	50	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg dry	89.5	50	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg dry	89.5	50	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL		µg/kg dry	89.5	50	"	"	"	"	"
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/kg dry	179	50	"	"	"	"	"
75-34-3	1,1-Dichloroethane	BRL		µg/kg dry	89.5	50	"	"	"	"	"
107-06-2	1,2-Dichloroethane	BRL		µg/kg dry	89.5	50	"	"	"	"	"
75-35-4	1,1-Dichloroethene	BRL		µg/kg dry	89.5	50	"	"	"	"	"
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	89.5	50	"	"	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL		µg/kg dry	89.5	50	"	"	"	"	"
78-87-5	1,2-Dichloropropane	BRL		µg/kg dry	89.5	50	"	"	"	"	"
142-28-9	1,3-Dichloropropane	BRL		µg/kg dry	89.5	50	"	"	"	"	"
594-20-7	2,2-Dichloropropane	BRL		µg/kg dry	89.5	50	"	"	"	"	"
563-58-6	1,1-Dichloropropene	BRL		µg/kg dry	89.5	50	"	"	"	"	"
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/kg dry	89.5	50	"	"	"	"	"
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/kg dry	89.5	50	"	"	"	"	"
100-41-4	Ethylbenzene	BRL		µg/kg dry	89.5	50	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL		µg/kg dry	89.5	50	"	"	"	"	"
591-78-6	2-Hexanone (MBK)	BRL		µg/kg dry	895	50	"	"	"	"	"
98-82-8	Isopropylbenzene	BRL		µg/kg dry	89.5	50	"	"	"	"	"
99-87-6	4-Isopropyltoluene	BRL		µg/kg dry	89.5	50	"	"	"	"	"
1634-04-4	Methyl tert-butyl ether	BRL		µg/kg dry	89.5	50	"	"	"	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/kg dry	895	50	"	"	"	"	"
75-09-2	Methylene chloride	BRL		µg/kg dry	895	50	"	"	"	"	"
91-20-3	Naphthalene	BRL		µg/kg dry	89.5	50	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 1 SA70868-01	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds											
Volatile Organic Compounds											
Prepared by method SW846 5030 Soil (high level)											
103-65-1	n-Propylbenzene	BRL		µg/kg dry	89.5	50	SW 846 8260B	15-Nov-07	16-Nov-07	7111331	adu
100-42-5	Styrene	BRL		µg/kg dry	89.5	50	"	"	"	"	"
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/kg dry	89.5	50	"	"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/kg dry	89.5	50	"	"	"	"	"
127-18-4	Tetrachloroethene	BRL		µg/kg dry	89.5	50	"	"	"	"	"
108-88-3	Toluene	BRL		µg/kg dry	89.5	50	"	"	"	"	"
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/kg dry	89.5	50	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg dry	89.5	50	"	"	"	"	"
71-55-6	1,1,1-Trichloroethane	BRL		µg/kg dry	89.5	50	"	"	"	"	"
79-00-5	1,1,2-Trichloroethane	BRL		µg/kg dry	89.5	50	"	"	"	"	"
79-01-6	Trichloroethene	BRL		µg/kg dry	89.5	50	"	"	"	"	"
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/kg dry	89.5	50	"	"	"	"	"
96-18-4	1,2,3-Trichloropropane	BRL		µg/kg dry	89.5	50	"	"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/kg dry	89.5	50	"	"	"	"	"
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/kg dry	89.5	50	"	"	"	"	"
75-01-4	Vinyl chloride	BRL		µg/kg dry	89.5	50	"	"	"	"	"
1330-20-7	m,p-Xylene	BRL		µg/kg dry	179	50	"	"	"	"	"
95-47-6	o-Xylene	BRL		µg/kg dry	89.5	50	"	"	"	"	"
109-99-9	Tetrahydrofuran	BRL		µg/kg dry	895	50	"	"	"	"	"
60-29-7	Ethyl ether	BRL		µg/kg dry	89.5	50	"	"	"	"	"
994-05-8	Tert-amyl methyl ether	BRL		µg/kg dry	89.5	50	"	"	"	"	"
637-92-3	Ethyl tert-butyl ether	BRL		µg/kg dry	89.5	50	"	"	"	"	"
108-20-3	Di-isopropyl ether	BRL		µg/kg dry	89.5	50	"	"	"	"	"
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/kg dry	895	50	"	"	"	"	"
123-91-1	1,4-Dioxane	BRL		µg/kg dry	1790	50	"	"	"	"	"
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/kg dry	447	50	"	"	"	"	"
64-17-5	Ethanol	BRL		µg/kg dry	44700	50	"	"	"	"	"
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*101*		*70-130 %*			"	"	"	"	"
2037-26-5	*Toluene-d8*	*103*		*70-130 %*			"	"	"	"	"
17060-07-0	*1,2-Dichloroethane-d4*	*108*		*70-130 %*			"	"	"	"	"
1868-53-7	*Dibromofluoromethane*	*95*		*70-130 %*			"	"	"	"	"
Semivolatile Organic Compounds by GCMS											
Semivolatile Organic Compounds by SW846 8270C											
Prepared by method SW846 3550B											
83-32-9	Acenaphthene	1,850		µg/kg dry	1210	5	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
208-96-8	Acenaphthylene	BRL		µg/kg dry	1210	5	"	"	"	"	"
62-53-3	Aniline	BRL		µg/kg dry	1210	5	"	"	"	"	"
120-12-7	Anthracene	1,620		µg/kg dry	1210	5	"	"	"	"	"
1912-24-9	Atrazine	BRL		µg/kg dry	1210	5	"	"	"	"	"
103-33-3	Azobenzene/Diphenyldiazine	BRL		µg/kg dry	1210	5	"	"	"	"	"
92-87-5	Benzidine	BRL		µg/kg dry	1210	5	"	"	"	"	"
56-55-3	Benzo (a) anthracene	4,250		µg/kg dry	1210	5	"	"	"	"	"
50-32-8	Benzo (a) pyrene	3,630		µg/kg dry	1210	5	"	"	"	"	"
205-99-2	Benzo (b) fluoranthene	3,180		µg/kg dry	1210	5	"	"	"	"	"
191-24-2	Benzo (g,h,i) perylene	1,320		µg/kg dry	1210	5	"	"	"	"	"
207-08-9	Benzo (k) fluoranthene	2,890		µg/kg dry	1210	5	"	"	"	"	"
65-85-0	Benzoic acid	BRL		µg/kg dry	1210	5	"	"	"	"	"
100-51-6	Benzyl alcohol	BRL		µg/kg dry	1210	5	"	"	"	"	"
111-91-1	Bis(2-chloroethoxy)methane	BRL		µg/kg dry	1210	5	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 1 SA70868-01	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS											
Semivolatile Organic Compounds by SW846 8270C											
Prepared by method SW846 3550B											
111-44-4	Bis(2-chloroethyl)ether	BRL		µg/kg dry	1210	5	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
108-60-1	Bis(2-chloroisopropyl)ether	BRL		µg/kg dry	1210	5	"	"	"	"	"
117-81-7	Bis(2-ethylhexyl)phthalate	BRL		µg/kg dry	1210	5	"	"	"	"	"
101-55-3	4-Bromophenyl phenyl ether	BRL		µg/kg dry	1210	5	"	"	"	"	"
85-68-7	Butyl benzyl phthalate	BRL		µg/kg dry	1210	5	"	"	"	"	"
86-74-8	Carbazole	BRL		µg/kg dry	1210	5	"	"	"	"	"
59-50-7	4-Chloro-3-methylphenol	BRL		µg/kg dry	1210	5	"	"	"	"	"
106-47-8	4-Chloroaniline	BRL		µg/kg dry	1210	5	"	"	"	"	"
91-58-7	2-Chloronaphthalene	BRL		µg/kg dry	1210	5	"	"	"	"	"
95-57-8	2-Chlorophenol	BRL		µg/kg dry	1210	5	"	"	"	"	"
7005-72-3	4-Chlorophenyl phenyl ether	BRL		µg/kg dry	1210	5	"	"	"	"	"
218-01-9	Chrysene	4,030		µg/kg dry	1210	5	"	"	"	"	"
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/kg dry	1210	5	"	"	"	"	"
132-64-9	Dibenzofuran	1,340		µg/kg dry	1210	5	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg dry	1210	5	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg dry	1210	5	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL		µg/kg dry	1210	5	"	"	"	"	"
91-94-1	3,3´-Dichlorobenzidine	BRL		µg/kg dry	1210	5	"	"	"	"	"
120-83-2	2,4-Dichlorophenol	BRL		µg/kg dry	1210	5	"	"	"	"	"
84-66-2	Diethyl phthalate	BRL		µg/kg dry	1210	5	"	"	"	"	"
131-11-3	Dimethyl phthalate	BRL		µg/kg dry	1210	5	"	"	"	"	"
105-67-9	2,4-Dimethylphenol	BRL		µg/kg dry	1210	5	"	"	"	"	"
84-74-2	Di-n-butyl phthalate	BRL		µg/kg dry	1210	5	"	"	"	"	"
534-52-1	4,6-Dinitro-2-methylphenol	BRL		µg/kg dry	1210	5	"	"	"	"	"
51-28-5	2,4-Dinitrophenol	BRL		µg/kg dry	1210	5	"	"	"	"	"
121-14-2	2,4-Dinitrotoluene	BRL		µg/kg dry	1210	5	"	"	"	"	"
606-20-2	2,6-Dinitrotoluene	BRL		µg/kg dry	1210	5	"	"	"	"	"
117-84-0	Di-n-octyl phthalate	BRL		µg/kg dry	1210	5	"	"	"	"	"
206-44-0	Fluoranthene	11,100		µg/kg dry	1210	5	"	"	"	"	"
86-73-7	Fluorene	1,610		µg/kg dry	1210	5	"	"	"	"	"
118-74-1	Hexachlorobenzene	BRL		µg/kg dry	1210	5	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL		µg/kg dry	1210	5	"	"	"	"	"
77-47-4	Hexachlorocyclopentadiene	BRL		µg/kg dry	1210	5	"	"	"	"	"
67-72-1	Hexachloroethane	BRL		µg/kg dry	1210	5	"	"	"	"	"
193-39-5	Indeno (1,2,3-cd) pyrene	1,720		µg/kg dry	1210	5	"	"	"	"	"
90-12-0	1-Methylnaphthalene	BRL		µg/kg dry	1210	5	"	"	"	"	"
78-59-1	Isophorone	BRL		µg/kg dry	1210	5	"	"	"	"	"
91-57-6	2-Methylnaphthalene	BRL		µg/kg dry	1210	5	"	"	"	"	"
95-48-7	2-Methylphenol	BRL		µg/kg dry	1210	5	"	"	"	"	"
108-39-4, 106-44-5	3,4-Methylphenol	BRL		µg/kg dry	1210	5	"	"	"	"	"
91-20-3	Naphthalene	1,400		µg/kg dry	1210	5	"	"	"	"	"
88-74-4	2-Nitroaniline	BRL		µg/kg dry	1210	5	"	"	"	"	"
99-09-2	3-Nitroaniline	BRL		µg/kg dry	1210	5	"	"	"	"	"
100-01-6	4-Nitroaniline	BRL		µg/kg dry	4840	5	"	"	"	"	"
98-95-3	Nitrobenzene	BRL		µg/kg dry	1210	5	"	"	"	"	"
88-75-5	2-Nitrophenol	BRL		µg/kg dry	1210	5	"	"	"	"	"
100-02-7	4-Nitrophenol	BRL		µg/kg dry	4840	5	"	"	"	"	"
62-75-9	N-Nitrosodimethylamine	BRL		µg/kg dry	1210	5	"	"	"	"	"
621-64-7	N-Nitrosodi-n-propylamine	BRL		µg/kg dry	1210	5	"	"	"	"	"
86-30-6	N-Nitrosodiphenylamine	BRL		µg/kg dry	1210	5	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 1 SA70868-01	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS											
Semivolatile Organic Compounds by SW846 8270C											
Prepared by method SW846 3550B											
87-86-5	Pentachlorophenol	BRL		µg/kg dry	1210	5	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
85-01-8	Phenanthrene	10,500		µg/kg dry	1210	5	"	"	"	"	"
108-95-2	Phenol	BRL		µg/kg dry	1210	5	"	"	"	"	"
129-00-0	Pyrene	8,760		µg/kg dry	1210	5	"	"	"	"	"
110-86-1	Pyridine	BRL		µg/kg dry	1210	5	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg dry	1210	5	"	"	"	"	"
95-95-4	2,4,5-Trichlorophenol	BRL		µg/kg dry	1210	5	"	"	"	"	"
88-06-2	2,4,6-Trichlorophenol	BRL		µg/kg dry	1210	5	"	"	"	"	"
82-68-8	Pentachloronitrobenzene	BRL		µg/kg dry	1210	5	"	"	"	"	"
95-94-3	1,2,4,5-Tetrachlorobenzene	BRL		µg/kg dry	1210	5	"	"	"	"	"
Surrogate recoveries:											
321-60-8	*2-Fluorobiphenyl*	*50*		*30-130 %*			"	"	"	"	"
367-12-4	*2-Fluorophenol*	*44*		*15-110 %*			"	"	"	"	"
4165-60-0	*Nitrobenzene-d5*	*42*		*30-130 %*			"	"	"	"	"
4165-62-2	*Phenol-d5*	*36*		*15-110 %*			"	"	"	"	"
1718-51-0	*Terphenyl-dl4*	*53*		*30-130 %*			"	"	"	"	"
118-79-6	*2,4,6-Tribromophenol*	*46*		*15-110 %*			"	"	"	"	"
Total Metals by EPA 6000/7000 Series Methods											
7439-97-6	Mercury	2.23		mg/kg dry	0.0395	1	SW846 7471A	20-Nov-07	21-Nov-07	7111615	CRM
Total Metals by EPA 200 Series Methods											
7440-22-4	Silver	BRL		mg/kg dry	2.11	1	EPA 200.7	16-Nov-07	20-Nov-07	7111328	SA
7440-38-2	Arsenic	8.68		mg/kg dry	2.11	1	"	"	"	"	"
7440-39-3	Barium	67.5		mg/kg dry	1.41	1	"	"	"	"	"
7440-41-7	Beryllium	0.773		mg/kg dry	0.703	1	"	"	"	"	"
7440-43-9	Cadmium	1.15		mg/kg dry	0.703	1	"	"	"	"	"
7440-47-3	Chromium	126		mg/kg dry	1.41	1	"	"	"	"	"
7440-50-8	Copper	1,410		mg/kg dry	1.41	1	"	"	"	"	"
7439-96-5	Manganese	86.6		mg/kg dry	1.41	1	"	"	"	"	"
7440-02-0	Nickel	9.72		mg/kg dry	1.41	1	"	"	"	"	"
7439-92-1	Lead	1,050		mg/kg dry	2.11	1	"	"	"	"	"
7440-36-0	Antimony	4.67		mg/kg dry	4.22	1	"	"	"	"	"
7782-49-2	Selenium	BRL		mg/kg dry	2.11	1	"	"	"	"	"
7440-28-0	Thallium	BRL		mg/kg dry	4.22	1	"	"	"	"	"
7440-62-2	Vanadium	16.7		mg/kg dry	2.11	1	"	"	"	"	"
7440-66-6	Zinc	261		mg/kg dry	1.41	1	"	"	"	"	"
General Chemistry Parameters											
	% Solids	69.2		%		1	SM2540 G Mod.	16-Nov-07	16-Nov-07	7111396	DG

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 2 SA70868-02	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds											
	VOC Extraction	Field extracted		N/A		1	VOC Soil Extraction	12-Nov-07	12-Nov-07	7111029	DG
Volatile Organic Compounds											
Prepared by method SW846 5030 Soil (high level)											
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon	BRL		µg/kg dry	84.5	50	SW 846 8260B	15-Nov-07	16-Nov-07	7111331	adu
67-64-1	Acetone	BRL		µg/kg dry	845	50	"	"	"	"	"
107-13-1	Acrylonitrile	BRL		µg/kg dry	84.5	50	"	"	"	"	"
71-43-2	Benzene	BRL		µg/kg dry	84.5	50	"	"	"	"	"
108-86-1	Bromobenzene	BRL		µg/kg dry	84.5	50	"	"	"	"	"
74-97-5	Bromochloromethane	BRL		µg/kg dry	84.5	50	"	"	"	"	"
75-27-4	Bromodichloromethane	BRL		µg/kg dry	84.5	50	"	"	"	"	"
75-25-2	Bromoform	BRL		µg/kg dry	84.5	50	"	"	"	"	"
74-83-9	Bromomethane	BRL		µg/kg dry	169	50	"	"	"	"	"
78-93-3	2-Butanone (MEK)	BRL		µg/kg dry	845	50	"	"	"	"	"
104-51-8	n-Butylbenzene	BRL		µg/kg dry	84.5	50	"	"	"	"	"
135-98-8	sec-Butylbenzene	BRL		µg/kg dry	84.5	50	"	"	"	"	"
98-06-6	tert-Butylbenzene	BRL		µg/kg dry	84.5	50	"	"	"	"	"
75-15-0	Carbon disulfide	BRL		µg/kg dry	422	50	"	"	"	"	"
56-23-5	Carbon tetrachloride	BRL		µg/kg dry	84.5	50	"	"	"	"	"
108-90-7	Chlorobenzene	BRL		µg/kg dry	84.5	50	"	"	"	"	"
75-00-3	Chloroethane	BRL		µg/kg dry	169	50	"	"	"	"	"
67-66-3	Chloroform	BRL		µg/kg dry	84.5	50	"	"	"	"	"
74-87-3	Chloromethane	BRL		µg/kg dry	169	50	"	"	"	"	"
95-49-8	2-Chlorotoluene	BRL		µg/kg dry	84.5	50	"	"	"	"	"
106-43-4	4-Chlorotoluene	BRL		µg/kg dry	84.5	50	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/kg dry	169	50	"	"	"	"	"
124-48-1	Dibromochloromethane	BRL		µg/kg dry	84.5	50	"	"	"	"	"
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/kg dry	84.5	50	"	"	"	"	"
74-95-3	Dibromomethane	BRL		µg/kg dry	84.5	50	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg dry	84.5	50	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg dry	84.5	50	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	111		µg/kg dry	84.5	50	"	"	"	"	"
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/kg dry	169	50	"	"	"	"	"
75-34-3	1,1-Dichloroethane	BRL		µg/kg dry	84.5	50	"	"	"	"	"
107-06-2	1,2-Dichloroethane	BRL		µg/kg dry	84.5	50	"	"	"	"	"
75-35-4	1,1-Dichloroethene	BRL		µg/kg dry	84.5	50	"	"	"	"	"
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	84.5	50	"	"	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL		µg/kg dry	84.5	50	"	"	"	"	"
78-87-5	1,2-Dichloropropane	BRL		µg/kg dry	84.5	50	"	"	"	"	"
142-28-9	1,3-Dichloropropane	BRL		µg/kg dry	84.5	50	"	"	"	"	"
594-20-7	2,2-Dichloropropane	BRL		µg/kg dry	84.5	50	"	"	"	"	"
563-58-6	1,1-Dichloropropene	BRL		µg/kg dry	84.5	50	"	"	"	"	"
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/kg dry	84.5	50	"	"	"	"	"
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/kg dry	84.5	50	"	"	"	"	"
100-41-4	Ethylbenzene	BRL		µg/kg dry	84.5	50	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL		µg/kg dry	84.5	50	"	"	"	"	"
591-78-6	2-Hexanone (MBK)	BRL		µg/kg dry	845	50	"	"	"	"	"
98-82-8	Isopropylbenzene	BRL		µg/kg dry	84.5	50	"	"	"	"	"
99-87-6	4-Isopropyltoluene	BRL		µg/kg dry	84.5	50	"	"	"	"	"
1634-04-4	Methyl tert-butyl ether	BRL		µg/kg dry	84.5	50	"	"	"	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/kg dry	845	50	"	"	"	"	"
75-09-2	Methylene chloride	BRL		µg/kg dry	845	50	"	"	"	"	"
91-20-3	Naphthalene	BRL		µg/kg dry	84.5	50	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 2 SA70868-02	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds											
Volatile Organic Compounds											
Prepared by method SW846 5030 Soil (high level)											
103-65-1	n-Propylbenzene	BRL		µg/kg dry	84.5	50	SW 846 8260B	15-Nov-07	16-Nov-07	7111331	adu
100-42-5	Styrene	BRL		µg/kg dry	84.5	50	"	"	"	"	"
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/kg dry	84.5	50	"	"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/kg dry	84.5	50	"	"	"	"	"
127-18-4	Tetrachloroethene	BRL		µg/kg dry	84.5	50	"	"	"	"	"
108-88-3	Toluene	BRL		µg/kg dry	84.5	50	"	"	"	"	"
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/kg dry	84.5	50	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg dry	84.5	50	"	"	"	"	"
71-55-6	1,1,1-Trichloroethane	BRL		µg/kg dry	84.5	50	"	"	"	"	"
79-00-5	1,1,2-Trichloroethane	BRL		µg/kg dry	84.5	50	"	"	"	"	"
79-01-6	Trichloroethene	BRL		µg/kg dry	84.5	50	"	"	"	"	"
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/kg dry	84.5	50	"	"	"	"	"
96-18-4	1,2,3-Trichloropropane	BRL		µg/kg dry	84.5	50	"	"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/kg dry	84.5	50	"	"	"	"	"
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/kg dry	84.5	50	"	"	"	"	"
75-01-4	Vinyl chloride	BRL		µg/kg dry	84.5	50	"	"	"	"	"
1330-20-7	m,p-Xylene	BRL		µg/kg dry	169	50	"	"	"	"	"
95-47-6	o-Xylene	BRL		µg/kg dry	84.5	50	"	"	"	"	"
109-99-9	Tetrahydrofuran	BRL		µg/kg dry	845	50	"	"	"	"	"
60-29-7	Ethyl ether	BRL		µg/kg dry	84.5	50	"	"	"	"	"
994-05-8	Tert-amyl methyl ether	BRL		µg/kg dry	84.5	50	"	"	"	"	"
637-92-3	Ethyl tert-butyl ether	BRL		µg/kg dry	84.5	50	"	"	"	"	"
108-20-3	Di-isopropyl ether	BRL		µg/kg dry	84.5	50	"	"	"	"	"
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/kg dry	845	50	"	"	"	"	"
123-91-1	1,4-Dioxane	BRL		µg/kg dry	1690	50	"	"	"	"	"
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/kg dry	422	50	"	"	"	"	"
64-17-5	Ethanol	BRL		µg/kg dry	42200	50	"	"	"	"	"
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*106*		*70-130 %*			"	"	"	"	"
2037-26-5	*Toluene-d8*	*104*		*70-130 %*			"	"	"	"	"
17060-07-0	*1,2-Dichloroethane-d4*	*111*		*70-130 %*			"	"	"	"	"
1868-53-7	*Dibromofluoromethane*	*97*		*70-130 %*			"	"	"	"	"
Semivolatile Organic Compounds by GCMS											
Semivolatile Organic Compounds by SW846 8270C											
Prepared by method SW846 3550B											
83-32-9	Acenaphthene	BRL		µg/kg dry	258	1	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
208-96-8	Acenaphthylene	BRL		µg/kg dry	258	1	"	"	"	"	"
62-53-3	Aniline	BRL		µg/kg dry	258	1	"	"	"	"	"
120-12-7	Anthracene	BRL		µg/kg dry	258	1	"	"	"	"	"
1912-24-9	Atrazine	BRL		µg/kg dry	258	1	"	"	"	"	"
103-33-3	Azobenzene/Diphenyldiazine	BRL		µg/kg dry	258	1	"	"	"	"	"
92-87-5	Benzidine	BRL		µg/kg dry	258	1	"	"	"	"	"
56-55-3	Benzo (a) anthracene	BRL		µg/kg dry	258	1	"	"	"	"	"
50-32-8	Benzo (a) pyrene	BRL		µg/kg dry	258	1	"	"	"	"	"
205-99-2	Benzo (b) fluoranthene	BRL		µg/kg dry	258	1	"	"	"	"	"
191-24-2	Benzo (g,h,i) perylene	BRL		µg/kg dry	258	1	"	"	"	"	"
207-08-9	Benzo (k) fluoranthene	BRL		µg/kg dry	258	1	"	"	"	"	"
65-85-0	Benzoic acid	BRL		µg/kg dry	258	1	"	"	"	"	"
100-51-6	Benzyl alcohol	BRL		µg/kg dry	258	1	"	"	"	"	"
111-91-1	Bis(2-chloroethoxy)methane	BRL		µg/kg dry	258	1	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 2 SA70868-02	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS											
Semivolatile Organic Compounds by SW846 8270C											
Prepared by method SW846 3550B											
111-44-4	Bis(2-chloroethyl)ether	BRL		µg/kg dry	258	1	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
108-60-1	Bis(2-chloroisopropyl)ether	BRL		µg/kg dry	258	1	"	"	"	"	"
117-81-7	Bis(2-ethylhexyl)phthalate	BRL		µg/kg dry	258	1	"	"	"	"	"
101-55-3	4-Bromophenyl phenyl ether	BRL		µg/kg dry	258	1	"	"	"	"	"
85-68-7	Butyl benzyl phthalate	BRL		µg/kg dry	258	1	"	"	"	"	"
86-74-8	Carbazole	BRL		µg/kg dry	258	1	"	"	"	"	"
59-50-7	4-Chloro-3-methylphenol	BRL		µg/kg dry	258	1	"	"	"	"	"
106-47-8	4-Chloroaniline	BRL		µg/kg dry	258	1	"	"	"	"	"
91-58-7	2-Chloronaphthalene	BRL		µg/kg dry	258	1	"	"	"	"	"
95-57-8	2-Chlorophenol	BRL		µg/kg dry	258	1	"	"	"	"	"
7005-72-3	4-Chlorophenyl phenyl ether	BRL		µg/kg dry	258	1	"	"	"	"	"
218-01-9	Chrysene	BRL		µg/kg dry	258	1	"	"	"	"	"
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/kg dry	258	1	"	"	"	"	"
132-64-9	Dibenzofuran	BRL		µg/kg dry	258	1	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg dry	258	1	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg dry	258	1	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL		µg/kg dry	258	1	"	"	"	"	"
91-94-1	3,3´-Dichlorobenzidine	BRL		µg/kg dry	258	1	"	"	"	"	"
120-83-2	2,4-Dichlorophenol	BRL		µg/kg dry	258	1	"	"	"	"	"
84-66-2	Diethyl phthalate	BRL		µg/kg dry	258	1	"	"	"	"	"
131-11-3	Dimethyl phthalate	BRL		µg/kg dry	258	1	"	"	"	"	"
105-67-9	2,4-Dimethylphenol	BRL		µg/kg dry	258	1	"	"	"	"	"
84-74-2	Di-n-butyl phthalate	BRL		µg/kg dry	258	1	"	"	"	"	"
534-52-1	4,6-Dinitro-2-methylphenol	BRL		µg/kg dry	258	1	"	"	"	"	"
51-28-5	2,4-Dinitrophenol	BRL		µg/kg dry	258	1	"	"	"	"	"
121-14-2	2,4-Dinitrotoluene	BRL		µg/kg dry	258	1	"	"	"	"	"
606-20-2	2,6-Dinitrotoluene	BRL		µg/kg dry	258	1	"	"	"	"	"
117-84-0	Di-n-octyl phthalate	BRL		µg/kg dry	258	1	"	"	"	"	"
206-44-0	Fluoranthene	BRL		µg/kg dry	258	1	"	"	"	"	"
86-73-7	Fluorene	BRL		µg/kg dry	258	1	"	"	"	"	"
118-74-1	Hexachlorobenzene	BRL		µg/kg dry	258	1	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL		µg/kg dry	258	1	"	"	"	"	"
77-47-4	Hexachlorocyclopentadiene	BRL		µg/kg dry	258	1	"	"	"	"	"
67-72-1	Hexachloroethane	BRL		µg/kg dry	258	1	"	"	"	"	"
193-39-5	Indeno (1,2,3-cd) pyrene	BRL		µg/kg dry	258	1	"	"	"	"	"
90-12-0	1-Methylnaphthalene	BRL		µg/kg dry	258	1	"	"	"	"	"
78-59-1	Isophorone	BRL		µg/kg dry	258	1	"	"	"	"	"
91-57-6	2-Methylnaphthalene	BRL		µg/kg dry	258	1	"	"	"	"	"
95-48-7	2-Methylphenol	BRL		µg/kg dry	258	1	"	"	"	"	"
108-39-4, 106-44-5	3,4-Methylphenol	BRL		µg/kg dry	258	1	"	"	"	"	"
91-20-3	Naphthalene	BRL		µg/kg dry	258	1	"	"	"	"	"
88-74-4	2-Nitroaniline	BRL		µg/kg dry	258	1	"	"	"	"	"
99-09-2	3-Nitroaniline	BRL		µg/kg dry	258	1	"	"	"	"	"
100-01-6	4-Nitroaniline	BRL		µg/kg dry	1030	1	"	"	"	"	"
98-95-3	Nitrobenzene	BRL		µg/kg dry	258	1	"	"	"	"	"
88-75-5	2-Nitrophenol	BRL		µg/kg dry	258	1	"	"	"	"	"
100-02-7	4-Nitrophenol	BRL		µg/kg dry	1030	1	"	"	"	"	"
62-75-9	N-Nitrosodimethylamine	BRL		µg/kg dry	258	1	"	"	"	"	"
621-64-7	N-Nitrosodi-n-propylamine	BRL		µg/kg dry	258	1	"	"	"	"	"
86-30-6	N-Nitrosodiphenylamine	BRL		µg/kg dry	258	1	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 2 SA70868-02	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS											
Semivolatile Organic Compounds by SW846 8270C											
Prepared by method SW846 3550B											
87-86-5	Pentachlorophenol	BRL		µg/kg dry	258	1	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
85-01-8	Phenanthrene	BRL		µg/kg dry	258	1	"	"	"	"	"
108-95-2	Phenol	BRL		µg/kg dry	258	1	"	"	"	"	"
129-00-0	Pyrene	BRL		µg/kg dry	258	1	"	"	"	"	"
110-86-1	Pyridine	BRL		µg/kg dry	258	1	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg dry	258	1	"	"	"	"	"
95-95-4	2,4,5-Trichlorophenol	BRL		µg/kg dry	258	1	"	"	"	"	"
88-06-2	2,4,6-Trichlorophenol	BRL		µg/kg dry	258	1	"	"	"	"	"
82-68-8	Pentachloronitrobenzene	BRL		µg/kg dry	258	1	"	"	"	"	"
95-94-3	1,2,4,5-Tetrachlorobenzene	BRL		µg/kg dry	258	1	"	"	"	"	"
Surrogate recoveries:											
321-60-8	*2-Fluorobiphenyl*	*48*		*30-130 %*			"	"	"	"	"
367-12-4	*2-Fluorophenol*	*47*		*15-110 %*			"	"	"	"	"
4165-60-0	*Nitrobenzene-d5*	*45*		*30-130 %*			"	"	"	"	"
4165-62-2	*Phenol-d5*	*39*		*15-110 %*			"	"	"	"	"
1718-51-0	*Terphenyl-dl4*	*49*		*30-130 %*			"	"	"	"	"
118-79-6	*2,4,6-Tribromophenol*	*51*		*15-110 %*			"	"	"	"	"
Total Metals by EPA 6000/7000 Series Methods											
7439-97-6	Mercury	3.06		mg/kg dry	0.0429	1	SW846 7471A	20-Nov-07	21-Nov-07	7111615	CRM
Total Metals by EPA 200 Series Methods											
7440-22-4	Silver	BRL		mg/kg dry	2.09	1	EPA 200.7	16-Nov-07	20-Nov-07	7111328	SA
7440-38-2	Arsenic	6.10		mg/kg dry	2.09	1	"	"	"	"	"
7440-39-3	Barium	59.8		mg/kg dry	1.39	1	"	"	"	"	"
7440-41-7	Beryllium	BRL		mg/kg dry	0.697	1	"	"	"	"	"
7440-43-9	Cadmium	BRL		mg/kg dry	0.697	1	"	"	"	"	"
7440-47-3	Chromium	78.5		mg/kg dry	1.39	1	"	"	"	"	"
7440-50-8	Copper	34.4		mg/kg dry	1.39	1	"	"	"	"	"
7439-96-5	Manganese	107		mg/kg dry	1.39	1	"	"	"	"	"
7440-02-0	Nickel	6.48		mg/kg dry	1.39	1	"	"	"	"	"
7439-92-1	Lead	28.8		mg/kg dry	2.09	1	"	"	"	"	"
7440-36-0	Antimony	BRL		mg/kg dry	4.18	1	"	"	"	"	"
7782-49-2	Selenium	BRL		mg/kg dry	2.09	1	"	"	"	"	"
7440-28-0	Thallium	BRL		mg/kg dry	4.18	1	"	"	"	"	"
7440-62-2	Vanadium	18.9		mg/kg dry	2.09	1	"	"	"	"	"
7440-66-6	Zinc	44.3		mg/kg dry	1.39	1	"	"	"	"	"
General Chemistry Parameters											
	% Solids	65.7		%		1	SM2540 G Mod.	16-Nov-07	16-Nov-07	7111396	DG

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 3 SA70868-03	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds											
	VOC Extraction	Field extracted		N/A		1	VOC Soil Extraction	12-Nov-07	12-Nov-07	7111029	DG
Volatile Organic Compounds											
Prepared by method SW846 5030 Soil (high level)											
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon	BRL		µg/kg dry	54.6	50	SW 846 8260B	15-Nov-07	16-Nov-07	7111331	adu
67-64-1	Acetone	BRL		µg/kg dry	546	50	"	"	"	"	"
107-13-1	Acrylonitrile	BRL		µg/kg dry	54.6	50	"	"	"	"	"
71-43-2	Benzene	BRL		µg/kg dry	54.6	50	"	"	"	"	"
108-86-1	Bromobenzene	BRL		µg/kg dry	54.6	50	"	"	"	"	"
74-97-5	Bromochloromethane	BRL		µg/kg dry	54.6	50	"	"	"	"	"
75-27-4	Bromodichloromethane	BRL		µg/kg dry	54.6	50	"	"	"	"	"
75-25-2	Bromoform	BRL		µg/kg dry	54.6	50	"	"	"	"	"
74-83-9	Bromomethane	BRL		µg/kg dry	109	50	"	"	"	"	"
78-93-3	2-Butanone (MEK)	BRL		µg/kg dry	546	50	"	"	"	"	"
104-51-8	n-Butylbenzene	BRL		µg/kg dry	54.6	50	"	"	"	"	"
135-98-8	sec-Butylbenzene	BRL		µg/kg dry	54.6	50	"	"	"	"	"
98-06-6	tert-Butylbenzene	BRL		µg/kg dry	54.6	50	"	"	"	"	"
75-15-0	Carbon disulfide	BRL		µg/kg dry	273	50	"	"	"	"	"
56-23-5	Carbon tetrachloride	BRL		µg/kg dry	54.6	50	"	"	"	"	"
108-90-7	Chlorobenzene	BRL		µg/kg dry	54.6	50	"	"	"	"	"
75-00-3	Chloroethane	BRL		µg/kg dry	109	50	"	"	"	"	"
67-66-3	Chloroform	BRL		µg/kg dry	54.6	50	"	"	"	"	"
74-87-3	Chloromethane	BRL		µg/kg dry	109	50	"	"	"	"	"
95-49-8	2-Chlorotoluene	BRL		µg/kg dry	54.6	50	"	"	"	"	"
106-43-4	4-Chlorotoluene	BRL		µg/kg dry	54.6	50	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/kg dry	109	50	"	"	"	"	"
124-48-1	Dibromochloromethane	BRL		µg/kg dry	54.6	50	"	"	"	"	"
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/kg dry	54.6	50	"	"	"	"	"
74-95-3	Dibromomethane	BRL		µg/kg dry	54.6	50	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg dry	54.6	50	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg dry	54.6	50	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL		µg/kg dry	54.6	50	"	"	"	"	"
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/kg dry	109	50	"	"	"	"	"
75-34-3	1,1-Dichloroethane	BRL		µg/kg dry	54.6	50	"	"	"	"	"
107-06-2	1,2-Dichloroethane	BRL		µg/kg dry	54.6	50	"	"	"	"	"
75-35-4	1,1-Dichloroethene	BRL		µg/kg dry	54.6	50	"	"	"	"	"
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	54.6	50	"	"	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL		µg/kg dry	54.6	50	"	"	"	"	"
78-87-5	1,2-Dichloropropane	BRL		µg/kg dry	54.6	50	"	"	"	"	"
142-28-9	1,3-Dichloropropane	BRL		µg/kg dry	54.6	50	"	"	"	"	"
594-20-7	2,2-Dichloropropane	BRL		µg/kg dry	54.6	50	"	"	"	"	"
563-58-6	1,1-Dichloropropene	BRL		µg/kg dry	54.6	50	"	"	"	"	"
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/kg dry	54.6	50	"	"	"	"	"
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/kg dry	54.6	50	"	"	"	"	"
100-41-4	Ethylbenzene	BRL		µg/kg dry	54.6	50	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL		µg/kg dry	54.6	50	"	"	"	"	"
591-78-6	2-Hexanone (MBK)	BRL		µg/kg dry	546	50	"	"	"	"	"
98-82-8	Isopropylbenzene	BRL		µg/kg dry	54.6	50	"	"	"	"	"
99-87-6	4-Isopropyltoluene	BRL		µg/kg dry	54.6	50	"	"	"	"	"
1634-04-4	Methyl tert-butyl ether	BRL		µg/kg dry	54.6	50	"	"	"	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/kg dry	546	50	"	"	"	"	"
75-09-2	Methylene chloride	BRL		µg/kg dry	546	50	"	"	"	"	"
91-20-3	Naphthalene	BRL		µg/kg dry	54.6	50	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 3 SA70868-03	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds											
Volatile Organic Compounds											
Prepared by method SW846 5030 Soil (high level)											
103-65-1	n-Propylbenzene	BRL		µg/kg dry	54.6	50	SW 846 8260B	15-Nov-07	16-Nov-07	7111331	adu
100-42-5	Styrene	BRL		µg/kg dry	54.6	50	"	"	"	"	"
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/kg dry	54.6	50	"	"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/kg dry	54.6	50	"	"	"	"	"
127-18-4	Tetrachloroethene	BRL		µg/kg dry	54.6	50	"	"	"	"	"
108-88-3	Toluene	BRL		µg/kg dry	54.6	50	"	"	"	"	"
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/kg dry	54.6	50	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg dry	54.6	50	"	"	"	"	"
71-55-6	1,1,1-Trichloroethane	BRL		µg/kg dry	54.6	50	"	"	"	"	"
79-00-5	1,1,2-Trichloroethane	BRL		µg/kg dry	54.6	50	"	"	"	"	"
79-01-6	Trichloroethene	BRL		µg/kg dry	54.6	50	"	"	"	"	"
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/kg dry	54.6	50	"	"	"	"	"
96-18-4	1,2,3-Trichloropropane	BRL		µg/kg dry	54.6	50	"	"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/kg dry	54.6	50	"	"	"	"	"
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/kg dry	54.6	50	"	"	"	"	"
75-01-4	Vinyl chloride	BRL		µg/kg dry	54.6	50	"	"	"	"	"
1330-20-7	m,p-Xylene	BRL		µg/kg dry	109	50	"	"	"	"	"
95-47-6	o-Xylene	BRL		µg/kg dry	54.6	50	"	"	"	"	"
109-99-9	Tetrahydrofuran	BRL		µg/kg dry	546	50	"	"	"	"	"
60-29-7	Ethyl ether	BRL		µg/kg dry	54.6	50	"	"	"	"	"
994-05-8	Tert-amyl methyl ether	BRL		µg/kg dry	54.6	50	"	"	"	"	"
637-92-3	Ethyl tert-butyl ether	BRL		µg/kg dry	54.6	50	"	"	"	"	"
108-20-3	Di-isopropyl ether	BRL		µg/kg dry	54.6	50	"	"	"	"	"
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/kg dry	546	50	"	"	"	"	"
123-91-1	1,4-Dioxane	BRL		µg/kg dry	1090	50	"	"	"	"	"
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/kg dry	273	50	"	"	"	"	"
64-17-5	Ethanol	BRL		µg/kg dry	27300	50	"	"	"	"	"
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*102*		*70-130 %*			"	"	"	"	"
2037-26-5	*Toluene-d8*	*104*		*70-130 %*			"	"	"	"	"
17060-07-0	*1,2-Dichloroethane-d4*	*112*		*70-130 %*			"	"	"	"	"
1868-53-7	*Dibromofluoromethane*	*98*		*70-130 %*			"	"	"	"	"
Semivolatile Organic Compounds by GCMS											
Semivolatile Organic Compounds by SW846 8270C											
Prepared by method SW846 3550B											
83-32-9	Acenaphthene	BRL		µg/kg dry	201	1	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
208-96-8	Acenaphthylene	BRL		µg/kg dry	201	1	"	"	"	"	"
62-53-3	Aniline	BRL		µg/kg dry	201	1	"	"	"	"	"
120-12-7	Anthracene	BRL		µg/kg dry	201	1	"	"	"	"	"
1912-24-9	Atrazine	BRL		µg/kg dry	201	1	"	"	"	"	"
103-33-3	Azobenzene/Diphenyldiazine	BRL		µg/kg dry	201	1	"	"	"	"	"
92-87-5	Benzidine	BRL		µg/kg dry	201	1	"	"	"	"	"
56-55-3	Benzo (a) anthracene	BRL		µg/kg dry	201	1	"	"	"	"	"
50-32-8	Benzo (a) pyrene	BRL		µg/kg dry	201	1	"	"	"	"	"
205-99-2	Benzo (b) fluoranthene	BRL		µg/kg dry	201	1	"	"	"	"	"
191-24-2	Benzo (g,h,i) perylene	BRL		µg/kg dry	201	1	"	"	"	"	"
207-08-9	Benzo (k) fluoranthene	BRL		µg/kg dry	201	1	"	"	"	"	"
65-85-0	Benzoic acid	BRL		µg/kg dry	201	1	"	"	"	"	"
100-51-6	Benzyl alcohol	BRL		µg/kg dry	201	1	"	"	"	"	"
111-91-1	Bis(2-chloroethoxy)methane	BRL		µg/kg dry	201	1	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 3 SA70868-03	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS											
Semivolatile Organic Compounds by SW846 8270C											
Prepared by method SW846 3550B											
111-44-4	Bis(2-chloroethyl)ether	BRL		µg/kg dry	201	1	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
108-60-1	Bis(2-chloroisopropyl)ether	BRL		µg/kg dry	201	1	"	"	"	"	"
117-81-7	Bis(2-ethylhexyl)phthalate	BRL		µg/kg dry	201	1	"	"	"	"	"
101-55-3	4-Bromophenyl phenyl ether	BRL		µg/kg dry	201	1	"	"	"	"	"
85-68-7	Butyl benzyl phthalate	BRL		µg/kg dry	201	1	"	"	"	"	"
86-74-8	Carbazole	BRL		µg/kg dry	201	1	"	"	"	"	"
59-50-7	4-Chloro-3-methylphenol	BRL		µg/kg dry	201	1	"	"	"	"	"
106-47-8	4-Chloroaniline	BRL		µg/kg dry	201	1	"	"	"	"	"
91-58-7	2-Chloronaphthalene	BRL		µg/kg dry	201	1	"	"	"	"	"
95-57-8	2-Chlorophenol	BRL		µg/kg dry	201	1	"	"	"	"	"
7005-72-3	4-Chlorophenyl phenyl ether	BRL		µg/kg dry	201	1	"	"	"	"	"
218-01-9	Chrysene	BRL		µg/kg dry	201	1	"	"	"	"	"
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/kg dry	201	1	"	"	"	"	"
132-64-9	Dibenzofuran	BRL		µg/kg dry	201	1	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg dry	201	1	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg dry	201	1	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL		µg/kg dry	201	1	"	"	"	"	"
91-94-1	3,3´-Dichlorobenzidine	BRL		µg/kg dry	201	1	"	"	"	"	"
120-83-2	2,4-Dichlorophenol	BRL		µg/kg dry	201	1	"	"	"	"	"
84-66-2	Diethyl phthalate	BRL		µg/kg dry	201	1	"	"	"	"	"
131-11-3	Dimethyl phthalate	BRL		µg/kg dry	201	1	"	"	"	"	"
105-67-9	2,4-Dimethylphenol	BRL		µg/kg dry	201	1	"	"	"	"	"
84-74-2	Di-n-butyl phthalate	BRL		µg/kg dry	201	1	"	"	"	"	"
534-52-1	4,6-Dinitro-2-methylphenol	BRL		µg/kg dry	201	1	"	"	"	"	"
51-28-5	2,4-Dinitrophenol	BRL		µg/kg dry	201	1	"	"	"	"	"
121-14-2	2,4-Dinitrotoluene	BRL		µg/kg dry	201	1	"	"	"	"	"
606-20-2	2,6-Dinitrotoluene	BRL		µg/kg dry	201	1	"	"	"	"	"
117-84-0	Di-n-octyl phthalate	BRL		µg/kg dry	201	1	"	"	"	"	"
206-44-0	Fluoranthene	BRL		µg/kg dry	201	1	"	"	"	"	"
86-73-7	Fluorene	BRL		µg/kg dry	201	1	"	"	"	"	"
118-74-1	Hexachlorobenzene	BRL		µg/kg dry	201	1	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL		µg/kg dry	201	1	"	"	"	"	"
77-47-4	Hexachlorocyclopentadiene	BRL		µg/kg dry	201	1	"	"	"	"	"
67-72-1	Hexachloroethane	BRL		µg/kg dry	201	1	"	"	"	"	"
193-39-5	Indeno (1,2,3-cd) pyrene	BRL		µg/kg dry	201	1	"	"	"	"	"
90-12-0	1-Methylnaphthalene	BRL		µg/kg dry	201	1	"	"	"	"	"
78-59-1	Isophorone	BRL		µg/kg dry	201	1	"	"	"	"	"
91-57-6	2-Methylnaphthalene	BRL		µg/kg dry	201	1	"	"	"	"	"
95-48-7	2-Methylphenol	BRL		µg/kg dry	201	1	"	"	"	"	"
108-39-4, 106-44-5	3,4-Methylphenol	BRL		µg/kg dry	201	1	"	"	"	"	"
91-20-3	Naphthalene	BRL		µg/kg dry	201	1	"	"	"	"	"
88-74-4	2-Nitroaniline	BRL		µg/kg dry	201	1	"	"	"	"	"
99-09-2	3-Nitroaniline	BRL		µg/kg dry	201	1	"	"	"	"	"
100-01-6	4-Nitroaniline	BRL		µg/kg dry	806	1	"	"	"	"	"
98-95-3	Nitrobenzene	BRL		µg/kg dry	201	1	"	"	"	"	"
88-75-5	2-Nitrophenol	BRL		µg/kg dry	201	1	"	"	"	"	"
100-02-7	4-Nitrophenol	BRL		µg/kg dry	806	1	"	"	"	"	"
62-75-9	N-Nitrosodimethylamine	BRL		µg/kg dry	201	1	"	"	"	"	"
621-64-7	N-Nitrosodi-n-propylamine	BRL		µg/kg dry	201	1	"	"	"	"	"
86-30-6	N-Nitrosodiphenylamine	BRL		µg/kg dry	201	1	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 3 SA70868-03	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS											
Semivolatile Organic Compounds by SW846 8270C											
Prepared by method SW846 3550B											
87-86-5	Pentachlorophenol	BRL		µg/kg dry	201	1	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
85-01-8	Phenanthrene	BRL		µg/kg dry	201	1	"	"	"	"	"
108-95-2	Phenol	BRL		µg/kg dry	201	1	"	"	"	"	"
129-00-0	Pyrene	BRL		µg/kg dry	201	1	"	"	"	"	"
110-86-1	Pyridine	BRL		µg/kg dry	201	1	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg dry	201	1	"	"	"	"	"
95-95-4	2,4,5-Trichlorophenol	BRL		µg/kg dry	201	1	"	"	"	"	"
88-06-2	2,4,6-Trichlorophenol	BRL		µg/kg dry	201	1	"	"	"	"	"
82-68-8	Pentachloronitrobenzene	BRL		µg/kg dry	201	1	"	"	"	"	"
95-94-3	1,2,4,5-Tetrachlorobenzene	BRL		µg/kg dry	201	1	"	"	"	"	"
Surrogate recoveries:											
321-60-8	*2-Fluorobiphenyl*	*53*		*30-130 %*			"	"	"	"	"
367-12-4	*2-Fluorophenol*	*52*		*15-110 %*			"	"	"	"	"
4165-60-0	*Nitrobenzene-d5*	*49*		*30-130 %*			"	"	"	"	"
4165-62-2	*Phenol-d5*	*44*		*15-110 %*			"	"	"	"	"
1718-51-0	*Terphenyl-dl4*	*55*		*30-130 %*			"	"	"	"	"
118-79-6	*2,4,6-Tribromophenol*	*61*		*15-110 %*			"	"	"	"	"
Total Metals by EPA 6000/7000 Series Methods											
7439-97-6	Mercury	0.166		mg/kg dry	0.0321	1	SW846 7471A	20-Nov-07	21-Nov-07	7111615	CRM
Total Metals by EPA 200 Series Methods											
7440-22-4	Silver	BRL		mg/kg dry	1.76	1	EPA 200.7	16-Nov-07	21-Nov-07	7111328	SA
7440-38-2	Arsenic	2.03		mg/kg dry	1.76	1	"	"	"	"	"
7440-39-3	Barium	9.52		mg/kg dry	1.17	1	"	"	"	"	"
7440-41-7	Beryllium	BRL		mg/kg dry	0.586	1	"	"	"	"	"
7440-43-9	Cadmium	BRL		mg/kg dry	0.586	1	"	"	"	"	"
7440-47-3	Chromium	15.6		mg/kg dry	1.17	1	"	"	"	"	"
7440-50-8	Copper	7.96		mg/kg dry	1.17	1	"	"	"	"	"
7439-96-5	Manganese	62.2		mg/kg dry	1.17	1	"	"	"	"	"
7440-02-0	Nickel	1.52		mg/kg dry	1.17	1	"	"	"	"	"
7439-92-1	Lead	17.0		mg/kg dry	1.76	1	"	"	"	"	"
7440-36-0	Antimony	BRL		mg/kg dry	3.52	1	"	"	"	"	"
7782-49-2	Selenium	BRL		mg/kg dry	1.76	1	"	"	"	"	"
7440-28-0	Thallium	BRL		mg/kg dry	3.52	1	"	"	"	"	"
7440-62-2	Vanadium	5.14		mg/kg dry	1.76	1	"	"	"	"	"
7440-66-6	Zinc	25.6		mg/kg dry	1.17	1	"	"	"	"	"
General Chemistry Parameters											
	% Solids	83.6		%		1	SM2540 G Mod.	16-Nov-07	16-Nov-07	7111396	DG

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 4 SA70868-04	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds											
	VOC Extraction	Field extracted		N/A		1	VOC Soil Extraction	12-Nov-07	12-Nov-07	7111029	DG
Volatile Organic Compounds											
Prepared by method SW846 5030 Soil (high level)											
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon	BRL		µg/kg dry	83.3	50	SW 846 8260B	15-Nov-07	16-Nov-07	7111331	adu
67-64-1	Acetone	BRL		µg/kg dry	833	50	"	"	"	"	"
107-13-1	Acrylonitrile	BRL		µg/kg dry	83.3	50	"	"	"	"	"
71-43-2	Benzene	BRL		µg/kg dry	83.3	50	"	"	"	"	"
108-86-1	Bromobenzene	BRL		µg/kg dry	83.3	50	"	"	"	"	"
74-97-5	Bromochloromethane	BRL		µg/kg dry	83.3	50	"	"	"	"	"
75-27-4	Bromodichloromethane	BRL		µg/kg dry	83.3	50	"	"	"	"	"
75-25-2	Bromoform	BRL		µg/kg dry	83.3	50	"	"	"	"	"
74-83-9	Bromomethane	BRL		µg/kg dry	167	50	"	"	"	"	"
78-93-3	2-Butanone (MEK)	BRL		µg/kg dry	833	50	"	"	"	"	"
104-51-8	n-Butylbenzene	BRL		µg/kg dry	83.3	50	"	"	"	"	"
135-98-8	sec-Butylbenzene	BRL		µg/kg dry	83.3	50	"	"	"	"	"
98-06-6	tert-Butylbenzene	BRL		µg/kg dry	83.3	50	"	"	"	"	"
75-15-0	Carbon disulfide	BRL		µg/kg dry	417	50	"	"	"	"	"
56-23-5	Carbon tetrachloride	BRL		µg/kg dry	83.3	50	"	"	"	"	"
108-90-7	Chlorobenzene	BRL		µg/kg dry	83.3	50	"	"	"	"	"
75-00-3	Chloroethane	BRL		µg/kg dry	167	50	"	"	"	"	"
67-66-3	Chloroform	BRL		µg/kg dry	83.3	50	"	"	"	"	"
74-87-3	Chloromethane	BRL		µg/kg dry	167	50	"	"	"	"	"
95-49-8	2-Chlorotoluene	BRL		µg/kg dry	83.3	50	"	"	"	"	"
106-43-4	4-Chlorotoluene	BRL		µg/kg dry	83.3	50	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/kg dry	167	50	"	"	"	"	"
124-48-1	Dibromochloromethane	BRL		µg/kg dry	83.3	50	"	"	"	"	"
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/kg dry	83.3	50	"	"	"	"	"
74-95-3	Dibromomethane	BRL		µg/kg dry	83.3	50	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg dry	83.3	50	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg dry	83.3	50	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL		µg/kg dry	83.3	50	"	"	"	"	"
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/kg dry	167	50	"	"	"	"	"
75-34-3	1,1-Dichloroethane	BRL		µg/kg dry	83.3	50	"	"	"	"	"
107-06-2	1,2-Dichloroethane	BRL		µg/kg dry	83.3	50	"	"	"	"	"
75-35-4	1,1-Dichloroethene	BRL		µg/kg dry	83.3	50	"	"	"	"	"
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	83.3	50	"	"	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL		µg/kg dry	83.3	50	"	"	"	"	"
78-87-5	1,2-Dichloropropane	BRL		µg/kg dry	83.3	50	"	"	"	"	"
142-28-9	1,3-Dichloropropane	BRL		µg/kg dry	83.3	50	"	"	"	"	"
594-20-7	2,2-Dichloropropane	BRL		µg/kg dry	83.3	50	"	"	"	"	"
563-58-6	1,1-Dichloropropene	BRL		µg/kg dry	83.3	50	"	"	"	"	"
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/kg dry	83.3	50	"	"	"	"	"
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/kg dry	83.3	50	"	"	"	"	"
100-41-4	Ethylbenzene	BRL		µg/kg dry	83.3	50	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL		µg/kg dry	83.3	50	"	"	"	"	"
591-78-6	2-Hexanone (MBK)	BRL		µg/kg dry	833	50	"	"	"	"	"
98-82-8	Isopropylbenzene	BRL		µg/kg dry	83.3	50	"	"	"	"	"
99-87-6	4-Isopropyltoluene	BRL		µg/kg dry	83.3	50	"	"	"	"	"
1634-04-4	Methyl tert-butyl ether	BRL		µg/kg dry	83.3	50	"	"	"	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/kg dry	833	50	"	"	"	"	"
75-09-2	Methylene chloride	BRL		µg/kg dry	833	50	"	"	"	"	"
91-20-3	Naphthalene	BRL		µg/kg dry	83.3	50	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 4 SA70868-04	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds											
Volatile Organic Compounds											
Prepared by method SW846 5030 Soil (high level)											
103-65-1	n-Propylbenzene	BRL		µg/kg dry	83.3	50	SW 846 8260B	15-Nov-07	16-Nov-07	7111331	adu
100-42-5	Styrene	BRL		µg/kg dry	83.3	50	"	"	"	"	"
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/kg dry	83.3	50	"	"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/kg dry	83.3	50	"	"	"	"	"
127-18-4	Tetrachloroethene	BRL		µg/kg dry	83.3	50	"	"	"	"	"
108-88-3	Toluene	BRL		µg/kg dry	83.3	50	"	"	"	"	"
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/kg dry	83.3	50	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg dry	83.3	50	"	"	"	"	"
71-55-6	1,1,1-Trichloroethane	BRL		µg/kg dry	83.3	50	"	"	"	"	"
79-00-5	1,1,2-Trichloroethane	BRL		µg/kg dry	83.3	50	"	"	"	"	"
79-01-6	Trichloroethene	BRL		µg/kg dry	83.3	50	"	"	"	"	"
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/kg dry	83.3	50	"	"	"	"	"
96-18-4	1,2,3-Trichloropropane	BRL		µg/kg dry	83.3	50	"	"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/kg dry	83.3	50	"	"	"	"	"
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/kg dry	83.3	50	"	"	"	"	"
75-01-4	Vinyl chloride	BRL		µg/kg dry	83.3	50	"	"	"	"	"
1330-20-7	m,p-Xylene	BRL		µg/kg dry	167	50	"	"	"	"	"
95-47-6	o-Xylene	BRL		µg/kg dry	83.3	50	"	"	"	"	"
109-99-9	Tetrahydrofuran	BRL		µg/kg dry	833	50	"	"	"	"	"
60-29-7	Ethyl ether	BRL		µg/kg dry	83.3	50	"	"	"	"	"
994-05-8	Tert-amyl methyl ether	BRL		µg/kg dry	83.3	50	"	"	"	"	"
637-92-3	Ethyl tert-butyl ether	BRL		µg/kg dry	83.3	50	"	"	"	"	"
108-20-3	Di-isopropyl ether	BRL		µg/kg dry	83.3	50	"	"	"	"	"
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/kg dry	833	50	"	"	"	"	"
123-91-1	1,4-Dioxane	BRL		µg/kg dry	1670	50	"	"	"	"	"
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/kg dry	417	50	"	"	"	"	"
64-17-5	Ethanol	BRL		µg/kg dry	41700	50	"	"	"	"	"
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*106*		*70-130 %*			"	"	"	"	"
2037-26-5	*Toluene-d8*	*104*		*70-130 %*			"	"	"	"	"
17060-07-0	*1,2-Dichloroethane-d4*	*116*		*70-130 %*			"	"	"	"	"
1868-53-7	*Dibromofluoromethane*	*100*		*70-130 %*			"	"	"	"	"
Semivolatile Organic Compounds by GCMS											
Semivolatile Organic Compounds by SW846 8270C											
Prepared by method SW846 3550B											
83-32-9	Acenaphthene	BRL		µg/kg dry	530	2	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
208-96-8	Acenaphthylene	BRL		µg/kg dry	530	2	"	"	"	"	"
62-53-3	Aniline	BRL		µg/kg dry	530	2	"	"	"	"	"
120-12-7	Anthracene	BRL		µg/kg dry	530	2	"	"	"	"	"
1912-24-9	Atrazine	BRL		µg/kg dry	530	2	"	"	"	"	"
103-33-3	Azobenzene/Diphenyldiazine	BRL		µg/kg dry	530	2	"	"	"	"	"
92-87-5	Benzidine	BRL		µg/kg dry	530	2	"	"	"	"	"
56-55-3	Benzo (a) anthracene	BRL		µg/kg dry	530	2	"	"	"	"	"
50-32-8	Benzo (a) pyrene	BRL		µg/kg dry	530	2	"	"	"	"	"
205-99-2	Benzo (b) fluoranthene	BRL		µg/kg dry	530	2	"	"	"	"	"
191-24-2	Benzo (g,h,i) perylene	BRL		µg/kg dry	530	2	"	"	"	"	"
207-08-9	Benzo (k) fluoranthene	BRL		µg/kg dry	530	2	"	"	"	"	"
65-85-0	Benzoic acid	BRL		µg/kg dry	530	2	"	"	"	"	"
100-51-6	Benzyl alcohol	BRL		µg/kg dry	530	2	"	"	"	"	"
111-91-1	Bis(2-chloroethoxy)methane	BRL		µg/kg dry	530	2	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 4 SA70868-04	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS											
Semivolatile Organic Compounds by SW846 8270C											
Prepared by method SW846 3550B											
111-44-4	Bis(2-chloroethyl)ether	BRL		µg/kg dry	530	2	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
108-60-1	Bis(2-chloroisopropyl)ether	BRL		µg/kg dry	530	2	"	"	"	"	"
117-81-7	Bis(2-ethylhexyl)phthalate	BRL		µg/kg dry	530	2	"	"	"	"	"
101-55-3	4-Bromophenyl phenyl ether	BRL		µg/kg dry	530	2	"	"	"	"	"
85-68-7	Butyl benzyl phthalate	BRL		µg/kg dry	530	2	"	"	"	"	"
86-74-8	Carbazole	BRL		µg/kg dry	530	2	"	"	"	"	"
59-50-7	4-Chloro-3-methylphenol	BRL		µg/kg dry	530	2	"	"	"	"	"
106-47-8	4-Chloroaniline	BRL		µg/kg dry	530	2	"	"	"	"	"
91-58-7	2-Chloronaphthalene	BRL		µg/kg dry	530	2	"	"	"	"	"
95-57-8	2-Chlorophenol	BRL		µg/kg dry	530	2	"	"	"	"	"
7005-72-3	4-Chlorophenyl phenyl ether	BRL		µg/kg dry	530	2	"	"	"	"	"
218-01-9	Chrysene	BRL		µg/kg dry	530	2	"	"	"	"	"
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/kg dry	530	2	"	"	"	"	"
132-64-9	Dibenzofuran	BRL		µg/kg dry	530	2	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg dry	530	2	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg dry	530	2	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL		µg/kg dry	530	2	"	"	"	"	"
91-94-1	3,3´-Dichlorobenzidine	BRL		µg/kg dry	530	2	"	"	"	"	"
120-83-2	2,4-Dichlorophenol	BRL		µg/kg dry	530	2	"	"	"	"	"
84-66-2	Diethyl phthalate	BRL		µg/kg dry	530	2	"	"	"	"	"
131-11-3	Dimethyl phthalate	BRL		µg/kg dry	530	2	"	"	"	"	"
105-67-9	2,4-Dimethylphenol	BRL		µg/kg dry	530	2	"	"	"	"	"
84-74-2	Di-n-butyl phthalate	BRL		µg/kg dry	530	2	"	"	"	"	"
534-52-1	4,6-Dinitro-2-methylphenol	BRL		µg/kg dry	530	2	"	"	"	"	"
51-28-5	2,4-Dinitrophenol	BRL		µg/kg dry	530	2	"	"	"	"	"
121-14-2	2,4-Dinitrotoluene	BRL		µg/kg dry	530	2	"	"	"	"	"
606-20-2	2,6-Dinitrotoluene	BRL		µg/kg dry	530	2	"	"	"	"	"
117-84-0	Di-n-octyl phthalate	BRL		µg/kg dry	530	2	"	"	"	"	"
206-44-0	Fluoranthene	BRL		µg/kg dry	530	2	"	"	"	"	"
86-73-7	Fluorene	BRL		µg/kg dry	530	2	"	"	"	"	"
118-74-1	Hexachlorobenzene	BRL		µg/kg dry	530	2	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL		µg/kg dry	530	2	"	"	"	"	"
77-47-4	Hexachlorocyclopentadiene	BRL		µg/kg dry	530	2	"	"	"	"	"
67-72-1	Hexachloroethane	BRL		µg/kg dry	530	2	"	"	"	"	"
193-39-5	Indeno (1,2,3-cd) pyrene	BRL		µg/kg dry	530	2	"	"	"	"	"
90-12-0	1-Methylnaphthalene	BRL		µg/kg dry	530	2	"	"	"	"	"
78-59-1	Isophorone	BRL		µg/kg dry	530	2	"	"	"	"	"
91-57-6	2-Methylnaphthalene	BRL		µg/kg dry	530	2	"	"	"	"	"
95-48-7	2-Methylphenol	BRL		µg/kg dry	530	2	"	"	"	"	"
108-39-4, 106-44-5	3,4-Methylphenol	BRL		µg/kg dry	530	2	"	"	"	"	"
91-20-3	Naphthalene	BRL		µg/kg dry	530	2	"	"	"	"	"
88-74-4	2-Nitroaniline	BRL		µg/kg dry	530	2	"	"	"	"	"
99-09-2	3-Nitroaniline	BRL		µg/kg dry	530	2	"	"	"	"	"
100-01-6	4-Nitroaniline	BRL		µg/kg dry	2120	2	"	"	"	"	"
98-95-3	Nitrobenzene	BRL		µg/kg dry	530	2	"	"	"	"	"
88-75-5	2-Nitrophenol	BRL		µg/kg dry	530	2	"	"	"	"	"
100-02-7	4-Nitrophenol	BRL		µg/kg dry	2120	2	"	"	"	"	"
62-75-9	N-Nitrosodimethylamine	BRL		µg/kg dry	530	2	"	"	"	"	"
621-64-7	N-Nitrosodi-n-propylamine	BRL		µg/kg dry	530	2	"	"	"	"	"
86-30-6	N-Nitrosodiphenylamine	BRL		µg/kg dry	530	2	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 4 SA70868-04	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS											
Semivolatile Organic Compounds by SW846 8270C											
Prepared by method SW846 3550B											
87-86-5	Pentachlorophenol	BRL		µg/kg dry	530	2	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
85-01-8	Phenanthrene	BRL		µg/kg dry	530	2	"	"	"	"	"
108-95-2	Phenol	BRL		µg/kg dry	530	2	"	"	"	"	"
129-00-0	Pyrene	BRL		µg/kg dry	530	2	"	"	"	"	"
110-86-1	Pyridine	BRL		µg/kg dry	530	2	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg dry	530	2	"	"	"	"	"
95-95-4	2,4,5-Trichlorophenol	BRL		µg/kg dry	530	2	"	"	"	"	"
88-06-2	2,4,6-Trichlorophenol	BRL		µg/kg dry	530	2	"	"	"	"	"
82-68-8	Pentachloronitrobenzene	BRL		µg/kg dry	530	2	"	"	"	"	"
95-94-3	1,2,4,5-Tetrachlorobenzene	BRL		µg/kg dry	530	2	"	"	"	"	"
Surrogate recoveries:											
321-60-8	*2-Fluorobiphenyl*	*51*		*30-130 %*			"	"	"	"	"
367-12-4	*2-Fluorophenol*	*37*		*15-110 %*			"	"	"	"	"
4165-60-0	*Nitrobenzene-d5*	*37*		*30-130 %*			"	"	"	"	"
4165-62-2	*Phenol-d5*	*32*		*15-110 %*			"	"	"	"	"
1718-51-0	*Terphenyl-dl4*	*47*		*30-130 %*			"	"	"	"	"
118-79-6	*2,4,6-Tribromophenol*	*45*		*15-110 %*			"	"	"	"	"
Total Metals by EPA 6000/7000 Series Methods											
7439-97-6	Mercury	3.77		mg/kg dry	0.0410	1	SW846 7471A	16-Nov-07	19-Nov-07	7111330	CRM
Total Metals by EPA 200 Series Methods											
7440-22-4	Silver	BRL		mg/kg dry	2.09	1	EPA 200.7	16-Nov-07	21-Nov-07	7111328	SA
7440-38-2	Arsenic	7.17		mg/kg dry	2.09	1	"	"	"	"	"
7440-39-3	Barium	35.1		mg/kg dry	1.39	1	"	"	"	"	"
7440-41-7	Beryllium	BRL		mg/kg dry	0.695	1	"	"	"	"	"
7440-43-9	Cadmium	BRL		mg/kg dry	0.695	1	"	"	"	"	"
7440-47-3	Chromium	139		mg/kg dry	1.39	1	"	"	"	"	"
7440-50-8	Copper	34.0		mg/kg dry	1.39	1	"	"	"	"	"
7439-96-5	Manganese	72.2		mg/kg dry	1.39	1	"	"	"	"	"
7440-02-0	Nickel	5.99		mg/kg dry	1.39	1	"	"	"	"	"
7439-92-1	Lead	75.6		mg/kg dry	2.09	1	"	"	"	"	"
7440-36-0	Antimony	BRL		mg/kg dry	4.17	1	"	"	"	"	"
7782-49-2	Selenium	BRL		mg/kg dry	2.09	1	"	"	"	"	"
7440-28-0	Thallium	BRL		mg/kg dry	4.17	1	"	"	"	"	"
7440-62-2	Vanadium	14.2		mg/kg dry	2.09	1	"	"	"	"	"
7440-66-6	Zinc	1,280		mg/kg dry	13.9	10	"	"	21-Nov-07	"	"
General Chemistry Parameters											
	% Solids	62.9		%		1	SM2540 G Mod.	16-Nov-07	16-Nov-07	7111396	DG

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 5 SA70868-05	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds											
	VOC Extraction	Field extracted		N/A		1	VOC Soil Extraction	12-Nov-07	12-Nov-07	7111029	DG
Volatile Organic Compounds											
Prepared by method SW846 5030 Soil (high level)											
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon	BRL		µg/kg dry	67.4	50	SW 846 8260B	15-Nov-07	16-Nov-07	7111331	adu
67-64-1	Acetone	BRL		µg/kg dry	674	50	"	"	"	"	"
107-13-1	Acrylonitrile	BRL		µg/kg dry	67.4	50	"	"	"	"	"
71-43-2	Benzene	BRL		µg/kg dry	67.4	50	"	"	"	"	"
108-86-1	Bromobenzene	BRL		µg/kg dry	67.4	50	"	"	"	"	"
74-97-5	Bromochloromethane	BRL		µg/kg dry	67.4	50	"	"	"	"	"
75-27-4	Bromodichloromethane	BRL		µg/kg dry	67.4	50	"	"	"	"	"
75-25-2	Bromoform	BRL		µg/kg dry	67.4	50	"	"	"	"	"
74-83-9	Bromomethane	BRL		µg/kg dry	135	50	"	"	"	"	"
78-93-3	2-Butanone (MEK)	BRL		µg/kg dry	674	50	"	"	"	"	"
104-51-8	n-Butylbenzene	BRL		µg/kg dry	67.4	50	"	"	"	"	"
135-98-8	sec-Butylbenzene	BRL		µg/kg dry	67.4	50	"	"	"	"	"
98-06-6	tert-Butylbenzene	BRL		µg/kg dry	67.4	50	"	"	"	"	"
75-15-0	Carbon disulfide	BRL		µg/kg dry	337	50	"	"	"	"	"
56-23-5	Carbon tetrachloride	BRL		µg/kg dry	67.4	50	"	"	"	"	"
108-90-7	Chlorobenzene	BRL		µg/kg dry	67.4	50	"	"	"	"	"
75-00-3	Chloroethane	BRL		µg/kg dry	135	50	"	"	"	"	"
67-66-3	Chloroform	BRL		µg/kg dry	67.4	50	"	"	"	"	"
74-87-3	Chloromethane	BRL		µg/kg dry	135	50	"	"	"	"	"
95-49-8	2-Chlorotoluene	BRL		µg/kg dry	67.4	50	"	"	"	"	"
106-43-4	4-Chlorotoluene	BRL		µg/kg dry	67.4	50	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/kg dry	135	50	"	"	"	"	"
124-48-1	Dibromochloromethane	BRL		µg/kg dry	67.4	50	"	"	"	"	"
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/kg dry	67.4	50	"	"	"	"	"
74-95-3	Dibromomethane	BRL		µg/kg dry	67.4	50	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg dry	67.4	50	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg dry	67.4	50	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL		µg/kg dry	67.4	50	"	"	"	"	"
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/kg dry	135	50	"	"	"	"	"
75-34-3	1,1-Dichloroethane	BRL		µg/kg dry	67.4	50	"	"	"	"	"
107-06-2	1,2-Dichloroethane	BRL		µg/kg dry	67.4	50	"	"	"	"	"
75-35-4	1,1-Dichloroethene	BRL		µg/kg dry	67.4	50	"	"	"	"	"
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	67.4	50	"	"	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL		µg/kg dry	67.4	50	"	"	"	"	"
78-87-5	1,2-Dichloropropane	BRL		µg/kg dry	67.4	50	"	"	"	"	"
142-28-9	1,3-Dichloropropane	BRL		µg/kg dry	67.4	50	"	"	"	"	"
594-20-7	2,2-Dichloropropane	BRL		µg/kg dry	67.4	50	"	"	"	"	"
563-58-6	1,1-Dichloropropene	BRL		µg/kg dry	67.4	50	"	"	"	"	"
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/kg dry	67.4	50	"	"	"	"	"
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/kg dry	67.4	50	"	"	"	"	"
100-41-4	Ethylbenzene	BRL		µg/kg dry	67.4	50	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL		µg/kg dry	67.4	50	"	"	"	"	"
591-78-6	2-Hexanone (MBK)	BRL		µg/kg dry	674	50	"	"	"	"	"
98-82-8	Isopropylbenzene	BRL		µg/kg dry	67.4	50	"	"	"	"	"
99-87-6	4-Isopropyltoluene	BRL		µg/kg dry	67.4	50	"	"	"	"	"
1634-04-4	Methyl tert-butyl ether	BRL		µg/kg dry	67.4	50	"	"	"	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/kg dry	674	50	"	"	"	"	"
75-09-2	Methylene chloride	BRL		µg/kg dry	674	50	"	"	"	"	"
91-20-3	Naphthalene	BRL		µg/kg dry	67.4	50	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 5 SA70868-05	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds											
Volatile Organic Compounds											
Prepared by method SW846 5030 Soil (high level)											
103-65-1	n-Propylbenzene	BRL		µg/kg dry	67.4	50	SW 846 8260B	15-Nov-07	16-Nov-07	7111331	adu
100-42-5	Styrene	BRL		µg/kg dry	67.4	50	"	"	"	"	"
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/kg dry	67.4	50	"	"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/kg dry	67.4	50	"	"	"	"	"
127-18-4	Tetrachloroethene	BRL		µg/kg dry	67.4	50	"	"	"	"	"
108-88-3	Toluene	BRL		µg/kg dry	67.4	50	"	"	"	"	"
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/kg dry	67.4	50	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg dry	67.4	50	"	"	"	"	"
71-55-6	1,1,1-Trichloroethane	BRL		µg/kg dry	67.4	50	"	"	"	"	"
79-00-5	1,1,2-Trichloroethane	BRL		µg/kg dry	67.4	50	"	"	"	"	"
79-01-6	Trichloroethene	BRL		µg/kg dry	67.4	50	"	"	"	"	"
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/kg dry	67.4	50	"	"	"	"	"
96-18-4	1,2,3-Trichloropropane	BRL		µg/kg dry	67.4	50	"	"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/kg dry	67.4	50	"	"	"	"	"
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/kg dry	67.4	50	"	"	"	"	"
75-01-4	Vinyl chloride	BRL		µg/kg dry	67.4	50	"	"	"	"	"
1330-20-7	m,p-Xylene	BRL		µg/kg dry	135	50	"	"	"	"	"
95-47-6	o-Xylene	BRL		µg/kg dry	67.4	50	"	"	"	"	"
109-99-9	Tetrahydrofuran	BRL		µg/kg dry	674	50	"	"	"	"	"
60-29-7	Ethyl ether	BRL		µg/kg dry	67.4	50	"	"	"	"	"
994-05-8	Tert-amyl methyl ether	BRL		µg/kg dry	67.4	50	"	"	"	"	"
637-92-3	Ethyl tert-butyl ether	BRL		µg/kg dry	67.4	50	"	"	"	"	"
108-20-3	Di-isopropyl ether	BRL		µg/kg dry	67.4	50	"	"	"	"	"
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/kg dry	674	50	"	"	"	"	"
123-91-1	1,4-Dioxane	BRL		µg/kg dry	1350	50	"	"	"	"	"
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/kg dry	337	50	"	"	"	"	"
64-17-5	Ethanol	BRL		µg/kg dry	33700	50	"	"	"	"	"
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*104*		*70-130 %*			"	"	"	"	"
2037-26-5	*Toluene-d8*	*102*		*70-130 %*			"	"	"	"	"
17060-07-0	*1,2-Dichloroethane-d4*	*108*		*70-130 %*			"	"	"	"	"
1868-53-7	*Dibromofluoromethane*	*95*		*70-130 %*			"	"	"	"	"
Semivolatile Organic Compounds by GCMS											
Semivolatile Organic Compounds by SW846 8270C											
Prepared by method SW846 3550B											
83-32-9	Acenaphthene	BRL		µg/kg dry	241	1	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
208-96-8	Acenaphthylene	BRL		µg/kg dry	241	1	"	"	"	"	"
62-53-3	Aniline	BRL		µg/kg dry	241	1	"	"	"	"	"
120-12-7	Anthracene	BRL		µg/kg dry	241	1	"	"	"	"	"
1912-24-9	Atrazine	BRL		µg/kg dry	241	1	"	"	"	"	"
103-33-3	Azobenzene/Diphenyldiazine	BRL		µg/kg dry	241	1	"	"	"	"	"
92-87-5	Benzidine	BRL		µg/kg dry	241	1	"	"	"	"	"
56-55-3	Benzo (a) anthracene	BRL		µg/kg dry	241	1	"	"	"	"	"
50-32-8	Benzo (a) pyrene	BRL		µg/kg dry	241	1	"	"	"	"	"
205-99-2	Benzo (b) fluoranthene	BRL		µg/kg dry	241	1	"	"	"	"	"
191-24-2	Benzo (g,h,i) perylene	BRL		µg/kg dry	241	1	"	"	"	"	"
207-08-9	Benzo (k) fluoranthene	BRL		µg/kg dry	241	1	"	"	"	"	"
65-85-0	Benzoic acid	BRL		µg/kg dry	241	1	"	"	"	"	"
100-51-6	Benzyl alcohol	BRL		µg/kg dry	241	1	"	"	"	"	"
111-91-1	Bis(2-chloroethoxy)methane	BRL		µg/kg dry	241	1	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 5 SA70868-05	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS											
Semivolatile Organic Compounds by SW846 8270C											
Prepared by method SW846 3550B											
111-44-4	Bis(2-chloroethyl)ether	BRL		µg/kg dry	241	1	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
108-60-1	Bis(2-chloroisopropyl)ether	BRL		µg/kg dry	241	1	"	"	"	"	"
117-81-7	Bis(2-ethylhexyl)phthalate	BRL		µg/kg dry	241	1	"	"	"	"	"
101-55-3	4-Bromophenyl phenyl ether	BRL		µg/kg dry	241	1	"	"	"	"	"
85-68-7	Butyl benzyl phthalate	BRL		µg/kg dry	241	1	"	"	"	"	"
86-74-8	Carbazole	BRL		µg/kg dry	241	1	"	"	"	"	"
59-50-7	4-Chloro-3-methylphenol	BRL		µg/kg dry	241	1	"	"	"	"	"
106-47-8	4-Chloroaniline	BRL		µg/kg dry	241	1	"	"	"	"	"
91-58-7	2-Chloronaphthalene	BRL		µg/kg dry	241	1	"	"	"	"	"
95-57-8	2-Chlorophenol	BRL		µg/kg dry	241	1	"	"	"	"	"
7005-72-3	4-Chlorophenyl phenyl ether	BRL		µg/kg dry	241	1	"	"	"	"	"
218-01-9	Chrysene	BRL		µg/kg dry	241	1	"	"	"	"	"
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/kg dry	241	1	"	"	"	"	"
132-64-9	Dibenzofuran	BRL		µg/kg dry	241	1	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg dry	241	1	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg dry	241	1	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL		µg/kg dry	241	1	"	"	"	"	"
91-94-1	3,3´-Dichlorobenzidine	BRL		µg/kg dry	241	1	"	"	"	"	"
120-83-2	2,4-Dichlorophenol	BRL		µg/kg dry	241	1	"	"	"	"	"
84-66-2	Diethyl phthalate	BRL		µg/kg dry	241	1	"	"	"	"	"
131-11-3	Dimethyl phthalate	BRL		µg/kg dry	241	1	"	"	"	"	"
105-67-9	2,4-Dimethylphenol	BRL		µg/kg dry	241	1	"	"	"	"	"
84-74-2	Di-n-butyl phthalate	BRL		µg/kg dry	241	1	"	"	"	"	"
534-52-1	4,6-Dinitro-2-methylphenol	BRL		µg/kg dry	241	1	"	"	"	"	"
51-28-5	2,4-Dinitrophenol	BRL		µg/kg dry	241	1	"	"	"	"	"
121-14-2	2,4-Dinitrotoluene	BRL		µg/kg dry	241	1	"	"	"	"	"
606-20-2	2,6-Dinitrotoluene	BRL		µg/kg dry	241	1	"	"	"	"	"
117-84-0	Di-n-octyl phthalate	BRL		µg/kg dry	241	1	"	"	"	"	"
206-44-0	Fluoranthene	BRL		µg/kg dry	241	1	"	"	"	"	"
86-73-7	Fluorene	BRL		µg/kg dry	241	1	"	"	"	"	"
118-74-1	Hexachlorobenzene	BRL		µg/kg dry	241	1	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL		µg/kg dry	241	1	"	"	"	"	"
77-47-4	Hexachlorocyclopentadiene	BRL		µg/kg dry	241	1	"	"	"	"	"
67-72-1	Hexachloroethane	BRL		µg/kg dry	241	1	"	"	"	"	"
193-39-5	Indeno (1,2,3-cd) pyrene	BRL		µg/kg dry	241	1	"	"	"	"	"
90-12-0	1-Methylnaphthalene	BRL		µg/kg dry	241	1	"	"	"	"	"
78-59-1	Isophorone	BRL		µg/kg dry	241	1	"	"	"	"	"
91-57-6	2-Methylnaphthalene	BRL		µg/kg dry	241	1	"	"	"	"	"
95-48-7	2-Methylphenol	BRL		µg/kg dry	241	1	"	"	"	"	"
108-39-4, 106-44-5	3,4-Methylphenol	BRL		µg/kg dry	241	1	"	"	"	"	"
91-20-3	Naphthalene	BRL		µg/kg dry	241	1	"	"	"	"	"
88-74-4	2-Nitroaniline	BRL		µg/kg dry	241	1	"	"	"	"	"
99-09-2	3-Nitroaniline	BRL		µg/kg dry	241	1	"	"	"	"	"
100-01-6	4-Nitroaniline	BRL		µg/kg dry	963	1	"	"	"	"	"
98-95-3	Nitrobenzene	BRL		µg/kg dry	241	1	"	"	"	"	"
88-75-5	2-Nitrophenol	BRL		µg/kg dry	241	1	"	"	"	"	"
100-02-7	4-Nitrophenol	BRL		µg/kg dry	963	1	"	"	"	"	"
62-75-9	N-Nitrosodimethylamine	BRL		µg/kg dry	241	1	"	"	"	"	"
621-64-7	N-Nitrosodi-n-propylamine	BRL		µg/kg dry	241	1	"	"	"	"	"
86-30-6	N-Nitrosodiphenylamine	BRL		µg/kg dry	241	1	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 5 SA70868-05	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS											
Semivolatile Organic Compounds by SW846 8270C											
Prepared by method SW846 3550B											
87-86-5	Pentachlorophenol	BRL		µg/kg dry	241	1	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
85-01-8	Phenanthrene	BRL		µg/kg dry	241	1	"	"	"	"	"
108-95-2	Phenol	BRL		µg/kg dry	241	1	"	"	"	"	"
129-00-0	Pyrene	BRL		µg/kg dry	241	1	"	"	"	"	"
110-86-1	Pyridine	BRL		µg/kg dry	241	1	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg dry	241	1	"	"	"	"	"
95-95-4	2,4,5-Trichlorophenol	BRL		µg/kg dry	241	1	"	"	"	"	"
88-06-2	2,4,6-Trichlorophenol	BRL		µg/kg dry	241	1	"	"	"	"	"
82-68-8	Pentachloronitrobenzene	BRL		µg/kg dry	241	1	"	"	"	"	"
95-94-3	1,2,4,5-Tetrachlorobenzene	BRL		µg/kg dry	241	1	"	"	"	"	"
Surrogate recoveries:											
321-60-8	*2-Fluorobiphenyl*	*46*		*30-130 %*			"	"	"	"	"
367-12-4	*2-Fluorophenol*	*51*		*15-110 %*			"	"	"	"	"
4165-60-0	*Nitrobenzene-d5*	*48*		*30-130 %*			"	"	"	"	"
4165-62-2	*Phenol-d5*	*43*		*15-110 %*			"	"	"	"	"
1718-51-0	*Terphenyl-dl4*	*56*		*30-130 %*			"	"	"	"	"
118-79-6	*2,4,6-Tribromophenol*	*58*		*15-110 %*			"	"	"	"	"
Total Metals by EPA 6000/7000 Series Methods											
7439-97-6	Mercury	0.159		mg/kg dry	0.0389	1	SW846 7471A	16-Nov-07	19-Nov-07	7111330	CRM
Total Metals by EPA 200 Series Methods											
7440-22-4	Silver	BRL		mg/kg dry	2.09	1	EPA 200.7	16-Nov-07	21-Nov-07	7111328	SA
7440-38-2	Arsenic	BRL		mg/kg dry	2.09	1	"	"	"	"	"
7440-39-3	Barium	22.9		mg/kg dry	1.39	1	"	"	"	"	"
7440-41-7	Beryllium	BRL		mg/kg dry	0.696	1	"	"	"	"	"
7440-43-9	Cadmium	BRL		mg/kg dry	0.696	1	"	"	"	"	"
7440-47-3	Chromium	134		mg/kg dry	1.39	1	"	"	"	"	"
7440-50-8	Copper	31.1		mg/kg dry	1.39	1	"	"	"	"	"
7439-96-5	Manganese	59.5		mg/kg dry	1.39	1	"	"	"	"	"
7440-02-0	Nickel	6.00		mg/kg dry	1.39	1	"	"	"	"	"
7439-92-1	Lead	35.7		mg/kg dry	2.09	1	"	"	"	"	"
7440-36-0	Antimony	BRL		mg/kg dry	4.17	1	"	"	"	"	"
7782-49-2	Selenium	BRL		mg/kg dry	2.09	1	"	"	"	"	"
7440-28-0	Thallium	BRL		mg/kg dry	4.17	1	"	"	"	"	"
7440-62-2	Vanadium	9.53		mg/kg dry	2.09	1	"	"	"	"	"
7440-66-6	Zinc	176		mg/kg dry	1.39	1	"	"	"	"	"
General Chemistry Parameters											
	% Solids	69.9		%		1	SM2540 G Mod.	16-Nov-07	16-Nov-07	7111396	DG

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 6 SA70868-06	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds											
	VOC Extraction	Field extracted		N/A		1	VOC Soil Extraction	12-Nov-07	12-Nov-07	7111029	DG
Volatile Organic Compounds											
Prepared by method SW846 5030 Soil (high level)											
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon	BRL		µg/kg dry	80.5	50	SW 846 8260B	15-Nov-07	16-Nov-07	7111331	adu
67-64-1	Acetone	BRL		µg/kg dry	805	50	"	"	"	"	"
107-13-1	Acrylonitrile	BRL		µg/kg dry	80.5	50	"	"	"	"	"
71-43-2	Benzene	BRL		µg/kg dry	80.5	50	"	"	"	"	"
108-86-1	Bromobenzene	BRL		µg/kg dry	80.5	50	"	"	"	"	"
74-97-5	Bromochloromethane	BRL		µg/kg dry	80.5	50	"	"	"	"	"
75-27-4	Bromodichloromethane	BRL		µg/kg dry	80.5	50	"	"	"	"	"
75-25-2	Bromoform	BRL		µg/kg dry	80.5	50	"	"	"	"	"
74-83-9	Bromomethane	BRL		µg/kg dry	161	50	"	"	"	"	"
78-93-3	2-Butanone (MEK)	BRL		µg/kg dry	805	50	"	"	"	"	"
104-51-8	n-Butylbenzene	BRL		µg/kg dry	80.5	50	"	"	"	"	"
135-98-8	sec-Butylbenzene	BRL		µg/kg dry	80.5	50	"	"	"	"	"
98-06-6	tert-Butylbenzene	BRL		µg/kg dry	80.5	50	"	"	"	"	"
75-15-0	Carbon disulfide	BRL		µg/kg dry	403	50	"	"	"	"	"
56-23-5	Carbon tetrachloride	BRL		µg/kg dry	80.5	50	"	"	"	"	"
108-90-7	Chlorobenzene	BRL		µg/kg dry	80.5	50	"	"	"	"	"
75-00-3	Chloroethane	BRL		µg/kg dry	161	50	"	"	"	"	"
67-66-3	Chloroform	BRL		µg/kg dry	80.5	50	"	"	"	"	"
74-87-3	Chloromethane	BRL		µg/kg dry	161	50	"	"	"	"	"
95-49-8	2-Chlorotoluene	BRL		µg/kg dry	80.5	50	"	"	"	"	"
106-43-4	4-Chlorotoluene	BRL		µg/kg dry	80.5	50	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/kg dry	161	50	"	"	"	"	"
124-48-1	Dibromochloromethane	BRL		µg/kg dry	80.5	50	"	"	"	"	"
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/kg dry	80.5	50	"	"	"	"	"
74-95-3	Dibromomethane	BRL		µg/kg dry	80.5	50	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg dry	80.5	50	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg dry	80.5	50	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL		µg/kg dry	80.5	50	"	"	"	"	"
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/kg dry	161	50	"	"	"	"	"
75-34-3	1,1-Dichloroethane	BRL		µg/kg dry	80.5	50	"	"	"	"	"
107-06-2	1,2-Dichloroethane	BRL		µg/kg dry	80.5	50	"	"	"	"	"
75-35-4	1,1-Dichloroethene	BRL		µg/kg dry	80.5	50	"	"	"	"	"
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	80.5	50	"	"	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL		µg/kg dry	80.5	50	"	"	"	"	"
78-87-5	1,2-Dichloropropane	BRL		µg/kg dry	80.5	50	"	"	"	"	"
142-28-9	1,3-Dichloropropane	BRL		µg/kg dry	80.5	50	"	"	"	"	"
594-20-7	2,2-Dichloropropane	BRL		µg/kg dry	80.5	50	"	"	"	"	"
563-58-6	1,1-Dichloropropene	BRL		µg/kg dry	80.5	50	"	"	"	"	"
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/kg dry	80.5	50	"	"	"	"	"
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/kg dry	80.5	50	"	"	"	"	"
100-41-4	Ethylbenzene	BRL		µg/kg dry	80.5	50	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL		µg/kg dry	80.5	50	"	"	"	"	"
591-78-6	2-Hexanone (MBK)	BRL		µg/kg dry	805	50	"	"	"	"	"
98-82-8	Isopropylbenzene	BRL		µg/kg dry	80.5	50	"	"	"	"	"
99-87-6	4-Isopropyltoluene	BRL		µg/kg dry	80.5	50	"	"	"	"	"
1634-04-4	Methyl tert-butyl ether	BRL		µg/kg dry	80.5	50	"	"	"	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/kg dry	805	50	"	"	"	"	"
75-09-2	Methylene chloride	BRL		µg/kg dry	805	50	"	"	"	"	"
91-20-3	Naphthalene	BRL		µg/kg dry	80.5	50	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 6 SA70868-06	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds											
Volatile Organic Compounds											
Prepared by method SW846 5030 Soil (high level)											
103-65-1	n-Propylbenzene	BRL		µg/kg dry	80.5	50	SW 846 8260B	15-Nov-07	16-Nov-07	7111331	adu
100-42-5	Styrene	BRL		µg/kg dry	80.5	50	"	"	"	"	"
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/kg dry	80.5	50	"	"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/kg dry	80.5	50	"	"	"	"	"
127-18-4	Tetrachloroethene	BRL		µg/kg dry	80.5	50	"	"	"	"	"
108-88-3	Toluene	BRL		µg/kg dry	80.5	50	"	"	"	"	"
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/kg dry	80.5	50	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg dry	80.5	50	"	"	"	"	"
71-55-6	1,1,1-Trichloroethane	BRL		µg/kg dry	80.5	50	"	"	"	"	"
79-00-5	1,1,2-Trichloroethane	BRL		µg/kg dry	80.5	50	"	"	"	"	"
79-01-6	Trichloroethene	BRL		µg/kg dry	80.5	50	"	"	"	"	"
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/kg dry	80.5	50	"	"	"	"	"
96-18-4	1,2,3-Trichloropropane	BRL		µg/kg dry	80.5	50	"	"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/kg dry	80.5	50	"	"	"	"	"
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/kg dry	80.5	50	"	"	"	"	"
75-01-4	Vinyl chloride	BRL		µg/kg dry	80.5	50	"	"	"	"	"
1330-20-7	m,p-Xylene	BRL		µg/kg dry	161	50	"	"	"	"	"
95-47-6	o-Xylene	BRL		µg/kg dry	80.5	50	"	"	"	"	"
109-99-9	Tetrahydrofuran	BRL		µg/kg dry	805	50	"	"	"	"	"
60-29-7	Ethyl ether	BRL		µg/kg dry	80.5	50	"	"	"	"	"
994-05-8	Tert-amyl methyl ether	BRL		µg/kg dry	80.5	50	"	"	"	"	"
637-92-3	Ethyl tert-butyl ether	BRL		µg/kg dry	80.5	50	"	"	"	"	"
108-20-3	Di-isopropyl ether	BRL		µg/kg dry	80.5	50	"	"	"	"	"
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/kg dry	805	50	"	"	"	"	"
123-91-1	1,4-Dioxane	BRL		µg/kg dry	1610	50	"	"	"	"	"
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/kg dry	403	50	"	"	"	"	"
64-17-5	Ethanol	BRL		µg/kg dry	40300	50	"	"	"	"	"
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*101*		*70-130 %*			"	"	"	"	"
2037-26-5	*Toluene-d8*	*104*		*70-130 %*			"	"	"	"	"
17060-07-0	*1,2-Dichloroethane-d4*	*109*		*70-130 %*			"	"	"	"	"
1868-53-7	*Dibromofluoromethane*	*97*		*70-130 %*			"	"	"	"	"
Semivolatile Organic Compounds by GCMS											
Semivolatile Organic Compounds by SW846 8270C											
Prepared by method SW846 3550B											
83-32-9	Acenaphthene	BRL		µg/kg dry	243	1	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
208-96-8	Acenaphthylene	BRL		µg/kg dry	243	1	"	"	"	"	"
62-53-3	Aniline	BRL		µg/kg dry	243	1	"	"	"	"	"
120-12-7	Anthracene	BRL		µg/kg dry	243	1	"	"	"	"	"
1912-24-9	Atrazine	BRL		µg/kg dry	243	1	"	"	"	"	"
103-33-3	Azobenzene/Diphenyldiazine	BRL		µg/kg dry	243	1	"	"	"	"	"
92-87-5	Benzidine	BRL		µg/kg dry	243	1	"	"	"	"	"
56-55-3	Benzo (a) anthracene	BRL		µg/kg dry	243	1	"	"	"	"	"
50-32-8	Benzo (a) pyrene	BRL		µg/kg dry	243	1	"	"	"	"	"
205-99-2	Benzo (b) fluoranthene	BRL		µg/kg dry	243	1	"	"	"	"	"
191-24-2	Benzo (g,h,i) perylene	BRL		µg/kg dry	243	1	"	"	"	"	"
207-08-9	Benzo (k) fluoranthene	BRL		µg/kg dry	243	1	"	"	"	"	"
65-85-0	Benzoic acid	BRL		µg/kg dry	243	1	"	"	"	"	"
100-51-6	Benzyl alcohol	BRL		µg/kg dry	243	1	"	"	"	"	"
111-91-1	Bis(2-chloroethoxy)methane	BRL		µg/kg dry	243	1	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 6 SA70868-06	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS											
Semivolatile Organic Compounds by SW846 8270C											
Prepared by method SW846 3550B											
111-44-4	Bis(2-chloroethyl)ether	BRL		µg/kg dry	243	1	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
108-60-1	Bis(2-chloroisopropyl)ether	BRL		µg/kg dry	243	1	"	"	"	"	"
117-81-7	Bis(2-ethylhexyl)phthalate	BRL		µg/kg dry	243	1	"	"	"	"	"
101-55-3	4-Bromophenyl phenyl ether	BRL		µg/kg dry	243	1	"	"	"	"	"
85-68-7	Butyl benzyl phthalate	BRL		µg/kg dry	243	1	"	"	"	"	"
86-74-8	Carbazole	BRL		µg/kg dry	243	1	"	"	"	"	"
59-50-7	4-Chloro-3-methylphenol	BRL		µg/kg dry	243	1	"	"	"	"	"
106-47-8	4-Chloroaniline	BRL		µg/kg dry	243	1	"	"	"	"	"
91-58-7	2-Chloronaphthalene	BRL		µg/kg dry	243	1	"	"	"	"	"
95-57-8	2-Chlorophenol	BRL		µg/kg dry	243	1	"	"	"	"	"
7005-72-3	4-Chlorophenyl phenyl ether	BRL		µg/kg dry	243	1	"	"	"	"	"
218-01-9	Chrysene	BRL		µg/kg dry	243	1	"	"	"	"	"
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/kg dry	243	1	"	"	"	"	"
132-64-9	Dibenzofuran	BRL		µg/kg dry	243	1	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg dry	243	1	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg dry	243	1	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL		µg/kg dry	243	1	"	"	"	"	"
91-94-1	3,3´-Dichlorobenzidine	BRL		µg/kg dry	243	1	"	"	"	"	"
120-83-2	2,4-Dichlorophenol	BRL		µg/kg dry	243	1	"	"	"	"	"
84-66-2	Diethyl phthalate	BRL		µg/kg dry	243	1	"	"	"	"	"
131-11-3	Dimethyl phthalate	BRL		µg/kg dry	243	1	"	"	"	"	"
105-67-9	2,4-Dimethylphenol	BRL		µg/kg dry	243	1	"	"	"	"	"
84-74-2	Di-n-butyl phthalate	BRL		µg/kg dry	243	1	"	"	"	"	"
534-52-1	4,6-Dinitro-2-methylphenol	BRL		µg/kg dry	243	1	"	"	"	"	"
51-28-5	2,4-Dinitrophenol	BRL		µg/kg dry	243	1	"	"	"	"	"
121-14-2	2,4-Dinitrotoluene	BRL		µg/kg dry	243	1	"	"	"	"	"
606-20-2	2,6-Dinitrotoluene	BRL		µg/kg dry	243	1	"	"	"	"	"
117-84-0	Di-n-octyl phthalate	BRL		µg/kg dry	243	1	"	"	"	"	"
206-44-0	Fluoranthene	BRL		µg/kg dry	243	1	"	"	"	"	"
86-73-7	Fluorene	BRL		µg/kg dry	243	1	"	"	"	"	"
118-74-1	Hexachlorobenzene	BRL		µg/kg dry	243	1	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL		µg/kg dry	243	1	"	"	"	"	"
77-47-4	Hexachlorocyclopentadiene	BRL		µg/kg dry	243	1	"	"	"	"	"
67-72-1	Hexachloroethane	BRL		µg/kg dry	243	1	"	"	"	"	"
193-39-5	Indeno (1,2,3-cd) pyrene	BRL		µg/kg dry	243	1	"	"	"	"	"
90-12-0	1-Methylnaphthalene	BRL		µg/kg dry	243	1	"	"	"	"	"
78-59-1	Isophorone	BRL		µg/kg dry	243	1	"	"	"	"	"
91-57-6	2-Methylnaphthalene	BRL		µg/kg dry	243	1	"	"	"	"	"
95-48-7	2-Methylphenol	BRL		µg/kg dry	243	1	"	"	"	"	"
108-39-4, 106-44-5	3,4-Methylphenol	BRL		µg/kg dry	243	1	"	"	"	"	"
91-20-3	Naphthalene	BRL		µg/kg dry	243	1	"	"	"	"	"
88-74-4	2-Nitroaniline	BRL		µg/kg dry	243	1	"	"	"	"	"
99-09-2	3-Nitroaniline	BRL		µg/kg dry	243	1	"	"	"	"	"
100-01-6	4-Nitroaniline	BRL		µg/kg dry	973	1	"	"	"	"	"
98-95-3	Nitrobenzene	BRL		µg/kg dry	243	1	"	"	"	"	"
88-75-5	2-Nitrophenol	BRL		µg/kg dry	243	1	"	"	"	"	"
100-02-7	4-Nitrophenol	BRL		µg/kg dry	973	1	"	"	"	"	"
62-75-9	N-Nitrosodimethylamine	BRL		µg/kg dry	243	1	"	"	"	"	"
621-64-7	N-Nitrosodi-n-propylamine	BRL		µg/kg dry	243	1	"	"	"	"	"
86-30-6	N-Nitrosodiphenylamine	BRL		µg/kg dry	243	1	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 6 SA70868-06	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS											
Semivolatile Organic Compounds by SW846 8270C											
Prepared by method SW846 3550B											
87-86-5	Pentachlorophenol	BRL		µg/kg dry	243	1	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
85-01-8	Phenanthrene	BRL		µg/kg dry	243	1	"	"	"	"	"
108-95-2	Phenol	BRL		µg/kg dry	243	1	"	"	"	"	"
129-00-0	Pyrene	BRL		µg/kg dry	243	1	"	"	"	"	"
110-86-1	Pyridine	BRL		µg/kg dry	243	1	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg dry	243	1	"	"	"	"	"
95-95-4	2,4,5-Trichlorophenol	BRL		µg/kg dry	243	1	"	"	"	"	"
88-06-2	2,4,6-Trichlorophenol	BRL		µg/kg dry	243	1	"	"	"	"	"
82-68-8	Pentachloronitrobenzene	BRL		µg/kg dry	243	1	"	"	"	"	"
95-94-3	1,2,4,5-Tetrachlorobenzene	BRL		µg/kg dry	243	1	"	"	"	"	"
Surrogate recoveries:											
321-60-8	*2-Fluorobiphenyl*	*63*		*30-130 %*			"	"	"	"	"
367-12-4	*2-Fluorophenol*	*59*		*15-110 %*			"	"	"	"	"
4165-60-0	*Nitrobenzene-d5*	*55*		*30-130 %*			"	"	"	"	"
4165-62-2	*Phenol-d5*	*53*		*15-110 %*			"	"	"	"	"
1718-51-0	*Terphenyl-dl4*	*60*		*30-130 %*			"	"	"	"	"
118-79-6	*2,4,6-Tribromophenol*	*70*		*15-110 %*			"	"	"	"	"
Total Metals by EPA 6000/7000 Series Methods											
7439-97-6	Mercury	0.401		mg/kg dry	0.0378	1	SW846 7471A	16-Nov-07	19-Nov-07	7111330	CRM
Total Metals by EPA 200 Series Methods											
7440-22-4	Silver	BRL		mg/kg dry	1.92	1	EPA 200.7	16-Nov-07	21-Nov-07	7111328	SA
7440-38-2	Arsenic	BRL		mg/kg dry	1.92	1	"	"	"	"	"
7440-39-3	Barium	20.6		mg/kg dry	1.28	1	"	"	"	"	"
7440-41-7	Beryllium	BRL		mg/kg dry	0.639	1	"	"	"	"	"
7440-43-9	Cadmium	BRL		mg/kg dry	0.639	1	"	"	"	"	"
7440-47-3	Chromium	73.0		mg/kg dry	1.28	1	"	"	"	"	"
7440-50-8	Copper	47.5		mg/kg dry	1.28	1	"	"	"	"	"
7439-96-5	Manganese	74.0		mg/kg dry	1.28	1	"	"	"	"	"
7440-02-0	Nickel	2.94		mg/kg dry	1.28	1	"	"	"	"	"
7439-92-1	Lead	62.7		mg/kg dry	1.92	1	"	"	"	"	"
7440-36-0	Antimony	BRL		mg/kg dry	3.84	1	"	"	"	"	"
7782-49-2	Selenium	BRL		mg/kg dry	1.92	1	"	"	"	"	"
7440-28-0	Thallium	BRL		mg/kg dry	3.84	1	"	"	"	"	"
7440-62-2	Vanadium	8.04		mg/kg dry	1.92	1	"	"	"	"	"
7440-66-6	Zinc	70.7		mg/kg dry	1.28	1	"	"	"	"	"
General Chemistry Parameters											
	% Solids	70.1		%		1	SM2540 G Mod.	16-Nov-07	16-Nov-07	7111396	DG

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 7 SA70868-07	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds											
	VOC Extraction	Field extracted		N/A		1	VOC Soil Extraction	12-Nov-07	12-Nov-07	7111029	DG
Volatile Organic Compounds											
Prepared by method SW846 5030 Soil (high level)											
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon	BRL		µg/kg dry	87.8	50	SW 846 8260B	15-Nov-07	16-Nov-07	7111331	adu
67-64-1	Acetone	BRL		µg/kg dry	878	50	"	"	"	"	"
107-13-1	Acrylonitrile	BRL		µg/kg dry	87.8	50	"	"	"	"	"
71-43-2	Benzene	BRL		µg/kg dry	87.8	50	"	"	"	"	"
108-86-1	Bromobenzene	BRL		µg/kg dry	87.8	50	"	"	"	"	"
74-97-5	Bromochloromethane	BRL		µg/kg dry	87.8	50	"	"	"	"	"
75-27-4	Bromodichloromethane	BRL		µg/kg dry	87.8	50	"	"	"	"	"
75-25-2	Bromoform	BRL		µg/kg dry	87.8	50	"	"	"	"	"
74-83-9	Bromomethane	BRL		µg/kg dry	176	50	"	"	"	"	"
78-93-3	2-Butanone (MEK)	BRL		µg/kg dry	878	50	"	"	"	"	"
104-51-8	n-Butylbenzene	BRL		µg/kg dry	87.8	50	"	"	"	"	"
135-98-8	sec-Butylbenzene	BRL		µg/kg dry	87.8	50	"	"	"	"	"
98-06-6	tert-Butylbenzene	BRL		µg/kg dry	87.8	50	"	"	"	"	"
75-15-0	Carbon disulfide	BRL		µg/kg dry	439	50	"	"	"	"	"
56-23-5	Carbon tetrachloride	BRL		µg/kg dry	87.8	50	"	"	"	"	"
108-90-7	Chlorobenzene	BRL		µg/kg dry	87.8	50	"	"	"	"	"
75-00-3	Chloroethane	BRL		µg/kg dry	176	50	"	"	"	"	"
67-66-3	Chloroform	BRL		µg/kg dry	87.8	50	"	"	"	"	"
74-87-3	Chloromethane	BRL		µg/kg dry	176	50	"	"	"	"	"
95-49-8	2-Chlorotoluene	BRL		µg/kg dry	87.8	50	"	"	"	"	"
106-43-4	4-Chlorotoluene	BRL		µg/kg dry	87.8	50	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/kg dry	176	50	"	"	"	"	"
124-48-1	Dibromochloromethane	BRL		µg/kg dry	87.8	50	"	"	"	"	"
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/kg dry	87.8	50	"	"	"	"	"
74-95-3	Dibromomethane	BRL		µg/kg dry	87.8	50	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg dry	87.8	50	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg dry	87.8	50	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL		µg/kg dry	87.8	50	"	"	"	"	"
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/kg dry	176	50	"	"	"	"	"
75-34-3	1,1-Dichloroethane	BRL		µg/kg dry	87.8	50	"	"	"	"	"
107-06-2	1,2-Dichloroethane	BRL		µg/kg dry	87.8	50	"	"	"	"	"
75-35-4	1,1-Dichloroethene	BRL		µg/kg dry	87.8	50	"	"	"	"	"
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	87.8	50	"	"	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL		µg/kg dry	87.8	50	"	"	"	"	"
78-87-5	1,2-Dichloropropane	BRL		µg/kg dry	87.8	50	"	"	"	"	"
142-28-9	1,3-Dichloropropane	BRL		µg/kg dry	87.8	50	"	"	"	"	"
594-20-7	2,2-Dichloropropane	BRL		µg/kg dry	87.8	50	"	"	"	"	"
563-58-6	1,1-Dichloropropene	BRL		µg/kg dry	87.8	50	"	"	"	"	"
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/kg dry	87.8	50	"	"	"	"	"
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/kg dry	87.8	50	"	"	"	"	"
100-41-4	Ethylbenzene	BRL		µg/kg dry	87.8	50	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL		µg/kg dry	87.8	50	"	"	"	"	"
591-78-6	2-Hexanone (MBK)	BRL		µg/kg dry	878	50	"	"	"	"	"
98-82-8	Isopropylbenzene	BRL		µg/kg dry	87.8	50	"	"	"	"	"
99-87-6	4-Isopropyltoluene	BRL		µg/kg dry	87.8	50	"	"	"	"	"
1634-04-4	Methyl tert-butyl ether	BRL		µg/kg dry	87.8	50	"	"	"	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/kg dry	878	50	"	"	"	"	"
75-09-2	Methylene chloride	BRL		µg/kg dry	878	50	"	"	"	"	"
91-20-3	Naphthalene	BRL		µg/kg dry	87.8	50	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 7 SA70868-07	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds											
Volatile Organic Compounds											
Prepared by method SW846 5030 Soil (high level)											
103-65-1	n-Propylbenzene	BRL		µg/kg dry	87.8	50	SW 846 8260B	15-Nov-07	16-Nov-07	7111331	adu
100-42-5	Styrene	BRL		µg/kg dry	87.8	50	"	"	"	"	"
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/kg dry	87.8	50	"	"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/kg dry	87.8	50	"	"	"	"	"
127-18-4	Tetrachloroethene	BRL		µg/kg dry	87.8	50	"	"	"	"	"
108-88-3	Toluene	BRL		µg/kg dry	87.8	50	"	"	"	"	"
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/kg dry	87.8	50	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg dry	87.8	50	"	"	"	"	"
71-55-6	1,1,1-Trichloroethane	BRL		µg/kg dry	87.8	50	"	"	"	"	"
79-00-5	1,1,2-Trichloroethane	BRL		µg/kg dry	87.8	50	"	"	"	"	"
79-01-6	Trichloroethene	BRL		µg/kg dry	87.8	50	"	"	"	"	"
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/kg dry	87.8	50	"	"	"	"	"
96-18-4	1,2,3-Trichloropropane	BRL		µg/kg dry	87.8	50	"	"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/kg dry	87.8	50	"	"	"	"	"
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/kg dry	87.8	50	"	"	"	"	"
75-01-4	Vinyl chloride	BRL		µg/kg dry	87.8	50	"	"	"	"	"
1330-20-7	m,p-Xylene	BRL		µg/kg dry	176	50	"	"	"	"	"
95-47-6	o-Xylene	BRL		µg/kg dry	87.8	50	"	"	"	"	"
109-99-9	Tetrahydrofuran	BRL		µg/kg dry	878	50	"	"	"	"	"
60-29-7	Ethyl ether	BRL		µg/kg dry	87.8	50	"	"	"	"	"
994-05-8	Tert-amyl methyl ether	BRL		µg/kg dry	87.8	50	"	"	"	"	"
637-92-3	Ethyl tert-butyl ether	BRL		µg/kg dry	87.8	50	"	"	"	"	"
108-20-3	Di-isopropyl ether	BRL		µg/kg dry	87.8	50	"	"	"	"	"
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/kg dry	878	50	"	"	"	"	"
123-91-1	1,4-Dioxane	BRL		µg/kg dry	1760	50	"	"	"	"	"
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/kg dry	439	50	"	"	"	"	"
64-17-5	Ethanol	BRL		µg/kg dry	43900	50	"	"	"	"	"
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*104*		*70-130 %*			"	"	"	"	"
2037-26-5	*Toluene-d8*	*106*		*70-130 %*			"	"	"	"	"
17060-07-0	*1,2-Dichloroethane-d4*	*117*		*70-130 %*			"	"	"	"	"
1868-53-7	*Dibromofluoromethane*	*99*		*70-130 %*			"	"	"	"	"
Semivolatile Organic Compounds by GCMS											
Semivolatile Organic Compounds by SW846 8270C											
Prepared by method SW846 3550B											
83-32-9	Acenaphthene	BRL		µg/kg dry	250	1	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
208-96-8	Acenaphthylene	BRL		µg/kg dry	250	1	"	"	"	"	"
62-53-3	Aniline	BRL		µg/kg dry	250	1	"	"	"	"	"
120-12-7	Anthracene	BRL		µg/kg dry	250	1	"	"	"	"	"
1912-24-9	Atrazine	BRL		µg/kg dry	250	1	"	"	"	"	"
103-33-3	Azobenzene/Diphenyldiazine	BRL		µg/kg dry	250	1	"	"	"	"	"
92-87-5	Benzidine	BRL		µg/kg dry	250	1	"	"	"	"	"
56-55-3	Benzo (a) anthracene	BRL		µg/kg dry	250	1	"	"	"	"	"
50-32-8	Benzo (a) pyrene	BRL		µg/kg dry	250	1	"	"	"	"	"
205-99-2	Benzo (b) fluoranthene	BRL		µg/kg dry	250	1	"	"	"	"	"
191-24-2	Benzo (g,h,i) perylene	BRL		µg/kg dry	250	1	"	"	"	"	"
207-08-9	Benzo (k) fluoranthene	BRL		µg/kg dry	250	1	"	"	"	"	"
65-85-0	Benzoic acid	BRL		µg/kg dry	250	1	"	"	"	"	"
100-51-6	Benzyl alcohol	BRL		µg/kg dry	250	1	"	"	"	"	"
111-91-1	Bis(2-chloroethoxy)methane	BRL		µg/kg dry	250	1	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 7 SA70868-07	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS											
Semivolatile Organic Compounds by SW846 8270C											
Prepared by method SW846 3550B											
111-44-4	Bis(2-chloroethyl)ether	BRL		µg/kg dry	250	1	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
108-60-1	Bis(2-chloroisopropyl)ether	BRL		µg/kg dry	250	1	"	"	"	"	"
117-81-7	Bis(2-ethylhexyl)phthalate	BRL		µg/kg dry	250	1	"	"	"	"	"
101-55-3	4-Bromophenyl phenyl ether	BRL		µg/kg dry	250	1	"	"	"	"	"
85-68-7	Butyl benzyl phthalate	BRL		µg/kg dry	250	1	"	"	"	"	"
86-74-8	Carbazole	BRL		µg/kg dry	250	1	"	"	"	"	"
59-50-7	4-Chloro-3-methylphenol	BRL		µg/kg dry	250	1	"	"	"	"	"
106-47-8	4-Chloroaniline	BRL		µg/kg dry	250	1	"	"	"	"	"
91-58-7	2-Chloronaphthalene	BRL		µg/kg dry	250	1	"	"	"	"	"
95-57-8	2-Chlorophenol	BRL		µg/kg dry	250	1	"	"	"	"	"
7005-72-3	4-Chlorophenyl phenyl ether	BRL		µg/kg dry	250	1	"	"	"	"	"
218-01-9	Chrysene	BRL		µg/kg dry	250	1	"	"	"	"	"
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/kg dry	250	1	"	"	"	"	"
132-64-9	Dibenzofuran	BRL		µg/kg dry	250	1	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg dry	250	1	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg dry	250	1	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL		µg/kg dry	250	1	"	"	"	"	"
91-94-1	3,3´-Dichlorobenzidine	BRL		µg/kg dry	250	1	"	"	"	"	"
120-83-2	2,4-Dichlorophenol	BRL		µg/kg dry	250	1	"	"	"	"	"
84-66-2	Diethyl phthalate	BRL		µg/kg dry	250	1	"	"	"	"	"
131-11-3	Dimethyl phthalate	BRL		µg/kg dry	250	1	"	"	"	"	"
105-67-9	2,4-Dimethylphenol	BRL		µg/kg dry	250	1	"	"	"	"	"
84-74-2	Di-n-butyl phthalate	BRL		µg/kg dry	250	1	"	"	"	"	"
534-52-1	4,6-Dinitro-2-methylphenol	BRL		µg/kg dry	250	1	"	"	"	"	"
51-28-5	2,4-Dinitrophenol	BRL		µg/kg dry	250	1	"	"	"	"	"
121-14-2	2,4-Dinitrotoluene	BRL		µg/kg dry	250	1	"	"	"	"	"
606-20-2	2,6-Dinitrotoluene	BRL		µg/kg dry	250	1	"	"	"	"	"
117-84-0	Di-n-octyl phthalate	BRL		µg/kg dry	250	1	"	"	"	"	"
206-44-0	Fluoranthene	392		µg/kg dry	250	1	"	"	"	"	"
86-73-7	Fluorene	BRL		µg/kg dry	250	1	"	"	"	"	"
118-74-1	Hexachlorobenzene	BRL		µg/kg dry	250	1	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL		µg/kg dry	250	1	"	"	"	"	"
77-47-4	Hexachlorocyclopentadiene	BRL		µg/kg dry	250	1	"	"	"	"	"
67-72-1	Hexachloroethane	BRL		µg/kg dry	250	1	"	"	"	"	"
193-39-5	Indeno (1,2,3-cd) pyrene	BRL		µg/kg dry	250	1	"	"	"	"	"
90-12-0	1-Methylnaphthalene	BRL		µg/kg dry	250	1	"	"	"	"	"
78-59-1	Isophorone	BRL		µg/kg dry	250	1	"	"	"	"	"
91-57-6	2-Methylnaphthalene	BRL		µg/kg dry	250	1	"	"	"	"	"
95-48-7	2-Methylphenol	BRL		µg/kg dry	250	1	"	"	"	"	"
108-39-4, 106-44-5	3,4-Methylphenol	BRL		µg/kg dry	250	1	"	"	"	"	"
91-20-3	Naphthalene	BRL		µg/kg dry	250	1	"	"	"	"	"
88-74-4	2-Nitroaniline	BRL		µg/kg dry	250	1	"	"	"	"	"
99-09-2	3-Nitroaniline	BRL		µg/kg dry	250	1	"	"	"	"	"
100-01-6	4-Nitroaniline	BRL		µg/kg dry	1000	1	"	"	"	"	"
98-95-3	Nitrobenzene	BRL		µg/kg dry	250	1	"	"	"	"	"
88-75-5	2-Nitrophenol	BRL		µg/kg dry	250	1	"	"	"	"	"
100-02-7	4-Nitrophenol	BRL		µg/kg dry	1000	1	"	"	"	"	"
62-75-9	N-Nitrosodimethylamine	BRL		µg/kg dry	250	1	"	"	"	"	"
621-64-7	N-Nitrosodi-n-propylamine	BRL		µg/kg dry	250	1	"	"	"	"	"
86-30-6	N-Nitrosodiphenylamine	BRL		µg/kg dry	250	1	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 7 SA70868-07	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS											
Semivolatile Organic Compounds by SW846 8270C											
Prepared by method SW846 3550B											
87-86-5	Pentachlorophenol	BRL		µg/kg dry	250	1	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
85-01-8	Phenanthrene	BRL		µg/kg dry	250	1	"	"	"	"	"
108-95-2	Phenol	BRL		µg/kg dry	250	1	"	"	"	"	"
129-00-0	Pyrene	273		µg/kg dry	250	1	"	"	"	"	"
110-86-1	Pyridine	BRL		µg/kg dry	250	1	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg dry	250	1	"	"	"	"	"
95-95-4	2,4,5-Trichlorophenol	BRL		µg/kg dry	250	1	"	"	"	"	"
88-06-2	2,4,6-Trichlorophenol	BRL		µg/kg dry	250	1	"	"	"	"	"
82-68-8	Pentachloronitrobenzene	BRL		µg/kg dry	250	1	"	"	"	"	"
95-94-3	1,2,4,5-Tetrachlorobenzene	BRL		µg/kg dry	250	1	"	"	"	"	"
Surrogate recoveries:											
321-60-8	*2-Fluorobiphenyl*	*51*		*30-130 %*			"	"	"	"	"
367-12-4	*2-Fluorophenol*	*49*		*15-110 %*			"	"	"	"	"
4165-60-0	*Nitrobenzene-d5*	*47*		*30-130 %*			"	"	"	"	"
4165-62-2	*Phenol-d5*	*33*		*15-110 %*			"	"	"	"	"
1718-51-0	*Terphenyl-dl4*	*52*		*30-130 %*			"	"	"	"	"
118-79-6	*2,4,6-Tribromophenol*	*52*		*15-110 %*			"	"	"	"	"
Total Metals by EPA 6000/7000 Series Methods											
7439-97-6	Mercury	0.215		mg/kg dry	0.0391	1	SW846 7471A	16-Nov-07	19-Nov-07	7111330	CRM
Total Metals by EPA 200 Series Methods											
7440-22-4	Silver	BRL		mg/kg dry	2.03	1	EPA 200.7	16-Nov-07	21-Nov-07	7111328	SA
7440-38-2	Arsenic	4.87		mg/kg dry	2.03	1	"	"	"	"	"
7440-39-3	Barium	48.4		mg/kg dry	1.35	1	"	"	"	"	"
7440-41-7	Beryllium	BRL		mg/kg dry	0.677	1	"	"	"	"	"
7440-43-9	Cadmium	BRL		mg/kg dry	0.677	1	"	"	"	"	"
7440-47-3	Chromium	48.8		mg/kg dry	1.35	1	"	"	"	"	"
7440-50-8	Copper	141		mg/kg dry	1.35	1	"	"	"	"	"
7439-96-5	Manganese	91.9		mg/kg dry	1.35	1	"	"	"	"	"
7440-02-0	Nickel	3.54		mg/kg dry	1.35	1	"	"	"	"	"
7439-92-1	Lead	101		mg/kg dry	2.03	1	"	"	"	"	"
7440-36-0	Antimony	BRL		mg/kg dry	4.06	1	"	"	"	"	"
7782-49-2	Selenium	BRL		mg/kg dry	2.03	1	"	"	"	"	"
7440-28-0	Thallium	BRL		mg/kg dry	4.06	1	"	"	"	"	"
7440-62-2	Vanadium	7.20		mg/kg dry	2.03	1	"	"	"	"	"
7440-66-6	Zinc	70.0		mg/kg dry	1.35	1	"	"	"	"	"
General Chemistry Parameters											
	% Solids	67.2		%		1	SM2540 G Mod.	16-Nov-07	16-Nov-07	7111396	DG

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 8 SA70868-08	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds											
	VOC Extraction	Field extracted		N/A		1	VOC Soil Extraction	12-Nov-07	12-Nov-07	7111029	DG
Volatile Organic Compounds											
Prepared by method SW846 5030 Soil (high level)											
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon	BRL		µg/kg dry	89.1	50	SW 846 8260B	18-Nov-07	18-Nov-07	7111480	adu
67-64-1	Acetone	BRL		µg/kg dry	891	50	"	"	"	"	"
107-13-1	Acrylonitrile	BRL		µg/kg dry	89.1	50	"	"	"	"	"
71-43-2	Benzene	BRL		µg/kg dry	89.1	50	"	"	"	"	"
108-86-1	Bromobenzene	BRL		µg/kg dry	89.1	50	"	"	"	"	"
74-97-5	Bromochloromethane	BRL		µg/kg dry	89.1	50	"	"	"	"	"
75-27-4	Bromodichloromethane	BRL		µg/kg dry	89.1	50	"	"	"	"	"
75-25-2	Bromoform	BRL		µg/kg dry	89.1	50	"	"	"	"	"
74-83-9	Bromomethane	BRL		µg/kg dry	178	50	"	"	"	"	"
78-93-3	2-Butanone (MEK)	BRL		µg/kg dry	891	50	"	"	"	"	"
104-51-8	n-Butylbenzene	BRL		µg/kg dry	89.1	50	"	"	"	"	"
135-98-8	sec-Butylbenzene	BRL		µg/kg dry	89.1	50	"	"	"	"	"
98-06-6	tert-Butylbenzene	BRL		µg/kg dry	89.1	50	"	"	"	"	"
75-15-0	Carbon disulfide	BRL		µg/kg dry	446	50	"	"	"	"	"
56-23-5	Carbon tetrachloride	BRL		µg/kg dry	89.1	50	"	"	"	"	"
108-90-7	Chlorobenzene	BRL		µg/kg dry	89.1	50	"	"	"	"	"
75-00-3	Chloroethane	BRL		µg/kg dry	178	50	"	"	"	"	"
67-66-3	Chloroform	BRL		µg/kg dry	89.1	50	"	"	"	"	"
74-87-3	Chloromethane	BRL		µg/kg dry	178	50	"	"	"	"	"
95-49-8	2-Chlorotoluene	BRL		µg/kg dry	89.1	50	"	"	"	"	"
106-43-4	4-Chlorotoluene	BRL		µg/kg dry	89.1	50	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/kg dry	178	50	"	"	"	"	"
124-48-1	Dibromochloromethane	BRL		µg/kg dry	89.1	50	"	"	"	"	"
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/kg dry	89.1	50	"	"	"	"	"
74-95-3	Dibromomethane	BRL		µg/kg dry	89.1	50	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg dry	89.1	50	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg dry	89.1	50	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL		µg/kg dry	89.1	50	"	"	"	"	"
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/kg dry	178	50	"	"	"	"	"
75-34-3	1,1-Dichloroethane	BRL		µg/kg dry	89.1	50	"	"	"	"	"
107-06-2	1,2-Dichloroethane	BRL		µg/kg dry	89.1	50	"	"	"	"	"
75-35-4	1,1-Dichloroethene	BRL		µg/kg dry	89.1	50	"	"	"	"	"
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	89.1	50	"	"	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL		µg/kg dry	89.1	50	"	"	"	"	"
78-87-5	1,2-Dichloropropane	BRL		µg/kg dry	89.1	50	"	"	"	"	"
142-28-9	1,3-Dichloropropane	BRL		µg/kg dry	89.1	50	"	"	"	"	"
594-20-7	2,2-Dichloropropane	BRL		µg/kg dry	89.1	50	"	"	"	"	"
563-58-6	1,1-Dichloropropene	BRL		µg/kg dry	89.1	50	"	"	"	"	"
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/kg dry	89.1	50	"	"	"	"	"
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/kg dry	89.1	50	"	"	"	"	"
100-41-4	Ethylbenzene	BRL		µg/kg dry	89.1	50	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL		µg/kg dry	89.1	50	"	"	"	"	"
591-78-6	2-Hexanone (MBK)	BRL		µg/kg dry	891	50	"	"	"	"	"
98-82-8	Isopropylbenzene	BRL		µg/kg dry	89.1	50	"	"	"	"	"
99-87-6	4-Isopropyltoluene	BRL		µg/kg dry	89.1	50	"	"	"	"	"
1634-04-4	Methyl tert-butyl ether	BRL		µg/kg dry	89.1	50	"	"	"	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/kg dry	891	50	"	"	"	"	"
75-09-2	Methylene chloride	BRL		µg/kg dry	891	50	"	"	"	"	"
91-20-3	Naphthalene	BRL		µg/kg dry	89.1	50	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 8 SA70868-08	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds											
Volatile Organic Compounds											
Prepared by method SW846 5030 Soil (high level)											
103-65-1	n-Propylbenzene	BRL		µg/kg dry	89.1	50	SW 846 8260B	18-Nov-07	18-Nov-07	7111480	adu
100-42-5	Styrene	BRL		µg/kg dry	89.1	50	"	"	"	"	"
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/kg dry	89.1	50	"	"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/kg dry	89.1	50	"	"	"	"	"
127-18-4	Tetrachloroethene	BRL		µg/kg dry	89.1	50	"	"	"	"	"
108-88-3	Toluene	200		µg/kg dry	89.1	50	"	"	"	"	"
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/kg dry	89.1	50	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg dry	89.1	50	"	"	"	"	"
71-55-6	1,1,1-Trichloroethane	BRL		µg/kg dry	89.1	50	"	"	"	"	"
79-00-5	1,1,2-Trichloroethane	BRL		µg/kg dry	89.1	50	"	"	"	"	"
79-01-6	Trichloroethene	BRL		µg/kg dry	89.1	50	"	"	"	"	"
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/kg dry	89.1	50	"	"	"	"	"
96-18-4	1,2,3-Trichloropropane	BRL		µg/kg dry	89.1	50	"	"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/kg dry	89.1	50	"	"	"	"	"
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/kg dry	89.1	50	"	"	"	"	"
75-01-4	Vinyl chloride	BRL		µg/kg dry	89.1	50	"	"	"	"	"
1330-20-7	m,p-Xylene	BRL		µg/kg dry	178	50	"	"	"	"	"
95-47-6	o-Xylene	BRL		µg/kg dry	89.1	50	"	"	"	"	"
109-99-9	Tetrahydrofuran	BRL		µg/kg dry	891	50	"	"	"	"	"
60-29-7	Ethyl ether	BRL		µg/kg dry	89.1	50	"	"	"	"	"
994-05-8	Tert-amyl methyl ether	BRL		µg/kg dry	89.1	50	"	"	"	"	"
637-92-3	Ethyl tert-butyl ether	BRL		µg/kg dry	89.1	50	"	"	"	"	"
108-20-3	Di-isopropyl ether	BRL		µg/kg dry	89.1	50	"	"	"	"	"
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/kg dry	891	50	"	"	"	"	"
123-91-1	1,4-Dioxane	BRL		µg/kg dry	1780	50	"	"	"	"	"
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/kg dry	446	50	"	"	"	"	"
64-17-5	Ethanol	BRL		µg/kg dry	44600	50	"	"	"	"	"
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*101*		*70-130 %*			"	"	"	"	"
2037-26-5	*Toluene-d8*	*102*		*70-130 %*			"	"	"	"	"
17060-07-0	*1,2-Dichloroethane-d4*	*98*		*70-130 %*			"	"	"	"	"
1868-53-7	*Dibromofluoromethane*	*94*		*70-130 %*			"	"	"	"	"
Semivolatile Organic Compounds by GCMS											
Semivolatile Organic Compounds by SW846 8270C											
Prepared by method SW846 3550B											
83-32-9	Acenaphthene	BRL		µg/kg dry	1290	5	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
208-96-8	Acenaphthylene	BRL		µg/kg dry	1290	5	"	"	"	"	"
62-53-3	Aniline	BRL		µg/kg dry	1290	5	"	"	"	"	"
120-12-7	Anthracene	BRL		µg/kg dry	1290	5	"	"	"	"	"
1912-24-9	Atrazine	BRL		µg/kg dry	1290	5	"	"	"	"	"
103-33-3	Azobenzene/Diphenyldiazine	BRL		µg/kg dry	1290	5	"	"	"	"	"
92-87-5	Benzidine	BRL		µg/kg dry	1290	5	"	"	"	"	"
56-55-3	Benzo (a) anthracene	3,520		µg/kg dry	1290	5	"	"	"	"	"
50-32-8	Benzo (a) pyrene	3,540		µg/kg dry	1290	5	"	"	"	"	"
205-99-2	Benzo (b) fluoranthene	3,650		µg/kg dry	1290	5	"	"	"	"	"
191-24-2	Benzo (g,h,i) perylene	1,620		µg/kg dry	1290	5	"	"	"	"	"
207-08-9	Benzo (k) fluoranthene	3,560		µg/kg dry	1290	5	"	"	"	"	"
65-85-0	Benzoic acid	BRL		µg/kg dry	1290	5	"	"	"	"	"
100-51-6	Benzyl alcohol	BRL		µg/kg dry	1290	5	"	"	"	"	"
111-91-1	Bis(2-chloroethoxy)methane	BRL		µg/kg dry	1290	5	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 8 SA70868-08	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS											
Semivolatile Organic Compounds by SW846 8270C											
Prepared by method SW846 3550B											
111-44-4	Bis(2-chloroethyl)ether	BRL		µg/kg dry	1290	5	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
108-60-1	Bis(2-chloroisopropyl)ether	BRL		µg/kg dry	1290	5	"	"	"	"	"
117-81-7	Bis(2-ethylhexyl)phthalate	BRL		µg/kg dry	1290	5	"	"	"	"	"
101-55-3	4-Bromophenyl phenyl ether	BRL		µg/kg dry	1290	5	"	"	"	"	"
85-68-7	Butyl benzyl phthalate	BRL		µg/kg dry	1290	5	"	"	"	"	"
86-74-8	Carbazole	BRL		µg/kg dry	1290	5	"	"	"	"	"
59-50-7	4-Chloro-3-methylphenol	BRL		µg/kg dry	1290	5	"	"	"	"	"
106-47-8	4-Chloroaniline	BRL		µg/kg dry	1290	5	"	"	"	"	"
91-58-7	2-Chloronaphthalene	BRL		µg/kg dry	1290	5	"	"	"	"	"
95-57-8	2-Chlorophenol	BRL		µg/kg dry	1290	5	"	"	"	"	"
7005-72-3	4-Chlorophenyl phenyl ether	BRL		µg/kg dry	1290	5	"	"	"	"	"
218-01-9	Chrysene	4,190		µg/kg dry	1290	5	"	"	"	"	"
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/kg dry	1290	5	"	"	"	"	"
132-64-9	Dibenzofuran	BRL		µg/kg dry	1290	5	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg dry	1290	5	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg dry	1290	5	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL		µg/kg dry	1290	5	"	"	"	"	"
91-94-1	3,3´-Dichlorobenzidine	BRL		µg/kg dry	1290	5	"	"	"	"	"
120-83-2	2,4-Dichlorophenol	BRL		µg/kg dry	1290	5	"	"	"	"	"
84-66-2	Diethyl phthalate	BRL		µg/kg dry	1290	5	"	"	"	"	"
131-11-3	Dimethyl phthalate	BRL		µg/kg dry	1290	5	"	"	"	"	"
105-67-9	2,4-Dimethylphenol	BRL		µg/kg dry	1290	5	"	"	"	"	"
84-74-2	Di-n-butyl phthalate	BRL		µg/kg dry	1290	5	"	"	"	"	"
534-52-1	4,6-Dinitro-2-methylphenol	BRL		µg/kg dry	1290	5	"	"	"	"	"
51-28-5	2,4-Dinitrophenol	BRL		µg/kg dry	1290	5	"	"	"	"	"
121-14-2	2,4-Dinitrotoluene	BRL		µg/kg dry	1290	5	"	"	"	"	"
606-20-2	2,6-Dinitrotoluene	BRL		µg/kg dry	1290	5	"	"	"	"	"
117-84-0	Di-n-octyl phthalate	BRL		µg/kg dry	1290	5	"	"	"	"	"
206-44-0	Fluoranthene	7,850		µg/kg dry	1290	5	"	"	"	"	"
86-73-7	Fluorene	BRL		µg/kg dry	1290	5	"	"	"	"	"
118-74-1	Hexachlorobenzene	BRL		µg/kg dry	1290	5	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL		µg/kg dry	1290	5	"	"	"	"	"
77-47-4	Hexachlorocyclopentadiene	BRL		µg/kg dry	1290	5	"	"	"	"	"
67-72-1	Hexachloroethane	BRL		µg/kg dry	1290	5	"	"	"	"	"
193-39-5	Indeno (1,2,3-cd) pyrene	1,750		µg/kg dry	1290	5	"	"	"	"	"
90-12-0	1-Methylnaphthalene	BRL		µg/kg dry	1290	5	"	"	"	"	"
78-59-1	Isophorone	BRL		µg/kg dry	1290	5	"	"	"	"	"
91-57-6	2-Methylnaphthalene	BRL		µg/kg dry	1290	5	"	"	"	"	"
95-48-7	2-Methylphenol	BRL		µg/kg dry	1290	5	"	"	"	"	"
108-39-4, 106-44-5	3,4-Methylphenol	BRL		µg/kg dry	1290	5	"	"	"	"	"
91-20-3	Naphthalene	BRL		µg/kg dry	1290	5	"	"	"	"	"
88-74-4	2-Nitroaniline	BRL		µg/kg dry	1290	5	"	"	"	"	"
99-09-2	3-Nitroaniline	BRL		µg/kg dry	1290	5	"	"	"	"	"
100-01-6	4-Nitroaniline	BRL		µg/kg dry	5170	5	"	"	"	"	"
98-95-3	Nitrobenzene	BRL		µg/kg dry	1290	5	"	"	"	"	"
88-75-5	2-Nitrophenol	BRL		µg/kg dry	1290	5	"	"	"	"	"
100-02-7	4-Nitrophenol	BRL		µg/kg dry	5170	5	"	"	"	"	"
62-75-9	N-Nitrosodimethylamine	BRL		µg/kg dry	1290	5	"	"	"	"	"
621-64-7	N-Nitrosodi-n-propylamine	BRL		µg/kg dry	1290	5	"	"	"	"	"
86-30-6	N-Nitrosodiphenylamine	BRL		µg/kg dry	1290	5	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed 8	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07
SA70868-08				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS											
Semivolatile Organic Compounds by SW846 8270C											
Prepared by method SW846 3550B											
87-86-5	Pentachlorophenol	BRL		µg/kg dry	1290	5	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
85-01-8	Phenanthrene	2,920		µg/kg dry	1290	5	"	"	"	"	"
108-95-2	Phenol	BRL		µg/kg dry	1290	5	"	"	"	"	"
129-00-0	Pyrene	6,850		µg/kg dry	1290	5	"	"	"	"	"
110-86-1	Pyridine	BRL		µg/kg dry	1290	5	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg dry	1290	5	"	"	"	"	"
95-95-4	2,4,5-Trichlorophenol	BRL		µg/kg dry	1290	5	"	"	"	"	"
88-06-2	2,4,6-Trichlorophenol	BRL		µg/kg dry	1290	5	"	"	"	"	"
82-68-8	Pentachloronitrobenzene	BRL		µg/kg dry	1290	5	"	"	"	"	"
95-94-3	1,2,4,5-Tetrachlorobenzene	BRL		µg/kg dry	1290	5	"	"	"	"	"
Surrogate recoveries:											
321-60-8	*2-Fluorobiphenyl*	*54*		*30-130 %*			"	"	"	"	"
367-12-4	*2-Fluorophenol*	*52*		*15-110 %*			"	"	"	"	"
4165-60-0	*Nitrobenzene-d5*	*38*		*30-130 %*			"	"	"	"	"
4165-62-2	*Phenol-d5*	*37*		*15-110 %*			"	"	"	"	"
1718-51-0	*Terphenyl-dl4*	*55*		*30-130 %*			"	"	"	"	"
118-79-6	*2,4,6-Tribromophenol*	*51*		*15-110 %*			"	"	"	"	"
Total Metals by EPA 6000/7000 Series Methods											
7439-97-6	Mercury	0.303		mg/kg dry	0.0411	1	SW846 7471A	16-Nov-07	19-Nov-07	7111330	CRM
Total Metals by EPA 200 Series Methods											
7440-22-4	Silver	BRL		mg/kg dry	2.26	1	EPA 200.7	16-Nov-07	21-Nov-07	7111328	SA
7440-38-2	Arsenic	BRL		mg/kg dry	2.26	1	"	"	"	"	"
7440-39-3	Barium	27.4		mg/kg dry	1.51	1	"	"	"	"	"
7440-41-7	Beryllium	BRL		mg/kg dry	0.754	1	"	"	"	"	"
7440-43-9	Cadmium	BRL		mg/kg dry	0.754	1	"	"	"	"	"
7440-47-3	Chromium	25.0		mg/kg dry	1.51	1	"	"	"	"	"
7440-50-8	Copper	18.1		mg/kg dry	1.51	1	"	"	"	"	"
7439-96-5	Manganese	64.6		mg/kg dry	1.51	1	"	"	"	"	"
7440-02-0	Nickel	2.50		mg/kg dry	1.51	1	"	"	"	"	"
7439-92-1	Lead	51.0		mg/kg dry	2.26	1	"	"	"	"	"
7440-36-0	Antimony	BRL		mg/kg dry	4.52	1	"	"	"	"	"
7782-49-2	Selenium	BRL		mg/kg dry	2.26	1	"	"	"	"	"
7440-28-0	Thallium	BRL		mg/kg dry	4.52	1	"	"	"	"	"
7440-62-2	Vanadium	7.21		mg/kg dry	2.26	1	"	"	"	"	"
7440-66-6	Zinc	75.4		mg/kg dry	1.51	1	"	"	"	"	"
General Chemistry Parameters											
	% Solids	65.3		%		1	SM2540 G Mod.	16-Nov-07	16-Nov-07	7111397	DG

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-27 SA70868-09	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds											
	VOC Extraction	Field extracted		N/A		1	VOC Soil Extraction	12-Nov-07	12-Nov-07	7111029	DG
Volatile Organic Compounds											
Prepared by method SW846 5030 Soil (high level)											
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon	BRL		µg/kg dry	31.2	50	SW 846 8260B	16-Nov-07	16-Nov-07	7111382	adu
67-64-1	Acetone	BRL		µg/kg dry	312	50	"	"	"	"	"
107-13-1	Acrylonitrile	BRL		µg/kg dry	31.2	50	"	"	"	"	"
71-43-2	Benzene	BRL		µg/kg dry	31.2	50	"	"	"	"	"
108-86-1	Bromobenzene	BRL		µg/kg dry	31.2	50	"	"	"	"	"
74-97-5	Bromochloromethane	BRL		µg/kg dry	31.2	50	"	"	"	"	"
75-27-4	Bromodichloromethane	BRL		µg/kg dry	31.2	50	"	"	"	"	"
75-25-2	Bromoform	BRL		µg/kg dry	31.2	50	"	"	"	"	"
74-83-9	Bromomethane	BRL		µg/kg dry	62.4	50	"	"	"	"	"
78-93-3	2-Butanone (MEK)	BRL		µg/kg dry	312	50	"	"	"	"	"
104-51-8	n-Butylbenzene	BRL		µg/kg dry	31.2	50	"	"	"	"	"
135-98-8	sec-Butylbenzene	BRL		µg/kg dry	31.2	50	"	"	"	"	"
98-06-6	tert-Butylbenzene	BRL		µg/kg dry	31.2	50	"	"	"	"	"
75-15-0	Carbon disulfide	BRL		µg/kg dry	156	50	"	"	"	"	"
56-23-5	Carbon tetrachloride	BRL		µg/kg dry	31.2	50	"	"	"	"	"
108-90-7	Chlorobenzene	BRL		µg/kg dry	31.2	50	"	"	"	"	"
75-00-3	Chloroethane	BRL		µg/kg dry	62.4	50	"	"	"	"	"
67-66-3	Chloroform	BRL		µg/kg dry	31.2	50	"	"	"	"	"
74-87-3	Chloromethane	BRL		µg/kg dry	62.4	50	"	"	"	"	"
95-49-8	2-Chlorotoluene	BRL		µg/kg dry	31.2	50	"	"	"	"	"
106-43-4	4-Chlorotoluene	BRL		µg/kg dry	31.2	50	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/kg dry	62.4	50	"	"	"	"	"
124-48-1	Dibromochloromethane	BRL		µg/kg dry	31.2	50	"	"	"	"	"
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/kg dry	31.2	50	"	"	"	"	"
74-95-3	Dibromomethane	BRL		µg/kg dry	31.2	50	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg dry	31.2	50	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg dry	31.2	50	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL		µg/kg dry	31.2	50	"	"	"	"	"
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/kg dry	62.4	50	"	"	"	"	"
75-34-3	1,1-Dichloroethane	BRL		µg/kg dry	31.2	50	"	"	"	"	"
107-06-2	1,2-Dichloroethane	BRL		µg/kg dry	31.2	50	"	"	"	"	"
75-35-4	1,1-Dichloroethene	BRL		µg/kg dry	31.2	50	"	"	"	"	"
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	31.2	50	"	"	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL		µg/kg dry	31.2	50	"	"	"	"	"
78-87-5	1,2-Dichloropropane	BRL		µg/kg dry	31.2	50	"	"	"	"	"
142-28-9	1,3-Dichloropropane	BRL		µg/kg dry	31.2	50	"	"	"	"	"
594-20-7	2,2-Dichloropropane	BRL		µg/kg dry	31.2	50	"	"	"	"	"
563-58-6	1,1-Dichloropropene	BRL		µg/kg dry	31.2	50	"	"	"	"	"
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/kg dry	31.2	50	"	"	"	"	"
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/kg dry	31.2	50	"	"	"	"	"
100-41-4	Ethylbenzene	BRL		µg/kg dry	31.2	50	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL		µg/kg dry	31.2	50	"	"	"	"	"
591-78-6	2-Hexanone (MBK)	BRL		µg/kg dry	312	50	"	"	"	"	"
98-82-8	Isopropylbenzene	BRL		µg/kg dry	31.2	50	"	"	"	"	"
99-87-6	4-Isopropyltoluene	BRL		µg/kg dry	31.2	50	"	"	"	"	"
1634-04-4	Methyl tert-butyl ether	BRL		µg/kg dry	31.2	50	"	"	"	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/kg dry	312	50	"	"	"	"	"
75-09-2	Methylene chloride	BRL		µg/kg dry	312	50	"	"	"	"	"
91-20-3	Naphthalene	BRL		µg/kg dry	31.2	50	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-27 SA70868-09	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds											
Volatile Organic Compounds											
Prepared by method SW846 5030 Soil (high level)											
103-65-1	n-Propylbenzene	BRL		µg/kg dry	31.2	50	SW 846 8260B	16-Nov-07	16-Nov-07	7111382	adu
100-42-5	Styrene	BRL		µg/kg dry	31.2	50	"	"	"	"	"
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/kg dry	31.2	50	"	"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/kg dry	31.2	50	"	"	"	"	"
127-18-4	Tetrachloroethene	BRL		µg/kg dry	31.2	50	"	"	"	"	"
108-88-3	Toluene	BRL		µg/kg dry	31.2	50	"	"	"	"	"
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/kg dry	31.2	50	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg dry	31.2	50	"	"	"	"	"
71-55-6	1,1,1-Trichloroethane	BRL		µg/kg dry	31.2	50	"	"	"	"	"
79-00-5	1,1,2-Trichloroethane	BRL		µg/kg dry	31.2	50	"	"	"	"	"
79-01-6	Trichloroethene	BRL		µg/kg dry	31.2	50	"	"	"	"	"
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/kg dry	31.2	50	"	"	"	"	"
96-18-4	1,2,3-Trichloropropane	BRL		µg/kg dry	31.2	50	"	"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/kg dry	31.2	50	"	"	"	"	"
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/kg dry	31.2	50	"	"	"	"	"
75-01-4	Vinyl chloride	BRL		µg/kg dry	31.2	50	"	"	"	"	"
1330-20-7	m,p-Xylene	BRL		µg/kg dry	62.4	50	"	"	"	"	"
95-47-6	o-Xylene	BRL		µg/kg dry	31.2	50	"	"	"	"	"
109-99-9	Tetrahydrofuran	BRL		µg/kg dry	312	50	"	"	"	"	"
60-29-7	Ethyl ether	BRL		µg/kg dry	31.2	50	"	"	"	"	"
994-05-8	Tert-amyl methyl ether	BRL		µg/kg dry	31.2	50	"	"	"	"	"
637-92-3	Ethyl tert-butyl ether	BRL		µg/kg dry	31.2	50	"	"	"	"	"
108-20-3	Di-isopropyl ether	BRL		µg/kg dry	31.2	50	"	"	"	"	"
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/kg dry	312	50	"	"	"	"	"
123-91-1	1,4-Dioxane	BRL		µg/kg dry	624	50	"	"	"	"	"
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/kg dry	156	50	"	"	"	"	"
64-17-5	Ethanol	BRL		µg/kg dry	15600	50	"	"	"	"	"
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*103*		*70-130 %*			"	"	"	"	"
2037-26-5	*Toluene-d8*	*103*		*70-130 %*			"	"	"	"	"
17060-07-0	*1,2-Dichloroethane-d4*	*102*		*70-130 %*			"	"	"	"	"
1868-53-7	*Dibromofluoromethane*	*93*		*70-130 %*			"	"	"	"	"
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3550B											
83-32-9	Acenaphthene	BRL		µg/kg dry	133	1	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
208-96-8	Acenaphthylene	BRL		µg/kg dry	133	1	"	"	"	"	"
120-12-7	Anthracene	BRL		µg/kg dry	133	1	"	"	"	"	"
56-55-3	Benzo (a) anthracene	BRL		µg/kg dry	133	1	"	"	"	"	"
50-32-8	Benzo (a) pyrene	BRL		µg/kg dry	133	1	"	"	"	"	"
205-99-2	Benzo (b) fluoranthene	BRL		µg/kg dry	133	1	"	"	"	"	"
191-24-2	Benzo (g,h,i) perylene	BRL		µg/kg dry	133	1	"	"	"	"	"
207-08-9	Benzo (k) fluoranthene	BRL		µg/kg dry	133	1	"	"	"	"	"
218-01-9	Chrysene	BRL		µg/kg dry	133	1	"	"	"	"	"
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/kg dry	133	1	"	"	"	"	"
206-44-0	Fluoranthene	BRL		µg/kg dry	133	1	"	"	"	"	"
86-73-7	Fluorene	BRL		µg/kg dry	133	1	"	"	"	"	"
193-39-5	Indeno (1,2,3-cd) pyrene	BRL		µg/kg dry	133	1	"	"	"	"	"
90-12-0	1-Methylnaphthalene	BRL		µg/kg dry	133	1	"	"	"	"	"
91-57-6	2-Methylnaphthalene	BRL		µg/kg dry	133	1	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-27 SA70868-09	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3550B											
91-20-3	Naphthalene	BRL		µg/kg dry	133	1	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
85-01-8	Phenanthrene	BRL		µg/kg dry	133	1	"	"	"	"	"
129-00-0	Pyrene	BRL		µg/kg dry	133	1	"	"	"	"	"
Surrogate recoveries:											
321-60-8	*2-Fluorobiphenyl*	*62*		*30-130 %*			"	"	"	"	"
1718-51-0	*Terphenyl-dl4*	*71*		*30-130 %*			"	"	"	"	"
Total Metals by EPA 6000/7000 Series Methods											
7439-97-6	Mercury	BRL		mg/kg dry	0.0295	1	SW846 7471A	16-Nov-07	19-Nov-07	7111330	CRM
Total Metals by EPA 200 Series Methods											
7440-22-4	Silver	BRL		mg/kg dry	1.33	1	EPA 200.7	16-Nov-07	21-Nov-07	7111328	SA
7440-38-2	Arsenic	BRL		mg/kg dry	1.33	1	"	"	"	"	"
7440-39-3	Barium	7.93		mg/kg dry	0.887	1	"	"	"	"	"
7440-41-7	Beryllium	BRL		mg/kg dry	0.444	1	"	"	"	"	"
7440-43-9	Cadmium	BRL		mg/kg dry	0.444	1	"	"	"	"	"
7440-47-3	Chromium	3.75		mg/kg dry	0.887	1	"	"	"	"	"
7440-50-8	Copper	2.71		mg/kg dry	0.887	1	"	"	"	"	"
7439-96-5	Manganese	55.2		mg/kg dry	0.887	1	"	"	"	"	"
7440-02-0	Nickel	1.76		mg/kg dry	0.887	1	"	"	"	"	"
7439-92-1	Lead	BRL		mg/kg dry	1.51	1	"	"	21-Nov-07	"	"
7440-36-0	Antimony	BRL		mg/kg dry	2.66	1	"	"	21-Nov-07	"	"
7782-49-2	Selenium	BRL		mg/kg dry	1.33	1	"	"	"	"	"
7440-28-0	Thallium	BRL		mg/kg dry	2.66	1	"	"	"	"	"
7440-62-2	Vanadium	4.69		mg/kg dry	1.33	1	"	"	"	"	"
7440-66-6	Zinc	7.67		mg/kg dry	0.887	1	"	"	"	"	"
General Chemistry Parameters											
	% Solids	97.7		%		1	SM2540 G Mod.	16-Nov-07	16-Nov-07	7111397	DG

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-28 SA70868-10	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds											
	VOC Extraction	Field extracted		N/A		1	VOC Soil Extraction	12-Nov-07	12-Nov-07	7111029	DG
Volatile Organic Compounds											
Prepared by method SW846 5030 Soil (high level)											
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon	BRL		µg/kg dry	29.4	50	SW 846 8260B	16-Nov-07	16-Nov-07	7111382	adu
67-64-1	Acetone	BRL		µg/kg dry	294	50	"	"	"	"	"
107-13-1	Acrylonitrile	BRL		µg/kg dry	29.4	50	"	"	"	"	"
71-43-2	Benzene	BRL		µg/kg dry	29.4	50	"	"	"	"	"
108-86-1	Bromobenzene	BRL		µg/kg dry	29.4	50	"	"	"	"	"
74-97-5	Bromochloromethane	BRL		µg/kg dry	29.4	50	"	"	"	"	"
75-27-4	Bromodichloromethane	BRL		µg/kg dry	29.4	50	"	"	"	"	"
75-25-2	Bromoform	BRL		µg/kg dry	29.4	50	"	"	"	"	"
74-83-9	Bromomethane	BRL		µg/kg dry	58.8	50	"	"	"	"	"
78-93-3	2-Butanone (MEK)	BRL		µg/kg dry	294	50	"	"	"	"	"
104-51-8	n-Butylbenzene	BRL		µg/kg dry	29.4	50	"	"	"	"	"
135-98-8	sec-Butylbenzene	BRL		µg/kg dry	29.4	50	"	"	"	"	"
98-06-6	tert-Butylbenzene	BRL		µg/kg dry	29.4	50	"	"	"	"	"
75-15-0	Carbon disulfide	BRL		µg/kg dry	147	50	"	"	"	"	"
56-23-5	Carbon tetrachloride	BRL		µg/kg dry	29.4	50	"	"	"	"	"
108-90-7	Chlorobenzene	BRL		µg/kg dry	29.4	50	"	"	"	"	"
75-00-3	Chloroethane	BRL		µg/kg dry	58.8	50	"	"	"	"	"
67-66-3	Chloroform	BRL		µg/kg dry	29.4	50	"	"	"	"	"
74-87-3	Chloromethane	BRL		µg/kg dry	58.8	50	"	"	"	"	"
95-49-8	2-Chlorotoluene	BRL		µg/kg dry	29.4	50	"	"	"	"	"
106-43-4	4-Chlorotoluene	BRL		µg/kg dry	29.4	50	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/kg dry	58.8	50	"	"	"	"	"
124-48-1	Dibromochloromethane	BRL		µg/kg dry	29.4	50	"	"	"	"	"
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/kg dry	29.4	50	"	"	"	"	"
74-95-3	Dibromomethane	BRL		µg/kg dry	29.4	50	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg dry	29.4	50	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg dry	29.4	50	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL		µg/kg dry	29.4	50	"	"	"	"	"
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/kg dry	58.8	50	"	"	"	"	"
75-34-3	1,1-Dichloroethane	BRL		µg/kg dry	29.4	50	"	"	"	"	"
107-06-2	1,2-Dichloroethane	BRL		µg/kg dry	29.4	50	"	"	"	"	"
75-35-4	1,1-Dichloroethene	BRL		µg/kg dry	29.4	50	"	"	"	"	"
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	29.4	50	"	"	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL		µg/kg dry	29.4	50	"	"	"	"	"
78-87-5	1,2-Dichloropropane	BRL		µg/kg dry	29.4	50	"	"	"	"	"
142-28-9	1,3-Dichloropropane	BRL		µg/kg dry	29.4	50	"	"	"	"	"
594-20-7	2,2-Dichloropropane	BRL		µg/kg dry	29.4	50	"	"	"	"	"
563-58-6	1,1-Dichloropropene	BRL		µg/kg dry	29.4	50	"	"	"	"	"
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/kg dry	29.4	50	"	"	"	"	"
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/kg dry	29.4	50	"	"	"	"	"
100-41-4	Ethylbenzene	BRL		µg/kg dry	29.4	50	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL		µg/kg dry	29.4	50	"	"	"	"	"
591-78-6	2-Hexanone (MBK)	BRL		µg/kg dry	294	50	"	"	"	"	"
98-82-8	Isopropylbenzene	BRL		µg/kg dry	29.4	50	"	"	"	"	"
99-87-6	4-Isopropyltoluene	BRL		µg/kg dry	29.4	50	"	"	"	"	"
1634-04-4	Methyl tert-butyl ether	BRL		µg/kg dry	29.4	50	"	"	"	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/kg dry	294	50	"	"	"	"	"
75-09-2	Methylene chloride	BRL		µg/kg dry	294	50	"	"	"	"	"
91-20-3	Naphthalene	BRL		µg/kg dry	29.4	50	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-28	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07
SA70868-10				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds											
Volatile Organic Compounds											
Prepared by method SW846 5030 Soil (high level)											
103-65-1	n-Propylbenzene	BRL		µg/kg dry	29.4	50	SW 846 8260B	16-Nov-07	16-Nov-07	7111382	adu
100-42-5	Styrene	BRL		µg/kg dry	29.4	50	"	"	"	"	"
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/kg dry	29.4	50	"	"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/kg dry	29.4	50	"	"	"	"	"
127-18-4	Tetrachloroethene	BRL		µg/kg dry	29.4	50	"	"	"	"	"
108-88-3	Toluene	BRL		µg/kg dry	29.4	50	"	"	"	"	"
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/kg dry	29.4	50	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg dry	29.4	50	"	"	"	"	"
71-55-6	1,1,1-Trichloroethane	BRL		µg/kg dry	29.4	50	"	"	"	"	"
79-00-5	1,1,2-Trichloroethane	BRL		µg/kg dry	29.4	50	"	"	"	"	"
79-01-6	Trichloroethene	BRL		µg/kg dry	29.4	50	"	"	"	"	"
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/kg dry	29.4	50	"	"	"	"	"
96-18-4	1,2,3-Trichloropropane	BRL		µg/kg dry	29.4	50	"	"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/kg dry	29.4	50	"	"	"	"	"
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/kg dry	29.4	50	"	"	"	"	"
75-01-4	Vinyl chloride	BRL		µg/kg dry	29.4	50	"	"	"	"	"
1330-20-7	m,p-Xylene	BRL		µg/kg dry	58.8	50	"	"	"	"	"
95-47-6	o-Xylene	BRL		µg/kg dry	29.4	50	"	"	"	"	"
109-99-9	Tetrahydrofuran	BRL		µg/kg dry	294	50	"	"	"	"	"
60-29-7	Ethyl ether	BRL		µg/kg dry	29.4	50	"	"	"	"	"
994-05-8	Tert-amyl methyl ether	BRL		µg/kg dry	29.4	50	"	"	"	"	"
637-92-3	Ethyl tert-butyl ether	BRL		µg/kg dry	29.4	50	"	"	"	"	"
108-20-3	Di-isopropyl ether	BRL		µg/kg dry	29.4	50	"	"	"	"	"
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/kg dry	294	50	"	"	"	"	"
123-91-1	1,4-Dioxane	BRL		µg/kg dry	588	50	"	"	"	"	"
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/kg dry	147	50	"	"	"	"	"
64-17-5	Ethanol	BRL		µg/kg dry	14700	50	"	"	"	"	"
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*101*		*70-130 %*			"	"	"	"	"
2037-26-5	*Toluene-d8*	*102*		*70-130 %*			"	"	"	"	"
17060-07-0	*1,2-Dichloroethane-d4*	*100*		*70-130 %*			"	"	"	"	"
1868-53-7	*Dibromofluoromethane*	*93*		*70-130 %*			"	"	"	"	"
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3550B											
83-32-9	Acenaphthene	BRL		µg/kg dry	129	1	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
208-96-8	Acenaphthylene	BRL		µg/kg dry	129	1	"	"	"	"	"
120-12-7	Anthracene	BRL		µg/kg dry	129	1	"	"	"	"	"
56-55-3	Benzo (a) anthracene	BRL		µg/kg dry	129	1	"	"	"	"	"
50-32-8	Benzo (a) pyrene	BRL		µg/kg dry	129	1	"	"	"	"	"
205-99-2	Benzo (b) fluoranthene	BRL		µg/kg dry	129	1	"	"	"	"	"
191-24-2	Benzo (g,h,i) perylene	BRL		µg/kg dry	129	1	"	"	"	"	"
207-08-9	Benzo (k) fluoranthene	BRL		µg/kg dry	129	1	"	"	"	"	"
218-01-9	Chrysene	BRL		µg/kg dry	129	1	"	"	"	"	"
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/kg dry	129	1	"	"	"	"	"
206-44-0	Fluoranthene	BRL		µg/kg dry	129	1	"	"	"	"	"
86-73-7	Fluorene	BRL		µg/kg dry	129	1	"	"	"	"	"
193-39-5	Indeno (1,2,3-cd) pyrene	BRL		µg/kg dry	129	1	"	"	"	"	"
90-12-0	1-Methylnaphthalene	BRL		µg/kg dry	129	1	"	"	"	"	"
91-57-6	2-Methylnaphthalene	BRL		µg/kg dry	129	1	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-28 SA70868-10	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Batch*	*Analyst*
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3550B											
91-20-3	Naphthalene	BRL		µg/kg dry	129	1	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
85-01-8	Phenanthrene	BRL		µg/kg dry	129	1	"	"	"	"	"
129-00-0	Pyrene	BRL		µg/kg dry	129	1	"	"	"	"	"
Surrogate recoveries:											
321-60-8	*2-Fluorobiphenyl*	*74*		*30-130 %*			"	"	"	"	"
1718-51-0	*Terphenyl-dl4*	*74*		*30-130 %*			"	"	"	"	"
Total Metals by EPA 6000/7000 Series Methods											
7439-97-6	Mercury	BRL		mg/kg dry	0.0278	1	SW846 7471A	16-Nov-07	19-Nov-07	7111330	CRM
Total Metals by EPA 200 Series Methods											
7440-22-4	Silver	BRL		mg/kg dry	1.28	1	EPA 200.7	16-Nov-07	21-Nov-07	7111328	SA
7440-38-2	Arsenic	BRL		mg/kg dry	1.28	1	"	"	"	"	"
7440-39-3	Barium	18.1		mg/kg dry	0.855	1	"	"	"	"	"
7440-41-7	Beryllium	BRL		mg/kg dry	0.428	1	"	"	"	"	"
7440-43-9	Cadmium	BRL		mg/kg dry	0.428	1	"	"	"	"	"
7440-47-3	Chromium	4.27		mg/kg dry	0.855	1	"	"	"	"	"
7440-50-8	Copper	1.51		mg/kg dry	0.855	1	"	"	"	"	"
7439-96-5	Manganese	380		mg/kg dry	0.855	1	"	"	"	"	"
7440-02-0	Nickel	1.37		mg/kg dry	0.855	1	"	"	"	"	"
7439-92-1	Lead	1.41		mg/kg dry	1.28	1	"	"	"	"	"
7440-36-0	Antimony	BRL		mg/kg dry	2.57	1	"	"	"	"	"
7782-49-2	Selenium	BRL		mg/kg dry	1.28	1	"	"	"	"	"
7440-28-0	Thallium	BRL		mg/kg dry	2.57	1	"	"	"	"	"
7440-62-2	Vanadium	8.05		mg/kg dry	1.28	1	"	"	"	"	"
7440-66-6	Zinc	13.2		mg/kg dry	0.855	1	"	"	"	"	"
General Chemistry Parameters											
	% Solids	98.6		%		1	SM2540 G Mod.	16-Nov-07	16-Nov-07	7111397	DG

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-29 SA70868-11	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds											
	VOC Extraction	Field extracted		N/A		1	VOC Soil Extraction	12-Nov-07	12-Nov-07	7111029	DG
Volatile Organic Compounds											
Prepared by method SW846 5030 Soil (high level)											
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon	BRL		µg/kg dry	46.7	50	SW 846 8260B	16-Nov-07	16-Nov-07	7111382	adu
67-64-1	Acetone	BRL		µg/kg dry	467	50	"	"	"	"	"
107-13-1	Acrylonitrile	BRL		µg/kg dry	46.7	50	"	"	"	"	"
71-43-2	Benzene	BRL		µg/kg dry	46.7	50	"	"	"	"	"
108-86-1	Bromobenzene	BRL		µg/kg dry	46.7	50	"	"	"	"	"
74-97-5	Bromochloromethane	BRL		µg/kg dry	46.7	50	"	"	"	"	"
75-27-4	Bromodichloromethane	BRL		µg/kg dry	46.7	50	"	"	"	"	"
75-25-2	Bromoform	BRL		µg/kg dry	46.7	50	"	"	"	"	"
74-83-9	Bromomethane	BRL		µg/kg dry	93.4	50	"	"	"	"	"
78-93-3	2-Butanone (MEK)	BRL		µg/kg dry	467	50	"	"	"	"	"
104-51-8	n-Butylbenzene	BRL		µg/kg dry	46.7	50	"	"	"	"	"
135-98-8	sec-Butylbenzene	BRL		µg/kg dry	46.7	50	"	"	"	"	"
98-06-6	tert-Butylbenzene	BRL		µg/kg dry	46.7	50	"	"	"	"	"
75-15-0	Carbon disulfide	BRL		µg/kg dry	234	50	"	"	"	"	"
56-23-5	Carbon tetrachloride	BRL		µg/kg dry	46.7	50	"	"	"	"	"
108-90-7	Chlorobenzene	BRL		µg/kg dry	46.7	50	"	"	"	"	"
75-00-3	Chloroethane	BRL		µg/kg dry	93.4	50	"	"	"	"	"
67-66-3	Chloroform	BRL		µg/kg dry	46.7	50	"	"	"	"	"
74-87-3	Chloromethane	BRL		µg/kg dry	93.4	50	"	"	"	"	"
95-49-8	2-Chlorotoluene	BRL		µg/kg dry	46.7	50	"	"	"	"	"
106-43-4	4-Chlorotoluene	BRL		µg/kg dry	46.7	50	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/kg dry	93.4	50	"	"	"	"	"
124-48-1	Dibromochloromethane	BRL		µg/kg dry	46.7	50	"	"	"	"	"
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/kg dry	46.7	50	"	"	"	"	"
74-95-3	Dibromomethane	BRL		µg/kg dry	46.7	50	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg dry	46.7	50	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg dry	46.7	50	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL		µg/kg dry	46.7	50	"	"	"	"	"
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/kg dry	93.4	50	"	"	"	"	"
75-34-3	1,1-Dichloroethane	BRL		µg/kg dry	46.7	50	"	"	"	"	"
107-06-2	1,2-Dichloroethane	BRL		µg/kg dry	46.7	50	"	"	"	"	"
75-35-4	1,1-Dichloroethene	BRL		µg/kg dry	46.7	50	"	"	"	"	"
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	46.7	50	"	"	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL		µg/kg dry	46.7	50	"	"	"	"	"
78-87-5	1,2-Dichloropropane	BRL		µg/kg dry	46.7	50	"	"	"	"	"
142-28-9	1,3-Dichloropropane	BRL		µg/kg dry	46.7	50	"	"	"	"	"
594-20-7	2,2-Dichloropropane	BRL		µg/kg dry	46.7	50	"	"	"	"	"
563-58-6	1,1-Dichloropropene	BRL		µg/kg dry	46.7	50	"	"	"	"	"
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/kg dry	46.7	50	"	"	"	"	"
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/kg dry	46.7	50	"	"	"	"	"
100-41-4	Ethylbenzene	BRL		µg/kg dry	46.7	50	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL		µg/kg dry	46.7	50	"	"	"	"	"
591-78-6	2-Hexanone (MBK)	BRL		µg/kg dry	467	50	"	"	"	"	"
98-82-8	Isopropylbenzene	BRL		µg/kg dry	46.7	50	"	"	"	"	"
99-87-6	4-Isopropyltoluene	BRL		µg/kg dry	46.7	50	"	"	"	"	"
1634-04-4	Methyl tert-butyl ether	BRL		µg/kg dry	46.7	50	"	"	"	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/kg dry	467	50	"	"	"	"	"
75-09-2	Methylene chloride	BRL		µg/kg dry	467	50	"	"	"	"	"
91-20-3	Naphthalene	BRL		µg/kg dry	46.7	50	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-29 SA70868-11	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds											
Volatile Organic Compounds											
Prepared by method SW846 5030 Soil (high level)											
103-65-1	n-Propylbenzene	BRL		µg/kg dry	46.7	50	SW 846 8260B	16-Nov-07	16-Nov-07	7111382	adu
100-42-5	Styrene	BRL		µg/kg dry	46.7	50	"	"	"	"	"
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/kg dry	46.7	50	"	"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/kg dry	46.7	50	"	"	"	"	"
127-18-4	Tetrachloroethene	BRL		µg/kg dry	46.7	50	"	"	"	"	"
108-88-3	Toluene	BRL		µg/kg dry	46.7	50	"	"	"	"	"
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/kg dry	46.7	50	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg dry	46.7	50	"	"	"	"	"
71-55-6	1,1,1-Trichloroethane	BRL		µg/kg dry	46.7	50	"	"	"	"	"
79-00-5	1,1,2-Trichloroethane	BRL		µg/kg dry	46.7	50	"	"	"	"	"
79-01-6	Trichloroethene	BRL		µg/kg dry	46.7	50	"	"	"	"	"
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/kg dry	46.7	50	"	"	"	"	"
96-18-4	1,2,3-Trichloropropane	BRL		µg/kg dry	46.7	50	"	"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/kg dry	46.7	50	"	"	"	"	"
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/kg dry	46.7	50	"	"	"	"	"
75-01-4	Vinyl chloride	BRL		µg/kg dry	46.7	50	"	"	"	"	"
1330-20-7	m,p-Xylene	BRL		µg/kg dry	93.4	50	"	"	"	"	"
95-47-6	o-Xylene	BRL		µg/kg dry	46.7	50	"	"	"	"	"
109-99-9	Tetrahydrofuran	BRL		µg/kg dry	467	50	"	"	"	"	"
60-29-7	Ethyl ether	BRL		µg/kg dry	46.7	50	"	"	"	"	"
994-05-8	Tert-amyl methyl ether	BRL		µg/kg dry	46.7	50	"	"	"	"	"
637-92-3	Ethyl tert-butyl ether	BRL		µg/kg dry	46.7	50	"	"	"	"	"
108-20-3	Di-isopropyl ether	BRL		µg/kg dry	46.7	50	"	"	"	"	"
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/kg dry	467	50	"	"	"	"	"
123-91-1	1,4-Dioxane	BRL		µg/kg dry	934	50	"	"	"	"	"
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/kg dry	234	50	"	"	"	"	"
64-17-5	Ethanol	BRL		µg/kg dry	23400	50	"	"	"	"	"
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*103*		*70-130 %*			"	"	"	"	"
2037-26-5	*Toluene-d8*	*101*		*70-130 %*			"	"	"	"	"
17060-07-0	*1,2-Dichloroethane-d4*	*99*		*70-130 %*			"	"	"	"	"
1868-53-7	*Dibromofluoromethane*	*91*		*70-130 %*			"	"	"	"	"
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3550B											
83-32-9	Acenaphthene	BRL		µg/kg dry	144	1	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
208-96-8	Acenaphthylene	BRL		µg/kg dry	144	1	"	"	"	"	"
120-12-7	Anthracene	BRL		µg/kg dry	144	1	"	"	"	"	"
56-55-3	Benzo (a) anthracene	BRL		µg/kg dry	144	1	"	"	"	"	"
50-32-8	Benzo (a) pyrene	BRL		µg/kg dry	144	1	"	"	"	"	"
205-99-2	Benzo (b) fluoranthene	BRL		µg/kg dry	144	1	"	"	"	"	"
191-24-2	Benzo (g,h,i) perylene	BRL		µg/kg dry	144	1	"	"	"	"	"
207-08-9	Benzo (k) fluoranthene	BRL		µg/kg dry	144	1	"	"	"	"	"
218-01-9	Chrysene	BRL		µg/kg dry	144	1	"	"	"	"	"
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/kg dry	144	1	"	"	"	"	"
206-44-0	Fluoranthene	BRL		µg/kg dry	144	1	"	"	"	"	"
86-73-7	Fluorene	BRL		µg/kg dry	144	1	"	"	"	"	"
193-39-5	Indeno (1,2,3-cd) pyrene	BRL		µg/kg dry	144	1	"	"	"	"	"
90-12-0	1-Methylnaphthalene	BRL		µg/kg dry	144	1	"	"	"	"	"
91-57-6	2-Methylnaphthalene	BRL		µg/kg dry	144	1	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-29 SA70868-11	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3550B											
91-20-3	Naphthalene	BRL		µg/kg dry	144	1	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
85-01-8	Phenanthrene	BRL		µg/kg dry	144	1	"	"	"	"	"
129-00-0	Pyrene	BRL		µg/kg dry	144	1	"	"	"	"	"
Surrogate recoveries:											
321-60-8	*2-Fluorobiphenyl*	*92*		*30-130 %*			"	"	"	"	"
1718-51-0	*Terphenyl-dl4*	*79*		*30-130 %*			"	"	"	"	"
Total Metals by EPA 6000/7000 Series Methods											
7439-97-6	Mercury	BRL		mg/kg dry	0.0305	1	SW846 7471A	16-Nov-07	19-Nov-07	7111330	CRM
Total Metals by EPA 200 Series Methods											
7440-22-4	Silver	BRL		mg/kg dry	1.67	1	EPA 200.7	16-Nov-07	21-Nov-07	7111328	SA
7440-38-2	Arsenic	BRL		mg/kg dry	1.67	1	"	"	"	"	"
7440-39-3	Barium	8.09		mg/kg dry	1.11	1	"	"	"	"	"
7440-41-7	Beryllium	BRL		mg/kg dry	0.556	1	"	"	"	"	"
7440-43-9	Cadmium	BRL		mg/kg dry	0.556	1	"	"	"	"	"
7440-47-3	Chromium	3.13		mg/kg dry	1.11	1	"	"	"	"	"
7440-50-8	Copper	BRL		mg/kg dry	1.11	1	"	"	"	"	"
7439-96-5	Manganese	168		mg/kg dry	1.11	1	"	"	"	"	"
7440-02-0	Nickel	1.58		mg/kg dry	1.11	1	"	"	"	"	"
7439-92-1	Lead	BRL		mg/kg dry	1.67	1	"	"	"	"	"
7440-36-0	Antimony	BRL		mg/kg dry	3.34	1	"	"	"	"	"
7782-49-2	Selenium	BRL		mg/kg dry	1.67	1	"	"	"	"	"
7440-28-0	Thallium	BRL		mg/kg dry	3.34	1	"	"	"	"	"
7440-62-2	Vanadium	5.47		mg/kg dry	1.67	1	"	"	"	"	"
7440-66-6	Zinc	11.9		mg/kg dry	1.11	1	"	"	"	"	"
General Chemistry Parameters											
	% Solids	89.5		%		1	SM2540 G Mod.	16-Nov-07	16-Nov-07	7111397	DG

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-30 SA70868-12	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds											
	VOC Extraction	Field extracted		N/A		1	VOC Soil Extraction	12-Nov-07	12-Nov-07	7111029	DG
Volatile Organic Compounds											
Prepared by method SW846 5030 Soil (high level)											
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon	BRL		µg/kg dry	52.8	50	SW 846 8260B	16-Nov-07	16-Nov-07	7111382	adu
67-64-1	Acetone	BRL		µg/kg dry	528	50	"	"	"	"	"
107-13-1	Acrylonitrile	BRL		µg/kg dry	52.8	50	"	"	"	"	"
71-43-2	Benzene	BRL		µg/kg dry	52.8	50	"	"	"	"	"
108-86-1	Bromobenzene	BRL		µg/kg dry	52.8	50	"	"	"	"	"
74-97-5	Bromochloromethane	BRL		µg/kg dry	52.8	50	"	"	"	"	"
75-27-4	Bromodichloromethane	BRL		µg/kg dry	52.8	50	"	"	"	"	"
75-25-2	Bromoform	BRL		µg/kg dry	52.8	50	"	"	"	"	"
74-83-9	Bromomethane	BRL		µg/kg dry	106	50	"	"	"	"	"
78-93-3	2-Butanone (MEK)	BRL		µg/kg dry	528	50	"	"	"	"	"
104-51-8	n-Butylbenzene	BRL		µg/kg dry	52.8	50	"	"	"	"	"
135-98-8	sec-Butylbenzene	BRL		µg/kg dry	52.8	50	"	"	"	"	"
98-06-6	tert-Butylbenzene	BRL		µg/kg dry	52.8	50	"	"	"	"	"
75-15-0	Carbon disulfide	BRL		µg/kg dry	264	50	"	"	"	"	"
56-23-5	Carbon tetrachloride	BRL		µg/kg dry	52.8	50	"	"	"	"	"
108-90-7	Chlorobenzene	BRL		µg/kg dry	52.8	50	"	"	"	"	"
75-00-3	Chloroethane	BRL		µg/kg dry	106	50	"	"	"	"	"
67-66-3	Chloroform	BRL		µg/kg dry	52.8	50	"	"	"	"	"
74-87-3	Chloromethane	BRL		µg/kg dry	106	50	"	"	"	"	"
95-49-8	2-Chlorotoluene	BRL		µg/kg dry	52.8	50	"	"	"	"	"
106-43-4	4-Chlorotoluene	BRL		µg/kg dry	52.8	50	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/kg dry	106	50	"	"	"	"	"
124-48-1	Dibromochloromethane	BRL		µg/kg dry	52.8	50	"	"	"	"	"
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/kg dry	52.8	50	"	"	"	"	"
74-95-3	Dibromomethane	BRL		µg/kg dry	52.8	50	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg dry	52.8	50	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg dry	52.8	50	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL		µg/kg dry	52.8	50	"	"	"	"	"
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/kg dry	106	50	"	"	"	"	"
75-34-3	1,1-Dichloroethane	BRL		µg/kg dry	52.8	50	"	"	"	"	"
107-06-2	1,2-Dichloroethane	BRL		µg/kg dry	52.8	50	"	"	"	"	"
75-35-4	1,1-Dichloroethene	BRL		µg/kg dry	52.8	50	"	"	"	"	"
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	52.8	50	"	"	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL		µg/kg dry	52.8	50	"	"	"	"	"
78-87-5	1,2-Dichloropropane	BRL		µg/kg dry	52.8	50	"	"	"	"	"
142-28-9	1,3-Dichloropropane	BRL		µg/kg dry	52.8	50	"	"	"	"	"
594-20-7	2,2-Dichloropropane	BRL		µg/kg dry	52.8	50	"	"	"	"	"
563-58-6	1,1-Dichloropropene	BRL		µg/kg dry	52.8	50	"	"	"	"	"
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/kg dry	52.8	50	"	"	"	"	"
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/kg dry	52.8	50	"	"	"	"	"
100-41-4	Ethylbenzene	BRL		µg/kg dry	52.8	50	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL		µg/kg dry	52.8	50	"	"	"	"	"
591-78-6	2-Hexanone (MBK)	BRL		µg/kg dry	528	50	"	"	"	"	"
98-82-8	Isopropylbenzene	BRL		µg/kg dry	52.8	50	"	"	"	"	"
99-87-6	4-Isopropyltoluene	BRL		µg/kg dry	52.8	50	"	"	"	"	"
1634-04-4	Methyl tert-butyl ether	BRL		µg/kg dry	52.8	50	"	"	"	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/kg dry	528	50	"	"	"	"	"
75-09-2	Methylene chloride	BRL		µg/kg dry	528	50	"	"	"	"	"
91-20-3	Naphthalene	BRL		µg/kg dry	52.8	50	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-30	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07
SA70868-12				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds											
Volatile Organic Compounds											
Prepared by method SW846 5030 Soil (high level)											
103-65-1	n-Propylbenzene	BRL		µg/kg dry	52.8	50	SW 846 8260B	16-Nov-07	16-Nov-07	7111382	adu
100-42-5	Styrene	BRL		µg/kg dry	52.8	50	"	"	"	"	"
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/kg dry	52.8	50	"	"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/kg dry	52.8	50	"	"	"	"	"
127-18-4	Tetrachloroethene	BRL		µg/kg dry	52.8	50	"	"	"	"	"
108-88-3	Toluene	BRL		µg/kg dry	52.8	50	"	"	"	"	"
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/kg dry	52.8	50	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg dry	52.8	50	"	"	"	"	"
71-55-6	1,1,1-Trichloroethane	BRL		µg/kg dry	52.8	50	"	"	"	"	"
79-00-5	1,1,2-Trichloroethane	BRL		µg/kg dry	52.8	50	"	"	"	"	"
79-01-6	Trichloroethene	BRL		µg/kg dry	52.8	50	"	"	"	"	"
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/kg dry	52.8	50	"	"	"	"	"
96-18-4	1,2,3-Trichloropropane	BRL		µg/kg dry	52.8	50	"	"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/kg dry	52.8	50	"	"	"	"	"
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/kg dry	52.8	50	"	"	"	"	"
75-01-4	Vinyl chloride	BRL		µg/kg dry	52.8	50	"	"	"	"	"
1330-20-7	m,p-Xylene	BRL		µg/kg dry	106	50	"	"	"	"	"
95-47-6	o-Xylene	BRL		µg/kg dry	52.8	50	"	"	"	"	"
109-99-9	Tetrahydrofuran	BRL		µg/kg dry	528	50	"	"	"	"	"
60-29-7	Ethyl ether	BRL		µg/kg dry	52.8	50	"	"	"	"	"
994-05-8	Tert-amyl methyl ether	BRL		µg/kg dry	52.8	50	"	"	"	"	"
637-92-3	Ethyl tert-butyl ether	BRL		µg/kg dry	52.8	50	"	"	"	"	"
108-20-3	Di-isopropyl ether	BRL		µg/kg dry	52.8	50	"	"	"	"	"
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/kg dry	528	50	"	"	"	"	"
123-91-1	1,4-Dioxane	BRL		µg/kg dry	1060	50	"	"	"	"	"
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/kg dry	264	50	"	"	"	"	"
64-17-5	Ethanol	BRL		µg/kg dry	26400	50	"	"	"	"	"
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*100*		*70-130 %*			"	"	"	"	"
2037-26-5	*Toluene-d8*	*102*		*70-130 %*			"	"	"	"	"
17060-07-0	*1,2-Dichloroethane-d4*	*102*		*70-130 %*			"	"	"	"	"
1868-53-7	*Dibromofluoromethane*	*93*		*70-130 %*			"	"	"	"	"
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3550B											
83-32-9	Acenaphthene	BRL		µg/kg dry	163	1	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
208-96-8	Acenaphthylene	BRL		µg/kg dry	163	1	"	"	"	"	"
120-12-7	Anthracene	BRL		µg/kg dry	163	1	"	"	"	"	"
56-55-3	Benzo (a) anthracene	BRL		µg/kg dry	163	1	"	"	"	"	"
50-32-8	Benzo (a) pyrene	BRL		µg/kg dry	163	1	"	"	"	"	"
205-99-2	Benzo (b) fluoranthene	BRL		µg/kg dry	163	1	"	"	"	"	"
191-24-2	Benzo (g,h,i) perylene	BRL		µg/kg dry	163	1	"	"	"	"	"
207-08-9	Benzo (k) fluoranthene	BRL		µg/kg dry	163	1	"	"	"	"	"
218-01-9	Chrysene	BRL		µg/kg dry	163	1	"	"	"	"	"
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/kg dry	163	1	"	"	"	"	"
206-44-0	Fluoranthene	BRL		µg/kg dry	163	1	"	"	"	"	"
86-73-7	Fluorene	BRL		µg/kg dry	163	1	"	"	"	"	"
193-39-5	Indeno (1,2,3-cd) pyrene	BRL		µg/kg dry	163	1	"	"	"	"	"
90-12-0	1-Methylnaphthalene	BRL		µg/kg dry	163	1	"	"	"	"	"
91-57-6	2-Methylnaphthalene	BRL		µg/kg dry	163	1	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-30 SA70868-12	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3550B											
91-20-3	Naphthalene	BRL		µg/kg dry	163	1	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
85-01-8	Phenanthrene	BRL		µg/kg dry	163	1	"	"	"	"	"
129-00-0	Pyrene	BRL		µg/kg dry	163	1	"	"	"	"	"
Surrogate recoveries:											
321-60-8	*2-Fluorobiphenyl*	*77*		*30-130 %*			"	"	"	"	"
1718-51-0	*Terphenyl-dl4*	*85*		*30-130 %*			"	"	"	"	"
Total Metals by EPA 6000/7000 Series Methods											
7439-97-6	Mercury	0.0355		mg/kg dry	0.0332	1	SW846 7471A	16-Nov-07	19-Nov-07	7111330	CRM
Total Metals by EPA 200 Series Methods											
7440-22-4	Silver	BRL		mg/kg dry	1.60	1	EPA 200.7	16-Nov-07	21-Nov-07	7111328	SA
7440-38-2	Arsenic	BRL		mg/kg dry	1.60	1	"	"	"	"	"
7440-41-7	Beryllium	BRL		mg/kg dry	0.533	1	"	"	"	"	"
7440-43-9	Cadmium	0.613		mg/kg dry	0.533	1	"	"	"	"	"
7440-47-3	Chromium	67.2		mg/kg dry	1.07	1	"	"	"	"	"
7440-50-8	Copper	32.0		mg/kg dry	1.07	1	"	"	"	"	"
7440-02-0	Nickel	4.43		mg/kg dry	1.07	1	"	"	"	"	"
7439-92-1	Lead	140		mg/kg dry	1.60	1	"	"	"	"	"
7440-36-0	Antimony	BRL		mg/kg dry	3.20	1	"	"	"	"	"
7782-49-2	Selenium	BRL		mg/kg dry	1.60	1	"	"	"	"	"
7440-28-0	Thallium	BRL		mg/kg dry	3.20	1	"	"	"	"	"
7440-66-6	Zinc	68.5		mg/kg dry	1.07	1	"	"	"	"	"
General Chemistry Parameters											
	% Solids	80.6		%		1	SM2540 G Mod.	16-Nov-07	16-Nov-07	7111397	DG

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-31 SA70868-13	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds											
	VOC Extraction	Field extracted		N/A		1	VOC Soil Extraction	12-Nov-07	12-Nov-07	7111029	DG
Volatile Organic Compounds											
Prepared by method SW846 5030 Soil (high level)											
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon	BRL		µg/kg dry	69.6	50	SW 846 8260B	16-Nov-07	16-Nov-07	7111382	adu
67-64-1	Acetone	BRL		µg/kg dry	696	50	"	"	"	"	"
107-13-1	Acrylonitrile	BRL		µg/kg dry	69.6	50	"	"	"	"	"
71-43-2	Benzene	BRL		µg/kg dry	69.6	50	"	"	"	"	"
108-86-1	Bromobenzene	BRL		µg/kg dry	69.6	50	"	"	"	"	"
74-97-5	Bromochloromethane	BRL		µg/kg dry	69.6	50	"	"	"	"	"
75-27-4	Bromodichloromethane	BRL		µg/kg dry	69.6	50	"	"	"	"	"
75-25-2	Bromoform	BRL		µg/kg dry	69.6	50	"	"	"	"	"
74-83-9	Bromomethane	BRL		µg/kg dry	139	50	"	"	"	"	"
78-93-3	2-Butanone (MEK)	BRL		µg/kg dry	696	50	"	"	"	"	"
104-51-8	n-Butylbenzene	BRL		µg/kg dry	69.6	50	"	"	"	"	"
135-98-8	sec-Butylbenzene	BRL		µg/kg dry	69.6	50	"	"	"	"	"
98-06-6	tert-Butylbenzene	BRL		µg/kg dry	69.6	50	"	"	"	"	"
75-15-0	Carbon disulfide	BRL		µg/kg dry	348	50	"	"	"	"	"
56-23-5	Carbon tetrachloride	BRL		µg/kg dry	69.6	50	"	"	"	"	"
108-90-7	Chlorobenzene	BRL		µg/kg dry	69.6	50	"	"	"	"	"
75-00-3	Chloroethane	BRL		µg/kg dry	139	50	"	"	"	"	"
67-66-3	Chloroform	BRL		µg/kg dry	69.6	50	"	"	"	"	"
74-87-3	Chloromethane	BRL		µg/kg dry	139	50	"	"	"	"	"
95-49-8	2-Chlorotoluene	BRL		µg/kg dry	69.6	50	"	"	"	"	"
106-43-4	4-Chlorotoluene	BRL		µg/kg dry	69.6	50	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/kg dry	139	50	"	"	"	"	"
124-48-1	Dibromochloromethane	BRL		µg/kg dry	69.6	50	"	"	"	"	"
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/kg dry	69.6	50	"	"	"	"	"
74-95-3	Dibromomethane	BRL		µg/kg dry	69.6	50	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg dry	69.6	50	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg dry	69.6	50	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL		µg/kg dry	69.6	50	"	"	"	"	"
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/kg dry	139	50	"	"	"	"	"
75-34-3	1,1-Dichloroethane	BRL		µg/kg dry	69.6	50	"	"	"	"	"
107-06-2	1,2-Dichloroethane	BRL		µg/kg dry	69.6	50	"	"	"	"	"
75-35-4	1,1-Dichloroethene	BRL		µg/kg dry	69.6	50	"	"	"	"	"
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	69.6	50	"	"	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL		µg/kg dry	69.6	50	"	"	"	"	"
78-87-5	1,2-Dichloropropane	BRL		µg/kg dry	69.6	50	"	"	"	"	"
142-28-9	1,3-Dichloropropane	BRL		µg/kg dry	69.6	50	"	"	"	"	"
594-20-7	2,2-Dichloropropane	BRL		µg/kg dry	69.6	50	"	"	"	"	"
563-58-6	1,1-Dichloropropene	BRL		µg/kg dry	69.6	50	"	"	"	"	"
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/kg dry	69.6	50	"	"	"	"	"
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/kg dry	69.6	50	"	"	"	"	"
100-41-4	Ethylbenzene	BRL		µg/kg dry	69.6	50	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL		µg/kg dry	69.6	50	"	"	"	"	"
591-78-6	2-Hexanone (MBK)	BRL		µg/kg dry	696	50	"	"	"	"	"
98-82-8	Isopropylbenzene	BRL		µg/kg dry	69.6	50	"	"	"	"	"
99-87-6	4-Isopropyltoluene	BRL		µg/kg dry	69.6	50	"	"	"	"	"
1634-04-4	Methyl tert-butyl ether	BRL		µg/kg dry	69.6	50	"	"	"	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/kg dry	696	50	"	"	"	"	"
75-09-2	Methylene chloride	BRL		µg/kg dry	696	50	"	"	"	"	"
91-20-3	Naphthalene	BRL		µg/kg dry	69.6	50	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-31	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07
SA70868-13				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds											
Volatile Organic Compounds											
Prepared by method SW846 5030 Soil (high level)											
103-65-1	n-Propylbenzene	BRL		µg/kg dry	69.6	50	SW 846 8260B	16-Nov-07	16-Nov-07	7111382	adu
100-42-5	Styrene	BRL		µg/kg dry	69.6	50	"	"	"	"	"
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/kg dry	69.6	50	"	"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/kg dry	69.6	50	"	"	"	"	"
127-18-4	Tetrachloroethene	BRL		µg/kg dry	69.6	50	"	"	"	"	"
108-88-3	Toluene	BRL		µg/kg dry	69.6	50	"	"	"	"	"
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/kg dry	69.6	50	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg dry	69.6	50	"	"	"	"	"
71-55-6	1,1,1-Trichloroethane	BRL		µg/kg dry	69.6	50	"	"	"	"	"
79-00-5	1,1,2-Trichloroethane	BRL		µg/kg dry	69.6	50	"	"	"	"	"
79-01-6	Trichloroethene	BRL		µg/kg dry	69.6	50	"	"	"	"	"
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/kg dry	69.6	50	"	"	"	"	"
96-18-4	1,2,3-Trichloropropane	BRL		µg/kg dry	69.6	50	"	"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/kg dry	69.6	50	"	"	"	"	"
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/kg dry	69.6	50	"	"	"	"	"
75-01-4	Vinyl chloride	BRL		µg/kg dry	69.6	50	"	"	"	"	"
1330-20-7	m,p-Xylene	BRL		µg/kg dry	139	50	"	"	"	"	"
95-47-6	o-Xylene	BRL		µg/kg dry	69.6	50	"	"	"	"	"
109-99-9	Tetrahydrofuran	BRL		µg/kg dry	696	50	"	"	"	"	"
60-29-7	Ethyl ether	BRL		µg/kg dry	69.6	50	"	"	"	"	"
994-05-8	Tert-amyl methyl ether	BRL		µg/kg dry	69.6	50	"	"	"	"	"
637-92-3	Ethyl tert-butyl ether	BRL		µg/kg dry	69.6	50	"	"	"	"	"
108-20-3	Di-isopropyl ether	BRL		µg/kg dry	69.6	50	"	"	"	"	"
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/kg dry	696	50	"	"	"	"	"
123-91-1	1,4-Dioxane	BRL		µg/kg dry	1390	50	"	"	"	"	"
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/kg dry	348	50	"	"	"	"	"
64-17-5	Ethanol	BRL		µg/kg dry	34800	50	"	"	"	"	"
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*104*		*70-130 %*			"	"	"	"	"
2037-26-5	*Toluene-d8*	*102*		*70-130 %*			"	"	"	"	"
17060-07-0	*1,2-Dichloroethane-d4*	*104*		*70-130 %*			"	"	"	"	"
1868-53-7	*Dibromofluoromethane*	*93*		*70-130 %*			"	"	"	"	"
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3550B											
83-32-9	Acenaphthene	BRL		µg/kg dry	175	1	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
208-96-8	Acenaphthylene	BRL		µg/kg dry	175	1	"	"	"	"	"
120-12-7	Anthracene	BRL		µg/kg dry	175	1	"	"	"	"	"
56-55-3	Benzo (a) anthracene	BRL		µg/kg dry	175	1	"	"	"	"	"
50-32-8	Benzo (a) pyrene	BRL		µg/kg dry	175	1	"	"	"	"	"
205-99-2	Benzo (b) fluoranthene	BRL		µg/kg dry	175	1	"	"	"	"	"
191-24-2	Benzo (g,h,i) perylene	BRL		µg/kg dry	175	1	"	"	"	"	"
207-08-9	Benzo (k) fluoranthene	BRL		µg/kg dry	175	1	"	"	"	"	"
218-01-9	Chrysene	BRL		µg/kg dry	175	1	"	"	"	"	"
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/kg dry	175	1	"	"	"	"	"
206-44-0	Fluoranthene	184		µg/kg dry	175	1	"	"	"	"	"
86-73-7	Fluorene	BRL		µg/kg dry	175	1	"	"	"	"	"
193-39-5	Indeno (1,2,3-cd) pyrene	BRL		µg/kg dry	175	1	"	"	"	"	"
90-12-0	1-Methylnaphthalene	BRL		µg/kg dry	175	1	"	"	"	"	"
91-57-6	2-Methylnaphthalene	BRL		µg/kg dry	175	1	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-31 SA70868-13	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3550B											
91-20-3	Naphthalene	BRL		µg/kg dry	175	1	SW846 8270C	15-Nov-07	17-Nov-07	7111248	M.B
85-01-8	Phenanthrene	BRL		µg/kg dry	175	1	"	"	"	"	"
129-00-0	Pyrene	BRL		µg/kg dry	175	1	"	"	"	"	"
Surrogate recoveries:											
321-60-8	*2-Fluorobiphenyl*	*77*		*30-130 %*			"	"	"	"	"
1718-51-0	*Terphenyl-dl4*	*83*		*30-130 %*			"	"	"	"	"
Total Metals by EPA 6000/7000 Series Methods											
7439-97-6	Mercury	0.100		mg/kg dry	0.0360	1	SW846 7471A	16-Nov-07	19-Nov-07	7111330	CRM
Total Metals by EPA 200 Series Methods											
7440-22-4	Silver	BRL		mg/kg dry	1.80	1	EPA 200.7	16-Nov-07	21-Nov-07	7111328	SA
7440-38-2	Arsenic	BRL		mg/kg dry	1.80	1	"	"	"	"	"
7440-41-7	Beryllium	BRL		mg/kg dry	0.600	1	"	"	"	"	"
7440-43-9	Cadmium	BRL		mg/kg dry	0.600	1	"	"	"	"	"
7440-47-3	Chromium	9.96		mg/kg dry	1.20	1	"	"	"	"	"
7440-50-8	Copper	5.82		mg/kg dry	1.20	1	"	"	"	"	"
7440-02-0	Nickel	1.92		mg/kg dry	1.20	1	"	"	"	"	"
7439-92-1	Lead	14.8		mg/kg dry	1.80	1	"	"	"	"	"
7440-36-0	Antimony	BRL		mg/kg dry	3.60	1	"	"	"	"	"
7782-49-2	Selenium	BRL		mg/kg dry	1.80	1	"	"	"	"	"
7440-28-0	Thallium	BRL		mg/kg dry	3.60	1	"	"	"	"	"
7440-66-6	Zinc	81.4		mg/kg dry	1.20	1	"	"	"	"	"
General Chemistry Parameters											
	% Solids	74.7		%		1	SM2540 G Mod.	16-Nov-07	16-Nov-07	7111397	DG

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-32 SA70868-14	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Batch*	*Analyst*
SPLP Metals by EPA 1312 & 6000/7000 Series Methods											
	SPLP Extraction	Completed		N/A		1	SW846 1312	14-Nov-07	14-Nov-07	7111227	DG
7439-92-1	Lead	BRL		mg/l	0.0150	1	SW846 1312/6010B	15-Nov-07	18-Nov-07	7111473	HB

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-33 SA70868-15	1009825.04/100	Soil	08-Nov-07 00:00	09-Nov-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
SPLP Metals by EPA 1312 & 6000/7000 Series Methods											
	SPLP Extraction	Completed		N/A		1	SW846 1312	14-Nov-07	14-Nov-07	7111227	DG
7439-92-1	Lead	0.0201		mg/l	0.0150	1	SW846 1312/6010B	15-Nov-07	18-Nov-07	7111473	HB

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111331 - SW846 5030 Soil (high level)										
Blank (7111331-BLK1)										
Prepared & Analyzed: 15-Nov-07										
1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/kg wet	1.0						
Acetone	BRL		µg/kg wet	10.0						
Acrylonitrile	BRL		µg/kg wet	1.0						
Benzene	BRL		µg/kg wet	1.0						
Bromobenzene	BRL		µg/kg wet	1.0						
Bromochloromethane	BRL		µg/kg wet	1.0						
Bromodichloromethane	BRL		µg/kg wet	1.0						
Bromoform	BRL		µg/kg wet	1.0						
Bromomethane	BRL		µg/kg wet	2.0						
2-Butanone (MEK)	BRL		µg/kg wet	10.0						
n-Butylbenzene	BRL		µg/kg wet	1.0						
sec-Butylbenzene	BRL		µg/kg wet	1.0						
tert-Butylbenzene	BRL		µg/kg wet	1.0						
Carbon disulfide	BRL		µg/kg wet	5.0						
Carbon tetrachloride	BRL		µg/kg wet	1.0						
Chlorobenzene	BRL		µg/kg wet	1.0						
Chloroethane	BRL		µg/kg wet	2.0						
Chloroform	BRL		µg/kg wet	1.0						
Chloromethane	BRL		µg/kg wet	2.0						
2-Chlorotoluene	BRL		µg/kg wet	1.0						
4-Chlorotoluene	BRL		µg/kg wet	1.0						
1,2-Dibromo-3-chloropropane	BRL		µg/kg wet	2.0						
Dibromochloromethane	BRL		µg/kg wet	1.0						
1,2-Dibromoethane (EDB)	BRL		µg/kg wet	1.0						
Dibromomethane	BRL		µg/kg wet	1.0						
1,2-Dichlorobenzene	BRL		µg/kg wet	1.0						
1,3-Dichlorobenzene	BRL		µg/kg wet	1.0						
1,4-Dichlorobenzene	BRL		µg/kg wet	1.0						
Dichlorodifluoromethane (Freon12)	BRL		µg/kg wet	2.0						
1,1-Dichloroethane	BRL		µg/kg wet	1.0						
1,2-Dichloroethane	BRL		µg/kg wet	1.0						
1,1-Dichloroethene	BRL		µg/kg wet	1.0						
cis-1,2-Dichloroethene	BRL		µg/kg wet	1.0						
trans-1,2-Dichloroethene	BRL		µg/kg wet	1.0						
1,2-Dichloropropane	BRL		µg/kg wet	1.0						
1,3-Dichloropropane	BRL		µg/kg wet	1.0						
2,2-Dichloropropane	BRL		µg/kg wet	1.0						
1,1-Dichloropropene	BRL		µg/kg wet	1.0						
cis-1,3-Dichloropropene	BRL		µg/kg wet	1.0						
trans-1,3-Dichloropropene	BRL		µg/kg wet	1.0						
Ethylbenzene	BRL		µg/kg wet	1.0						
Hexachlorobutadiene	BRL		µg/kg wet	1.0						
2-Hexanone (MBK)	BRL		µg/kg wet	10.0						
Isopropylbenzene	BRL		µg/kg wet	1.0						
4-Isopropyltoluene	BRL		µg/kg wet	1.0						
Methyl tert-butyl ether	BRL		µg/kg wet	1.0						
4-Methyl-2-pentanone (MIBK)	BRL		µg/kg wet	10.0						
Methylene chloride	BRL		µg/kg wet	10.0						
Naphthalene	BRL		µg/kg wet	1.0						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111331 - SW846 5030 Soil (high level)										
Blank (7111331-BLK1)										
Prepared & Analyzed: 15-Nov-07										
n-Propylbenzene	BRL		µg/kg wet	1.0						
Styrene	BRL		µg/kg wet	1.0						
1,1,1,2-Tetrachloroethane	BRL		µg/kg wet	1.0						
1,1,2,2-Tetrachloroethane	BRL		µg/kg wet	1.0						
Tetrachloroethene	BRL		µg/kg wet	1.0						
Toluene	BRL		µg/kg wet	1.0						
1,2,3-Trichlorobenzene	BRL		µg/kg wet	1.0						
1,2,4-Trichlorobenzene	BRL		µg/kg wet	1.0						
1,1,1-Trichloroethane	BRL		µg/kg wet	1.0						
1,1,2-Trichloroethane	BRL		µg/kg wet	1.0						
Trichloroethene	BRL		µg/kg wet	1.0						
Trichlorofluoromethane (Freon 11)	BRL		µg/kg wet	1.0						
1,2,3-Trichloropropane	BRL		µg/kg wet	1.0						
1,2,4-Trimethylbenzene	BRL		µg/kg wet	1.0						
1,3,5-Trimethylbenzene	BRL		µg/kg wet	1.0						
Vinyl chloride	BRL		µg/kg wet	1.0						
m,p-Xylene	BRL		µg/kg wet	2.0						
o-Xylene	BRL		µg/kg wet	1.0						
Tetrahydrofuran	BRL		µg/kg wet	10.0						
Ethyl ether	BRL		µg/kg wet	1.0						
Tert-amyl methyl ether	BRL		µg/kg wet	1.0						
Ethyl tert-butyl ether	BRL		µg/kg wet	1.0						
Di-isopropyl ether	BRL		µg/kg wet	1.0						
Tert-Butanol / butyl alcohol	BRL		µg/kg wet	10.0						
1,4-Dioxane	BRL		µg/kg wet	20.0						
trans-1,4-Dichloro-2-butene	BRL		µg/kg wet	5.0						
Ethanol	BRL		µg/kg wet	500						
Surrogate: 4-Bromofluorobenzene	*30.6*		µg/kg wet		*30.0*		*102*	*70-130*		
Surrogate: Toluene-d8	*30.8*		µg/kg wet		*30.0*		*103*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*31.0*		µg/kg wet		*30.0*		*103*	*70-130*		
Surrogate: Dibromofluoromethane	*28.6*		µg/kg wet		*30.0*		*95*	*70-130*		
LCS (7111331-BS1)										
Prepared & Analyzed: 15-Nov-07										
1,1,2-Trichlorotrifluoroethane (Freon 113)	17.1		µg/kg wet		20.0		86	70-130		
Acetone	18.1		µg/kg wet		20.0		90	0-177		
Acrylonitrile	19.8		µg/kg wet		20.0		99	70-130		
Benzene	20.1		µg/kg wet		20.0		101	70-130		
Bromobenzene	22.0		µg/kg wet		20.0		110	70-130		
Bromochloromethane	21.8		µg/kg wet		20.0		109	70-130		
Bromodichloromethane	20.2		µg/kg wet		20.0		101	70-130		
Bromoform	18.3		µg/kg wet		20.0		92	70-130		
Bromomethane	23.4		µg/kg wet		20.0		117	61.3-136		
2-Butanone (MEK)	19.2		µg/kg wet		20.0		96	20.6-137		
n-Butylbenzene	15.7		µg/kg wet		20.0		79	70-130		
sec-Butylbenzene	19.2		µg/kg wet		20.0		96	70-130		
tert-Butylbenzene	20.4		µg/kg wet		20.0		102	70-130		
Carbon disulfide	14.5		µg/kg wet		20.0		73	70-130		
Carbon tetrachloride	17.1		µg/kg wet		20.0		86	70-130		
Chlorobenzene	21.2		µg/kg wet		20.0		106	70-130		
Chloroethane	16.6		µg/kg wet		20.0		83	64.6-134		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111331 - SW846 5030 Soil (high level)										
LCS (7111331-BS1)										
Prepared & Analyzed: 15-Nov-07										
Chloroform	20.8		µg/kg wet		20.0		104	70-130		
Chloromethane	19.2		µg/kg wet		20.0		96	70-130		
2-Chlorotoluene	21.1		µg/kg wet		20.0		106	70-130		
4-Chlorotoluene	20.4		µg/kg wet		20.0		102	70-130		
1,2-Dibromo-3-chloropropane	17.0		µg/kg wet		20.0		85	70-130		
Dibromochloromethane	18.6		µg/kg wet		20.0		93	70-137		
1,2-Dibromoethane (EDB)	21.6		µg/kg wet		20.0		108	70-130		
Dibromomethane	21.8		µg/kg wet		20.0		109	70-130		
1,2-Dichlorobenzene	21.0		µg/kg wet		20.0		105	70-130		
1,3-Dichlorobenzene	21.2		µg/kg wet		20.0		106	70-130		
1,4-Dichlorobenzene	19.6		µg/kg wet		20.0		98	70-130		
Dichlorodifluoromethane (Freon12)	17.1		µg/kg wet		20.0		85	29.9-190		
1,1-Dichloroethane	20.6		µg/kg wet		20.0		103	70-130		
1,2-Dichloroethane	20.5		µg/kg wet		20.0		102	70-130		
1,1-Dichloroethene	17.2		µg/kg wet		20.0		86	70-130		
cis-1,2-Dichloroethene	20.9		µg/kg wet		20.0		104	70-130		
trans-1,2-Dichloroethene	19.0		µg/kg wet		20.0		95	70-130		
1,2-Dichloropropane	20.6		µg/kg wet		20.0		103	70-130		
1,3-Dichloropropane	21.2		µg/kg wet		20.0		106	70-130		
2,2-Dichloropropane	18.3		µg/kg wet		20.0		92	70-130		
1,1-Dichloropropene	17.6		µg/kg wet		20.0		88	70-130		
cis-1,3-Dichloropropene	19.3		µg/kg wet		20.0		97	70-130		
trans-1,3-Dichloropropene	21.5		µg/kg wet		20.0		107	70-130		
Ethylbenzene	20.8		µg/kg wet		20.0		104	70-130		
Hexachlorobutadiene	16.8		µg/kg wet		20.0		84	60.6-135		
2-Hexanone (MBK)	18.2		µg/kg wet		20.0		91	70-130		
Isopropylbenzene	19.8		µg/kg wet		20.0		99	70-130		
4-Isopropyltoluene	18.5		µg/kg wet		20.0		92	70-130		
Methyl tert-butyl ether	21.4		µg/kg wet		20.0		107	70-130		
4-Methyl-2-pentanone (MIBK)	19.0		µg/kg wet		20.0		95	46-139		
Methylene chloride	18.8		µg/kg wet		20.0		94	70-130		
Naphthalene	19.8		µg/kg wet		20.0		99	70-130		
n-Propylbenzene	19.8		µg/kg wet		20.0		99	70-130		
Styrene	21.4		µg/kg wet		20.0		107	70-130		
1,1,1,2-Tetrachloroethane	20.6		µg/kg wet		20.0		103	70-130		
1,1,2,2-Tetrachloroethane	21.6		µg/kg wet		20.0		108	70-130		
Tetrachloroethene	19.5		µg/kg wet		20.0		98	70-130		
Toluene	19.8		µg/kg wet		20.0		99	70-130		
1,2,3-Trichlorobenzene	18.2		µg/kg wet		20.0		91	70-130		
1,2,4-Trichlorobenzene	16.8		µg/kg wet		20.0		84	70-130		
1,1,1-Trichloroethane	19.0		µg/kg wet		20.0		95	70-130		
1,1,2-Trichloroethane	21.8		µg/kg wet		20.0		109	70-130		
Trichloroethene	18.9		µg/kg wet		20.0		94	70-130		
Trichlorofluoromethane (Freon 11)	15.9		µg/kg wet		20.0		79	56.6-150		
1,2,3-Trichloropropane	24.6		µg/kg wet		20.0		123	70-130		
1,2,4-Trimethylbenzene	20.2		µg/kg wet		20.0		101	70-130		
1,3,5-Trimethylbenzene	20.6		µg/kg wet		20.0		103	70-130		
Vinyl chloride	18.0		µg/kg wet		20.0		90	70-130		
m,p-Xylene	41.3		µg/kg wet		40.0		103	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111331 - SW846 5030 Soil (high level)										
LCS (7111331-BS1)										
Prepared & Analyzed: 15-Nov-07										
o-Xylene	21.8		µg/kg wet		20.0		109	70-130		
Tetrahydrofuran	19.5		µg/kg wet		20.0		98	70-130		
Ethyl ether	20.0		µg/kg wet		20.0		100	64.1-136		
Tert-amyl methyl ether	20.0		µg/kg wet		20.0		100	70-130		
Ethyl tert-butyl ether	21.5		µg/kg wet		20.0		107	70-130		
Di-isopropyl ether	19.0		µg/kg wet		20.0		95	70-130		
Tert-Butanol / butyl alcohol	195		µg/kg wet		200		97	70-130		
1,4-Dioxane	216		µg/kg wet		200		108	34.8-156		
trans-1,4-Dichloro-2-butene	15.6		µg/kg wet		20.0		78	70-130		
Ethanol	365		µg/kg wet		400		91	70-130		
Surrogate: 4-Bromofluorobenzene	*31.3*		µg/kg wet		*30.0*		*104*	*70-130*		
Surrogate: Toluene-d8	*30.1*		µg/kg wet		*30.0*		*100*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*29.8*		µg/kg wet		*30.0*		*100*	*70-130*		
Surrogate: Dibromofluoromethane	*29.7*		µg/kg wet		*30.0*		*99*	*70-130*		
LCS Dup (7111331-BSD1)										
Prepared & Analyzed: 15-Nov-07										
1,1,2-Trichlorotrifluoroethane (Freon 113)	16.4		µg/kg wet		20.0		82	70-130	4	25
Acetone	19.1		µg/kg wet		20.0		96	0-177	6	50
Acrylonitrile	20.6		µg/kg wet		20.0		103	70-130	4	25
Benzene	20.4		µg/kg wet		20.0		102	70-130	1	25
Bromobenzene	22.2		µg/kg wet		20.0		111	70-130	1	25
Bromochloromethane	22.2		µg/kg wet		20.0		111	70-130	2	25
Bromodichloromethane	20.1		µg/kg wet		20.0		100	70-130	0.6	25
Bromoform	18.8		µg/kg wet		20.0		94	70-130	2	25
Bromomethane	23.4		µg/kg wet		20.0		117	61.3-136	0.04	50
2-Butanone (MEK)	18.7		µg/kg wet		20.0		94	20.6-137	2	50
n-Butylbenzene	15.1		µg/kg wet		20.0		76	70-130	4	25
sec-Butylbenzene	19.1		µg/kg wet		20.0		96	70-130	0.7	25
tert-Butylbenzene	20.1		µg/kg wet		20.0		100	70-130	1	25
Carbon disulfide	14.8		µg/kg wet		20.0		74	70-130	2	25
Carbon tetrachloride	17.3		µg/kg wet		20.0		87	70-130	1	25
Chlorobenzene	21.2		µg/kg wet		20.0		106	70-130	0.1	25
Chloroethane	16.5		µg/kg wet		20.0		83	64.6-134	0.5	50
Chloroform	21.1		µg/kg wet		20.0		106	70-130	2	25
Chloromethane	19.3		µg/kg wet		20.0		96	70-130	0.3	25
2-Chlorotoluene	20.7		µg/kg wet		20.0		104	70-130	2	25
4-Chlorotoluene	20.3		µg/kg wet		20.0		102	70-130	0.2	25
1,2-Dibromo-3-chloropropane	17.4		µg/kg wet		20.0		87	70-130	2	25
Dibromochloromethane	18.8		µg/kg wet		20.0		94	70-137	1	50
1,2-Dibromoethane (EDB)	22.2		µg/kg wet		20.0		111	70-130	3	25
Dibromomethane	21.7		µg/kg wet		20.0		108	70-130	0.6	25
1,2-Dichlorobenzene	20.9		µg/kg wet		20.0		105	70-130	0.3	25
1,3-Dichlorobenzene	21.1		µg/kg wet		20.0		106	70-130	0.3	25
1,4-Dichlorobenzene	19.5		µg/kg wet		20.0		98	70-130	0.3	25
Dichlorodifluoromethane (Freon12)	16.3		µg/kg wet		20.0		82	29.9-190	4	50
1,1-Dichloroethane	20.5		µg/kg wet		20.0		103	70-130	0.2	25
1,2-Dichloroethane	20.6		µg/kg wet		20.0		103	70-130	0.8	25
1,1-Dichloroethene	17.1		µg/kg wet		20.0		85	70-130	0.5	25
cis-1,2-Dichloroethene	21.2		µg/kg wet		20.0		106	70-130	1	25
trans-1,2-Dichloroethene	19.0		µg/kg wet		20.0		95	70-130	0.05	25

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111331 - SW846 5030 Soil (high level)										
LCS Dup (7111331-BSD1)										
Prepared & Analyzed: 15-Nov-07										
1,2-Dichloropropane	20.0		µg/kg wet		20.0		100	70-130	3	25
1,3-Dichloropropane	21.5		µg/kg wet		20.0		107	70-130	1	25
2,2-Dichloropropane	18.5		µg/kg wet		20.0		92	70-130	0.9	25
1,1-Dichloropropene	17.4		µg/kg wet		20.0		87	70-130	1	25
cis-1,3-Dichloropropene	19.5		µg/kg wet		20.0		98	70-130	0.9	25
trans-1,3-Dichloropropene	22.1		µg/kg wet		20.0		111	70-130	3	25
Ethylbenzene	20.7		µg/kg wet		20.0		103	70-130	0.7	25
Hexachlorobutadiene	16.6		µg/kg wet		20.0		83	60.6-135	1	50
2-Hexanone (MBK)	18.9		µg/kg wet		20.0		95	70-130	4	25
Isopropylbenzene	19.6		µg/kg wet		20.0		98	70-130	1	25
4-Isopropyltoluene	18.3		µg/kg wet		20.0		92	70-130	1	25
Methyl tert-butyl ether	21.9		µg/kg wet		20.0		109	70-130	2	25
4-Methyl-2-pentanone (MIBK)	19.3		µg/kg wet		20.0		96	46-139	2	50
Methylene chloride	18.6		µg/kg wet		20.0		93	70-130	1	25
Naphthalene	19.2		µg/kg wet		20.0		96	70-130	3	25
n-Propylbenzene	19.4		µg/kg wet		20.0		97	70-130	2	25
Styrene	20.8		µg/kg wet		20.0		104	70-130	3	25
1,1,1,2-Tetrachloroethane	21.1		µg/kg wet		20.0		105	70-130	2	25
1,1,2,2-Tetrachloroethane	21.8		µg/kg wet		20.0		109	70-130	1	25
Tetrachloroethene	19.1		µg/kg wet		20.0		96	70-130	2	25
Toluene	19.9		µg/kg wet		20.0		100	70-130	0.5	25
1,2,3-Trichlorobenzene	17.4		µg/kg wet		20.0		87	70-130	5	25
1,2,4-Trichlorobenzene	16.2		µg/kg wet		20.0		81	70-130	4	25
1,1,1-Trichloroethane	19.0		µg/kg wet		20.0		95	70-130	0.2	25
1,1,2-Trichloroethane	21.9		µg/kg wet		20.0		109	70-130	0.5	25
Trichloroethene	19.0		µg/kg wet		20.0		95	70-130	0.7	25
Trichlorofluoromethane (Freon 11)	15.8		µg/kg wet		20.0		79	56.6-150	0.6	50
1,2,3-Trichloropropane	24.7		µg/kg wet		20.0		124	70-130	0.4	25
1,2,4-Trimethylbenzene	19.9		µg/kg wet		20.0		100	70-130	1	25
1,3,5-Trimethylbenzene	20.5		µg/kg wet		20.0		102	70-130	0.6	25
Vinyl chloride	17.5		µg/kg wet		20.0		87	70-130	3	25
m,p-Xylene	41.0		µg/kg wet		40.0		102	70-130	0.9	25
o-Xylene	21.4		µg/kg wet		20.0		107	70-130	2	25
Tetrahydrofuran	20.0		µg/kg wet		20.0		100	70-130	3	25
Ethyl ether	20.5		µg/kg wet		20.0		102	64.1-136	2	50
Tert-amyl methyl ether	20.1		µg/kg wet		20.0		100	70-130	0.3	25
Ethyl tert-butyl ether	21.8		µg/kg wet		20.0		109	70-130	1	25
Di-isopropyl ether	19.1		µg/kg wet		20.0		95	70-130	0.5	25
Tert-Butanol / butyl alcohol	189		µg/kg wet		200		95	70-130	3	25
1,4-Dioxane	209		µg/kg wet		200		104	34.8-156	4	25
trans-1,4-Dichloro-2-butene	16.0		µg/kg wet		20.0		80	70-130	3	25
Ethanol	374		µg/kg wet		400		94	70-130	3	30
Surrogate: 4-Bromofluorobenzene	*31.1*		µg/kg wet		*30.0*		*104*	*70-130*		
Surrogate: Toluene-d8	*30.1*		µg/kg wet		*30.0*		*100*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*30.8*		µg/kg wet		*30.0*		*103*	*70-130*		
Surrogate: Dibromofluoromethane	*30.3*		µg/kg wet		*30.0*		*101*	*70-130*		
Matrix Spike (7111331-MS1) **Source: SA70825-01**										
Prepared & Analyzed: 15-Nov-07										
Benzene	20.9		µg/kg dry		20.0	BRL	105	70-130		
Chlorobenzene	23.5		µg/kg dry		20.0	BRL	118	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111331 - SW846 5030 Soil (high level)										
Matrix Spike (7111331-MS1) Source: SA70825-01										
Prepared & Analyzed: 15-Nov-07										
1,1-Dichloroethene	17.2		µg/kg dry		20.0	BRL	86	70-130		
Toluene	21.8		µg/kg dry		20.0	BRL	109	70-130		
Trichloroethene	19.9		µg/kg dry		20.0	BRL	99	70-130		
Surrogate: 4-Bromofluorobenzene	*31.4*		µg/kg dry		*30.0*		*105*	*70-130*		
Surrogate: Toluene-d8	*30.3*		µg/kg dry		*30.0*		*101*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*29.5*		µg/kg dry		*30.0*		*98*	*70-130*		
Surrogate: Dibromofluoromethane	*29.4*		µg/kg dry		*30.0*		*98*	*70-130*		
Matrix Spike Dup (7111331-MSD1) Source: SA70825-01										
Prepared & Analyzed: 15-Nov-07										
Benzene	20.3		µg/kg dry		20.0	BRL	102	70-130	3	30
Chlorobenzene	22.9		µg/kg dry		20.0	BRL	114	70-130	3	30
1,1-Dichloroethene	16.3		µg/kg dry		20.0	BRL	81	70-130	6	30
Toluene	21.2		µg/kg dry		20.0	BRL	106	70-130	3	30
Trichloroethene	19.6		µg/kg dry		20.0	BRL	98	70-130	2	30
Surrogate: 4-Bromofluorobenzene	*31.3*		µg/kg dry		*30.0*		*104*	*70-130*		
Surrogate: Toluene-d8	*30.5*		µg/kg dry		*30.0*		*102*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*29.2*		µg/kg dry		*30.0*		*97*	*70-130*		
Surrogate: Dibromofluoromethane	*29.3*		µg/kg dry		*30.0*		*98*	*70-130*		
Batch 7111382 - SW846 5030 Soil (high level)										
Blank (7111382-BLK1)										
Prepared & Analyzed: 16-Nov-07										
1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/kg wet	1.0						
Acetone	BRL		µg/kg wet	10.0						
Acrylonitrile	BRL		µg/kg wet	1.0						
Benzene	BRL		µg/kg wet	1.0						
Bromobenzene	BRL		µg/kg wet	1.0						
Bromochloromethane	BRL		µg/kg wet	1.0						
Bromodichloromethane	BRL		µg/kg wet	1.0						
Bromoform	BRL		µg/kg wet	1.0						
Bromomethane	BRL		µg/kg wet	2.0						
2-Butanone (MEK)	BRL		µg/kg wet	10.0						
n-Butylbenzene	BRL		µg/kg wet	1.0						
sec-Butylbenzene	BRL		µg/kg wet	1.0						
tert-Butylbenzene	BRL		µg/kg wet	1.0						
Carbon disulfide	BRL		µg/kg wet	5.0						
Carbon tetrachloride	BRL		µg/kg wet	1.0						
Chlorobenzene	BRL		µg/kg wet	1.0						
Chloroethane	BRL		µg/kg wet	2.0						
Chloroform	BRL		µg/kg wet	1.0						
Chloromethane	BRL		µg/kg wet	2.0						
2-Chlorotoluene	BRL		µg/kg wet	1.0						
4-Chlorotoluene	BRL		µg/kg wet	1.0						
1,2-Dibromo-3-chloropropane	BRL		µg/kg wet	2.0						
Dibromochloromethane	BRL		µg/kg wet	1.0						
1,2-Dibromoethane (EDB)	BRL		µg/kg wet	1.0						
Dibromomethane	BRL		µg/kg wet	1.0						
1,2-Dichlorobenzene	BRL		µg/kg wet	1.0						
1,3-Dichlorobenzene	BRL		µg/kg wet	1.0						
1,4-Dichlorobenzene	BRL		µg/kg wet	1.0						
Dichlorodifluoromethane (Freon12)	BRL		µg/kg wet	2.0						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111382 - SW846 5030 Soil (high level)										
Blank (7111382-BLK1)										
Prepared & Analyzed: 16-Nov-07										
1,1-Dichloroethane	BRL		µg/kg wet	1.0						
1,2-Dichloroethane	BRL		µg/kg wet	1.0						
1,1-Dichloroethene	BRL		µg/kg wet	1.0						
cis-1,2-Dichloroethene	BRL		µg/kg wet	1.0						
trans-1,2-Dichloroethene	BRL		µg/kg wet	1.0						
1,2-Dichloropropane	BRL		µg/kg wet	1.0						
1,3-Dichloropropane	BRL		µg/kg wet	1.0						
2,2-Dichloropropane	BRL		µg/kg wet	1.0						
1,1-Dichloropropene	BRL		µg/kg wet	1.0						
cis-1,3-Dichloropropene	BRL		µg/kg wet	1.0						
trans-1,3-Dichloropropene	BRL		µg/kg wet	1.0						
Ethylbenzene	BRL		µg/kg wet	1.0						
Hexachlorobutadiene	BRL		µg/kg wet	1.0						
2-Hexanone (MBK)	BRL		µg/kg wet	10.0						
Isopropylbenzene	BRL		µg/kg wet	1.0						
4-Isopropyltoluene	BRL		µg/kg wet	1.0						
Methyl tert-butyl ether	BRL		µg/kg wet	1.0						
4-Methyl-2-pentanone (MIBK)	BRL		µg/kg wet	10.0						
Methylene chloride	BRL		µg/kg wet	10.0						
Naphthalene	BRL		µg/kg wet	1.0						
n-Propylbenzene	BRL		µg/kg wet	1.0						
Styrene	BRL		µg/kg wet	1.0						
1,1,1,2-Tetrachloroethane	BRL		µg/kg wet	1.0						
1,1,2,2-Tetrachloroethane	BRL		µg/kg wet	1.0						
Tetrachloroethene	BRL		µg/kg wet	1.0						
Toluene	BRL		µg/kg wet	1.0						
1,2,3-Trichlorobenzene	BRL		µg/kg wet	1.0						
1,2,4-Trichlorobenzene	BRL		µg/kg wet	1.0						
1,1,1-Trichloroethane	BRL		µg/kg wet	1.0						
1,1,2-Trichloroethane	BRL		µg/kg wet	1.0						
Trichloroethene	BRL		µg/kg wet	1.0						
Trichlorofluoromethane (Freon 11)	BRL		µg/kg wet	1.0						
1,2,3-Trichloropropane	BRL		µg/kg wet	1.0						
1,2,4-Trimethylbenzene	BRL		µg/kg wet	1.0						
1,3,5-Trimethylbenzene	BRL		µg/kg wet	1.0						
Vinyl chloride	BRL		µg/kg wet	1.0						
m,p-Xylene	BRL		µg/kg wet	2.0						
o-Xylene	BRL		µg/kg wet	1.0						
Tetrahydrofuran	BRL		µg/kg wet	10.0						
Ethyl ether	BRL		µg/kg wet	1.0						
Tert-amyl methyl ether	BRL		µg/kg wet	1.0						
Ethyl tert-butyl ether	BRL		µg/kg wet	1.0						
Di-isopropyl ether	BRL		µg/kg wet	1.0						
Tert-Butanol / butyl alcohol	BRL		µg/kg wet	10.0						
1,4-Dioxane	BRL		µg/kg wet	20.0						
trans-1,4-Dichloro-2-butene	BRL		µg/kg wet	5.0						
Ethanol	BRL		µg/kg wet	500						
Surrogate: 4-Bromofluorobenzene	*31.0*		µg/kg wet		*30.0*		*103*	*70-130*		
Surrogate: Toluene-d8	*30.3*		µg/kg wet		*30.0*		*101*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*30.7*		µg/kg wet		*30.0*		*102*	*70-130*		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111382 - SW846 5030 Soil (high level)										
Blank (7111382-BLK1)										
Prepared & Analyzed: 16-Nov-07										
Surrogate: Dibromofluoromethane	*28.8*		µg/kg wet		*30.0*		*96*	*70-130*		
LCS (7111382-BS1)										
Prepared & Analyzed: 16-Nov-07										
1,1,2-Trichlorotrifluoroethane (Freon 113)	21.2		µg/kg wet		20.0		106	70-130		
Acetone	28.2		µg/kg wet		20.0		141	24.9-167		
Acrylonitrile	20.4		µg/kg wet		20.0		102	70-130		
Benzene	22.0		µg/kg wet		20.0		110	70-130		
Bromobenzene	23.5		µg/kg wet		20.0		118	70-130		
Bromochloromethane	22.4		µg/kg wet		20.0		112	70-130		
Bromodichloromethane	21.0		µg/kg wet		20.0		105	70-130		
Bromoform	19.1		µg/kg wet		20.0		96	70-130		
Bromomethane	24.9		µg/kg wet		20.0		125	57.4-139		
2-Butanone (MEK)	23.7		µg/kg wet		20.0		118	46.9-141		
n-Butylbenzene	19.1		µg/kg wet		20.0		96	70-130		
sec-Butylbenzene	22.0		µg/kg wet		20.0		110	70-130		
tert-Butylbenzene	22.4		µg/kg wet		20.0		112	70-130		
Carbon disulfide	17.1		µg/kg wet		20.0		85	70-130		
Carbon tetrachloride	20.4		µg/kg wet		20.0		102	70-130		
Chlorobenzene	22.5		µg/kg wet		20.0		112	70-130		
Chloroethane	19.2		µg/kg wet		20.0		96	60.5-131		
Chloroform	22.1		µg/kg wet		20.0		111	70-130		
Chloromethane	22.7		µg/kg wet		20.0		113	70-130		
2-Chlorotoluene	23.4		µg/kg wet		20.0		117	70-130		
4-Chlorotoluene	22.2		µg/kg wet		20.0		111	70-130		
1,2-Dibromo-3-chloropropane	18.5		µg/kg wet		20.0		93	70-130		
Dibromochloromethane	19.3		µg/kg wet		20.0		96	70-130		
1,2-Dibromoethane (EDB)	22.6		µg/kg wet		20.0		113	70-130		
Dibromomethane	21.9		µg/kg wet		20.0		110	70-130		
1,2-Dichlorobenzene	21.7		µg/kg wet		20.0		109	70-130		
1,3-Dichlorobenzene	22.9		µg/kg wet		20.0		115	70-130		
1,4-Dichlorobenzene	20.9		µg/kg wet		20.0		104	70-130		
Dichlorodifluoromethane (Freon12)	23.9		µg/kg wet		20.0		119	47.2-175		
1,1-Dichloroethane	22.2		µg/kg wet		20.0		111	70-130		
1,2-Dichloroethane	21.1		µg/kg wet		20.0		106	70-130		
1,1-Dichloroethene	20.4		µg/kg wet		20.0		102	70-130		
cis-1,2-Dichloroethene	23.0		µg/kg wet		20.0		115	70-130		
trans-1,2-Dichloroethene	21.4		µg/kg wet		20.0		107	70-130		
1,2-Dichloropropane	21.6		µg/kg wet		20.0		108	70-130		
1,3-Dichloropropane	22.3		µg/kg wet		20.0		111	70-130		
2,2-Dichloropropane	22.9		µg/kg wet		20.0		114	70-130		
1,1-Dichloropropene	20.7		µg/kg wet		20.0		103	70-130		
cis-1,3-Dichloropropene	20.7		µg/kg wet		20.0		103	70-130		
trans-1,3-Dichloropropene	23.2		µg/kg wet		20.0		116	70-130		
Ethylbenzene	22.8		µg/kg wet		20.0		114	70-130		
Hexachlorobutadiene	19.0		µg/kg wet		20.0		95	62.4-142		
2-Hexanone (MBK)	22.2		µg/kg wet		20.0		111	70-130		
Isopropylbenzene	21.6		µg/kg wet		20.0		108	70-130		
4-Isopropyltoluene	21.2		µg/kg wet		20.0		106	70-130		
Methyl tert-butyl ether	22.4		µg/kg wet		20.0		112	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111382 - SW846 5030 Soil (high level)										
LCS (7111382-BS1)										
Prepared & Analyzed: 16-Nov-07										
4-Methyl-2-pentanone (MIBK)	20.9		µg/kg wet		20.0		105	70-135		
Methylene chloride	20.3		µg/kg wet		20.0		101	70-130		
Naphthalene	21.1		µg/kg wet		20.0		105	70-130		
n-Propylbenzene	21.7		µg/kg wet		20.0		109	70-130		
Styrene	23.6		µg/kg wet		20.0		118	70-130		
1,1,1,2-Tetrachloroethane	22.1		µg/kg wet		20.0		111	70-130		
1,1,2,2-Tetrachloroethane	22.7		µg/kg wet		20.0		114	70-130		
Tetrachloroethene	21.8		µg/kg wet		20.0		109	70-130		
Toluene	21.8		µg/kg wet		20.0		109	70-130		
1,2,3-Trichlorobenzene	20.8		µg/kg wet		20.0		104	70-130		
1,2,4-Trichlorobenzene	18.8		µg/kg wet		20.0		94	70-130		
1,1,1-Trichloroethane	21.5		µg/kg wet		20.0		108	70-130		
1,1,2-Trichloroethane	22.5		µg/kg wet		20.0		112	70-130		
Trichloroethene	21.3		µg/kg wet		20.0		106	70-130		
Trichlorofluoromethane (Freon 11)	20.3		µg/kg wet		20.0		101	58.4-143		
1,2,3-Trichloropropane	25.3		µg/kg wet		20.0		126	70-130		
1,2,4-Trimethylbenzene	22.3		µg/kg wet		20.0		111	70-130		
1,3,5-Trimethylbenzene	22.4		µg/kg wet		20.0		112	70-130		
Vinyl chloride	21.4		µg/kg wet		20.0		107	70-130		
m,p-Xylene	45.3		µg/kg wet		40.0		113	70-130		
o-Xylene	23.0		µg/kg wet		20.0		115	70-130		
Tetrahydrofuran	21.3		µg/kg wet		20.0		107	70-130		
Ethyl ether	20.6		µg/kg wet		20.0		103	70-130		
Tert-amyl methyl ether	20.6		µg/kg wet		20.0		103	70-130		
Ethyl tert-butyl ether	22.6		µg/kg wet		20.0		113	70-130		
Di-isopropyl ether	20.0		µg/kg wet		20.0		100	70-130		
Tert-Butanol / butyl alcohol	220		µg/kg wet		200		110	70-130		
1,4-Dioxane	231		µg/kg wet		200		116	54.5-152		
trans-1,4-Dichloro-2-butene	16.8		µg/kg wet		20.0		84	70-130		
Ethanol	416		µg/kg wet		400		104	70-130		
Surrogate: 4-Bromofluorobenzene	*31.2*		µg/kg wet		*30.0*		*104*	*70-130*		
Surrogate: Toluene-d8	*30.1*		µg/kg wet		*30.0*		*100*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*30.0*		µg/kg wet		*30.0*		*100*	*70-130*		
Surrogate: Dibromofluoromethane	*29.7*		µg/kg wet		*30.0*		*99*	*70-130*		
LCS Dup (7111382-BSD1)										
Prepared & Analyzed: 16-Nov-07										
1,1,2-Trichlorotrifluoroethane (Freon 113)	22.2		µg/kg wet		20.0		111	70-130	4	25
Acetone	24.6		µg/kg wet		20.0		123	24.9-167	13	50
Acrylonitrile	21.2		µg/kg wet		20.0		106	70-130	4	25
Benzene	21.7		µg/kg wet		20.0		108	70-130	1	25
Bromobenzene	23.4		µg/kg wet		20.0		117	70-130	0.6	25
Bromochloromethane	23.2		µg/kg wet		20.0		116	70-130	3	25
Bromodichloromethane	21.8		µg/kg wet		20.0		109	70-130	3	25
Bromoform	19.9		µg/kg wet		20.0		99	70-130	4	25
Bromomethane	22.9		µg/kg wet		20.0		115	57.4-139	8	50
2-Butanone (MEK)	22.2		µg/kg wet		20.0		111	46.9-141	7	50
n-Butylbenzene	18.7		µg/kg wet		20.0		94	70-130	2	25
sec-Butylbenzene	21.7		µg/kg wet		20.0		109	70-130	1	25
tert-Butylbenzene	22.4		µg/kg wet		20.0		112	70-130	0.4	25
Carbon disulfide	16.8		µg/kg wet		20.0		84	70-130	1	25

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111382 - SW846 5030 Soil (high level)										
LCS Dup (7111382-BSD1)										
Prepared & Analyzed: 16-Nov-07										
Carbon tetrachloride	20.2		µg/kg wet		20.0		101	70-130	0.7	25
Chlorobenzene	22.6		µg/kg wet		20.0		113	70-130	0.7	25
Chloroethane	18.5		µg/kg wet		20.0		93	60.5-131	4	50
Chloroform	22.1		µg/kg wet		20.0		110	70-130	0.3	25
Chloromethane	22.3		µg/kg wet		20.0		112	70-130	2	25
2-Chlorotoluene	23.2		µg/kg wet		20.0		116	70-130	0.9	25
4-Chlorotoluene	22.1		µg/kg wet		20.0		110	70-130	0.7	25
1,2-Dibromo-3-chloropropane	18.3		µg/kg wet		20.0		92	70-130	1	25
Dibromochloromethane	19.3		µg/kg wet		20.0		97	70-130	0.05	50
1,2-Dibromoethane (EDB)	22.8		µg/kg wet		20.0		114	70-130	0.5	25
Dibromomethane	23.0		µg/kg wet		20.0		115	70-130	5	25
1,2-Dichlorobenzene	21.8		µg/kg wet		20.0		109	70-130	0.2	25
1,3-Dichlorobenzene	23.1		µg/kg wet		20.0		115	70-130	0.7	25
1,4-Dichlorobenzene	20.8		µg/kg wet		20.0		104	70-130	0.7	25
Dichlorodifluoromethane (Freon12)	25.4		µg/kg wet		20.0		127	47.2-175	6	50
1,1-Dichloroethane	21.5		µg/kg wet		20.0		108	70-130	3	25
1,2-Dichloroethane	21.3		µg/kg wet		20.0		107	70-130	1	25
1,1-Dichloroethene	19.7		µg/kg wet		20.0		98	70-130	3	25
cis-1,2-Dichloroethene	22.5		µg/kg wet		20.0		112	70-130	3	25
trans-1,2-Dichloroethene	20.9		µg/kg wet		20.0		105	70-130	2	25
1,2-Dichloropropane	21.6		µg/kg wet		20.0		108	70-130	0.3	25
1,3-Dichloropropane	22.4		µg/kg wet		20.0		112	70-130	0.7	25
2,2-Dichloropropane	22.0		µg/kg wet		20.0		110	70-130	4	25
1,1-Dichloropropene	20.1		µg/kg wet		20.0		100	70-130	3	25
cis-1,3-Dichloropropene	21.1		µg/kg wet		20.0		106	70-130	2	25
trans-1,3-Dichloropropene	23.6		µg/kg wet		20.0		118	70-130	2	25
Ethylbenzene	22.2		µg/kg wet		20.0		111	70-130	2	25
Hexachlorobutadiene	19.2		µg/kg wet		20.0		96	62.4-142	1	50
2-Hexanone (MBK)	20.9		µg/kg wet		20.0		104	70-130	6	25
Isopropylbenzene	21.2		µg/kg wet		20.0		106	70-130	2	25
4-Isopropyltoluene	20.7		µg/kg wet		20.0		103	70-130	3	25
Methyl tert-butyl ether	22.8		µg/kg wet		20.0		114	70-130	2	25
4-Methyl-2-pentanone (MIBK)	21.4		µg/kg wet		20.0		107	70-135	2	50
Methylene chloride	20.7		µg/kg wet		20.0		103	70-130	2	25
Naphthalene	21.9		µg/kg wet		20.0		110	70-130	4	25
n-Propylbenzene	21.2		µg/kg wet		20.0		106	70-130	2	25
Styrene	23.6		µg/kg wet		20.0		118	70-130	0.4	25
1,1,1,2-Tetrachloroethane	21.8		µg/kg wet		20.0		109	70-130	1	25
1,1,2,2-Tetrachloroethane	23.1		µg/kg wet		20.0		116	70-130	2	25
Tetrachloroethene	21.4		µg/kg wet		20.0		107	70-130	2	25
Toluene	21.3		µg/kg wet		20.0		107	70-130	2	25
1,2,3-Trichlorobenzene	21.3		µg/kg wet		20.0		106	70-130	3	25
1,2,4-Trichlorobenzene	19.0		µg/kg wet		20.0		95	70-130	1	25
1,1,1-Trichloroethane	21.5		µg/kg wet		20.0		107	70-130	0.4	25
1,1,2-Trichloroethane	22.6		µg/kg wet		20.0		113	70-130	0.8	25
Trichloroethene	20.7		µg/kg wet		20.0		104	70-130	3	25
Trichlorofluoromethane (Freon 11)	20.3		µg/kg wet		20.0		101	58.4-143	0.05	50
1,2,3-Trichloropropane	26.1		µg/kg wet		20.0		130	70-130	3	25
1,2,4-Trimethylbenzene	22.4		µg/kg wet		20.0		112	70-130	0.4	25

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111382 - SW846 5030 Soil (high level)										
LCS Dup (7111382-BSD1)										
Prepared & Analyzed: 16-Nov-07										
1,3,5-Trimethylbenzene	22.2		µg/kg wet		20.0		111	70-130	1	25
Vinyl chloride	21.4		µg/kg wet		20.0		107	70-130	0.05	25
m,p-Xylene	44.4		µg/kg wet		40.0		111	70-130	2	25
o-Xylene	22.9		µg/kg wet		20.0		114	70-130	0.7	25
Tetrahydrofuran	22.1		µg/kg wet		20.0		110	70-130	4	25
Ethyl ether	21.2		µg/kg wet		20.0		106	70-130	3	50
Tert-amyl methyl ether	20.9		µg/kg wet		20.0		105	70-130	1	25
Ethyl tert-butyl ether	22.9		µg/kg wet		20.0		115	70-130	1	25
Di-isopropyl ether	20.2		µg/kg wet		20.0		101	70-130	0.8	25
Tert-Butanol / butyl alcohol	219		µg/kg wet		200		110	70-130	0.5	25
1,4-Dioxane	249		µg/kg wet		200		124	54.5-152	7	25
trans-1,4-Dichloro-2-butene	17.4		µg/kg wet		20.0		87	70-130	4	25
Ethanol	428		µg/kg wet		400		107	70-130	3	30
Surrogate: 4-Bromofluorobenzene	*31.4*		µg/kg wet		*30.0*		*105*	*70-130*		
Surrogate: Toluene-d8	*30.1*		µg/kg wet		*30.0*		*100*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*30.1*		µg/kg wet		*30.0*		*100*	*70-130*		
Surrogate: Dibromofluoromethane	*30.2*		µg/kg wet		*30.0*		*101*	*70-130*		
Matrix Spike (7111382-MS1) **Source: SA70868-08RE1**										
Prepared & Analyzed: 16-Nov-07										
Benzene	18.0		µg/kg dry		20.0	BRL	90	70-130		
Chlorobenzene	21.7		µg/kg dry		20.0	BRL	108	70-130		
1,1-Dichloroethene	13.1	QM7	µg/kg dry		20.0	BRL	66	70-130		
Toluene	21.1		µg/kg dry		20.0	3.0	90	70-130		
Trichloroethene	17.4		µg/kg dry		20.0	BRL	87	70-130		
Surrogate: 4-Bromofluorobenzene	*31.9*		µg/kg dry		*30.0*		*106*	*70-130*		
Surrogate: Toluene-d8	*30.4*		µg/kg dry		*30.0*		*101*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*30.0*		µg/kg dry		*30.0*		*100*	*70-130*		
Surrogate: Dibromofluoromethane	*29.0*		µg/kg dry		*30.0*		*97*	*70-130*		
Matrix Spike Dup (7111382-MSD1) **Source: SA70868-08RE1**										
Prepared & Analyzed: 16-Nov-07										
Benzene	19.1		µg/kg dry		20.0	BRL	96	70-130	6	30
Chlorobenzene	22.7		µg/kg dry		20.0	BRL	114	70-130	5	30
1,1-Dichloroethene	14.6		µg/kg dry		20.0	BRL	73	70-130	11	30
Toluene	22.4		µg/kg dry		20.0	3.0	97	70-130	7	30
Trichloroethene	18.6		µg/kg dry		20.0	BRL	93	70-130	6	30
Surrogate: 4-Bromofluorobenzene	*31.7*		µg/kg dry		*30.0*		*106*	*70-130*		
Surrogate: Toluene-d8	*30.6*		µg/kg dry		*30.0*		*102*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*29.7*		µg/kg dry		*30.0*		*99*	*70-130*		
Surrogate: Dibromofluoromethane	*28.7*		µg/kg dry		*30.0*		*96*	*70-130*		
Batch 7111480 - SW846 5030 Soil (high level)										
Blank (7111480-BLK1)										
Prepared & Analyzed: 18-Nov-07										
1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/kg wet	1.0						
Acetone	BRL		µg/kg wet	10.0						
Acrylonitrile	BRL		µg/kg wet	1.0						
Benzene	BRL		µg/kg wet	1.0						
Bromobenzene	BRL		µg/kg wet	1.0						
Bromochloromethane	BRL		µg/kg wet	1.0						
Bromodichloromethane	BRL		µg/kg wet	1.0						
Bromoform	BRL		µg/kg wet	1.0						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111480 - SW846 5030 Soil (high level)										
Blank (7111480-BLK1)										
Prepared & Analyzed: 18-Nov-07										
Bromomethane	BRL		µg/kg wet	2.0						
2-Butanone (MEK)	BRL		µg/kg wet	10.0						
n-Butylbenzene	BRL		µg/kg wet	1.0						
sec-Butylbenzene	BRL		µg/kg wet	1.0						
tert-Butylbenzene	BRL		µg/kg wet	1.0						
Carbon disulfide	BRL		µg/kg wet	5.0						
Carbon tetrachloride	BRL		µg/kg wet	1.0						
Chlorobenzene	BRL		µg/kg wet	1.0						
Chloroethane	BRL		µg/kg wet	2.0						
Chloroform	BRL		µg/kg wet	1.0						
Chloromethane	BRL		µg/kg wet	2.0						
2-Chlorotoluene	BRL		µg/kg wet	1.0						
4-Chlorotoluene	BRL		µg/kg wet	1.0						
1,2-Dibromo-3-chloropropane	BRL		µg/kg wet	2.0						
Dibromochloromethane	BRL		µg/kg wet	1.0						
1,2-Dibromoethane (EDB)	BRL		µg/kg wet	1.0						
Dibromomethane	BRL		µg/kg wet	1.0						
1,2-Dichlorobenzene	BRL		µg/kg wet	1.0						
1,3-Dichlorobenzene	BRL		µg/kg wet	1.0						
1,4-Dichlorobenzene	BRL		µg/kg wet	1.0						
Dichlorodifluoromethane (Freon12)	BRL		µg/kg wet	2.0						
1,1-Dichloroethane	BRL		µg/kg wet	1.0						
1,2-Dichloroethane	BRL		µg/kg wet	1.0						
1,1-Dichloroethene	BRL		µg/kg wet	1.0						
cis-1,2-Dichloroethene	BRL		µg/kg wet	1.0						
trans-1,2-Dichloroethene	BRL		µg/kg wet	1.0						
1,2-Dichloropropane	BRL		µg/kg wet	1.0						
1,3-Dichloropropane	BRL		µg/kg wet	1.0						
2,2-Dichloropropane	BRL		µg/kg wet	1.0						
1,1-Dichloropropene	BRL		µg/kg wet	1.0						
cis-1,3-Dichloropropene	BRL		µg/kg wet	1.0						
trans-1,3-Dichloropropene	BRL		µg/kg wet	1.0						
Ethylbenzene	BRL		µg/kg wet	1.0						
Hexachlorobutadiene	BRL		µg/kg wet	1.0						
2-Hexanone (MBK)	BRL		µg/kg wet	10.0						
Isopropylbenzene	BRL		µg/kg wet	1.0						
4-Isopropyltoluene	BRL		µg/kg wet	1.0						
Methyl tert-butyl ether	BRL		µg/kg wet	1.0						
4-Methyl-2-pentanone (MIBK)	BRL		µg/kg wet	10.0						
Methylene chloride	BRL		µg/kg wet	10.0						
Naphthalene	BRL		µg/kg wet	1.0						
n-Propylbenzene	BRL		µg/kg wet	1.0						
Styrene	BRL		µg/kg wet	1.0						
1,1,1,2-Tetrachloroethane	BRL		µg/kg wet	1.0						
1,1,2,2-Tetrachloroethane	BRL		µg/kg wet	1.0						
Tetrachloroethene	BRL		µg/kg wet	1.0						
Toluene	BRL		µg/kg wet	1.0						
1,2,3-Trichlorobenzene	BRL		µg/kg wet	1.0						
1,2,4-Trichlorobenzene	BRL		µg/kg wet	1.0						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111480 - SW846 5030 Soil (high level)										
Blank (7111480-BLK1)										
Prepared & Analyzed: 18-Nov-07										
1,1,1-Trichloroethane	BRL		µg/kg wet	1.0						
1,1,2-Trichloroethane	BRL		µg/kg wet	1.0						
Trichloroethene	BRL		µg/kg wet	1.0						
Trichlorofluoromethane (Freon 11)	BRL		µg/kg wet	1.0						
1,2,3-Trichloropropane	BRL		µg/kg wet	1.0						
1,2,4-Trimethylbenzene	BRL		µg/kg wet	1.0						
1,3,5-Trimethylbenzene	BRL		µg/kg wet	1.0						
Vinyl chloride	BRL		µg/kg wet	1.0						
m,p-Xylene	BRL		µg/kg wet	2.0						
o-Xylene	BRL		µg/kg wet	1.0						
Tetrahydrofuran	BRL		µg/kg wet	10.0						
Ethyl ether	BRL		µg/kg wet	1.0						
Tert-amyl methyl ether	BRL		µg/kg wet	1.0						
Ethyl tert-butyl ether	BRL		µg/kg wet	1.0						
Di-isopropyl ether	BRL		µg/kg wet	1.0						
Tert-Butanol / butyl alcohol	BRL		µg/kg wet	10.0						
1,4-Dioxane	BRL		µg/kg wet	20.0						
trans-1,4-Dichloro-2-butene	BRL		µg/kg wet	5.0						
Ethanol	BRL		µg/kg wet	500						
Surrogate: 4-Bromofluorobenzene	*30.2*		µg/kg wet		*30.0*		*101*	*70-130*		
Surrogate: Toluene-d8	*30.4*		µg/kg wet		*30.0*		*101*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*29.9*		µg/kg wet		*30.0*		*100*	*70-130*		
Surrogate: Dibromofluoromethane	*29.0*		µg/kg wet		*30.0*		*97*	*70-130*		
LCS (7111480-BS1)										
Prepared & Analyzed: 18-Nov-07										
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.0		µg/kg wet		20.0		100	70-130		
Acetone	18.4		µg/kg wet		20.0		92	24.9-167		
Acrylonitrile	17.4		µg/kg wet		20.0		87	70-130		
Benzene	19.7		µg/kg wet		20.0		98	70-130		
Bromobenzene	21.7		µg/kg wet		20.0		109	70-130		
Bromochloromethane	20.7		µg/kg wet		20.0		103	70-130		
Bromodichloromethane	20.6		µg/kg wet		20.0		103	70-130		
Bromoform	20.8		µg/kg wet		20.0		104	70-130		
Bromomethane	22.4		µg/kg wet		20.0		112	57.4-139		
2-Butanone (MEK)	17.1		µg/kg wet		20.0		86	46.9-141		
n-Butylbenzene	15.4		µg/kg wet		20.0		77	70-130		
sec-Butylbenzene	18.6		µg/kg wet		20.0		93	70-130		
tert-Butylbenzene	19.2		µg/kg wet		20.0		96	70-130		
Carbon disulfide	16.4		µg/kg wet		20.0		82	70-130		
Carbon tetrachloride	20.3		µg/kg wet		20.0		102	70-130		
Chlorobenzene	20.8		µg/kg wet		20.0		104	70-130		
Chloroethane	17.0		µg/kg wet		20.0		85	60.5-131		
Chloroform	20.2		µg/kg wet		20.0		101	70-130		
Chloromethane	18.1		µg/kg wet		20.0		91	70-130		
2-Chlorotoluene	21.6		µg/kg wet		20.0		108	70-130		
4-Chlorotoluene	20.5		µg/kg wet		20.0		103	70-130		
1,2-Dibromo-3-chloropropane	18.2		µg/kg wet		20.0		91	70-130		
Dibromochloromethane	20.0		µg/kg wet		20.0		100	70-130		
1,2-Dibromoethane (EDB)	20.6		µg/kg wet		20.0		103	70-130		
Dibromomethane	20.5		µg/kg wet		20.0		102	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111480 - SW846 5030 Soil (high level)										
LCS (7111480-BS1)										
Prepared & Analyzed: 18-Nov-07										
1,2-Dichlorobenzene	20.3		µg/kg wet		20.0		101	70-130		
1,3-Dichlorobenzene	21.0		µg/kg wet		20.0		105	70-130		
1,4-Dichlorobenzene	19.5		µg/kg wet		20.0		98	70-130		
Dichlorodifluoromethane (Freon12)	19.2		µg/kg wet		20.0		96	47.2-175		
1,1-Dichloroethane	20.2		µg/kg wet		20.0		101	70-130		
1,2-Dichloroethane	18.7		µg/kg wet		20.0		93	70-130		
1,1-Dichloroethene	18.3		µg/kg wet		20.0		92	70-130		
cis-1,2-Dichloroethene	20.6		µg/kg wet		20.0		103	70-130		
trans-1,2-Dichloroethene	19.4		µg/kg wet		20.0		97	70-130		
1,2-Dichloropropane	19.6		µg/kg wet		20.0		98	70-130		
1,3-Dichloropropane	19.8		µg/kg wet		20.0		99	70-130		
2,2-Dichloropropane	22.0		µg/kg wet		20.0		110	70-130		
1,1-Dichloropropene	18.6		µg/kg wet		20.0		93	70-130		
cis-1,3-Dichloropropene	20.9		µg/kg wet		20.0		104	70-130		
trans-1,3-Dichloropropene	22.8		µg/kg wet		20.0		114	70-130		
Ethylbenzene	20.8		µg/kg wet		20.0		104	70-130		
Hexachlorobutadiene	16.5		µg/kg wet		20.0		83	62.4-142		
2-Hexanone (MBK)	17.2		µg/kg wet		20.0		86	70-130		
Isopropylbenzene	19.8		µg/kg wet		20.0		99	70-130		
4-Isopropyltoluene	17.9		µg/kg wet		20.0		89	70-130		
Methyl tert-butyl ether	19.8		µg/kg wet		20.0		99	70-130		
4-Methyl-2-pentanone (MIBK)	17.4		µg/kg wet		20.0		87	70-135		
Methylene chloride	18.5		µg/kg wet		20.0		92	70-130		
Naphthalene	18.4		µg/kg wet		20.0		92	70-130		
n-Propylbenzene	18.9		µg/kg wet		20.0		94	70-130		
Styrene	22.4		µg/kg wet		20.0		112	70-130		
1,1,1,2-Tetrachloroethane	22.5		µg/kg wet		20.0		112	70-130		
1,1,2,2-Tetrachloroethane	20.2		µg/kg wet		20.0		101	70-130		
Tetrachloroethene	20.3		µg/kg wet		20.0		102	70-130		
Toluene	19.8		µg/kg wet		20.0		99	70-130		
1,2,3-Trichlorobenzene	16.8		µg/kg wet		20.0		84	70-130		
1,2,4-Trichlorobenzene	15.6		µg/kg wet		20.0		78	70-130		
1,1,1-Trichloroethane	20.3		µg/kg wet		20.0		101	70-130		
1,1,2-Trichloroethane	20.0		µg/kg wet		20.0		100	70-130		
Trichloroethene	19.0		µg/kg wet		20.0		95	70-130		
Trichlorofluoromethane (Freon 11)	17.9		µg/kg wet		20.0		90	58.4-143		
1,2,3-Trichloropropane	22.1		µg/kg wet		20.0		110	70-130		
1,2,4-Trimethylbenzene	19.2		µg/kg wet		20.0		96	70-130		
1,3,5-Trimethylbenzene	20.0		µg/kg wet		20.0		100	70-130		
Vinyl chloride	18.4		µg/kg wet		20.0		92	70-130		
m,p-Xylene	41.3		µg/kg wet		40.0		103	70-130		
o-Xylene	21.1		µg/kg wet		20.0		106	70-130		
Tetrahydrofuran	17.8		µg/kg wet		20.0		89	70-130		
Ethyl ether	18.2		µg/kg wet		20.0		91	70-130		
Tert-amyl methyl ether	18.0		µg/kg wet		20.0		90	70-130		
Ethyl tert-butyl ether	20.1		µg/kg wet		20.0		101	70-130		
Di-isopropyl ether	18.0		µg/kg wet		20.0		90	70-130		
Tert-Butanol / butyl alcohol	174		µg/kg wet		200		87	70-130		
1,4-Dioxane	199		µg/kg wet		200		99	54.5-152		

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111480 - SW846 5030 Soil (high level)										
LCS (7111480-BS1)										
Prepared & Analyzed: 18-Nov-07										
trans-1,4-Dichloro-2-butene	17.3		µg/kg wet		20.0		86	70-130		
Ethanol	347		µg/kg wet		400		87	70-130		
Surrogate: 4-Bromofluorobenzene	*30.9*		µg/kg wet		*30.0*		*103*	*70-130*		
Surrogate: Toluene-d8	*30.4*		µg/kg wet		*30.0*		*101*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*28.7*		µg/kg wet		*30.0*		*96*	*70-130*		
Surrogate: Dibromofluoromethane	*29.9*		µg/kg wet		*30.0*		*100*	*70-130*		
LCS Dup (7111480-BSD1)										
Prepared & Analyzed: 18-Nov-07										
1,1,2-Trichlorotrifluoroethane (Freon 113)	21.3		µg/kg wet		20.0		107	70-130	7	25
Acetone	18.1		µg/kg wet		20.0		90	24.9-167	2	50
Acrylonitrile	19.2		µg/kg wet		20.0		96	70-130	10	25
Benzene	20.2		µg/kg wet		20.0		101	70-130	2	25
Bromobenzene	21.1		µg/kg wet		20.0		106	70-130	3	25
Bromochloromethane	21.3		µg/kg wet		20.0		106	70-130	3	25
Bromodichloromethane	21.5		µg/kg wet		20.0		107	70-130	4	25
Bromoform	20.8		µg/kg wet		20.0		104	70-130	0.2	25
Bromomethane	23.7		µg/kg wet		20.0		118	57.4-139	6	50
2-Butanone (MEK)	18.4		µg/kg wet		20.0		92	46.9-141	7	50
n-Butylbenzene	13.7	QC1	µg/kg wet		20.0		69	70-130	11	25
sec-Butylbenzene	17.6		µg/kg wet		20.0		88	70-130	5	25
tert-Butylbenzene	18.4		µg/kg wet		20.0		92	70-130	4	25
Carbon disulfide	16.1		µg/kg wet		20.0		80	70-130	2	25
Carbon tetrachloride	20.3		µg/kg wet		20.0		102	70-130	0	25
Chlorobenzene	20.6		µg/kg wet		20.0		103	70-130	1	25
Chloroethane	16.7		µg/kg wet		20.0		83	60.5-131	2	50
Chloroform	20.6		µg/kg wet		20.0		103	70-130	2	25
Chloromethane	18.1		µg/kg wet		20.0		90	70-130	0.2	25
2-Chlorotoluene	21.3		µg/kg wet		20.0		106	70-130	2	25
4-Chlorotoluene	19.9		µg/kg wet		20.0		99	70-130	3	25
1,2-Dibromo-3-chloropropane	17.1		µg/kg wet		20.0		85	70-130	6	25
Dibromochloromethane	20.7		µg/kg wet		20.0		103	70-130	3	50
1,2-Dibromoethane (EDB)	21.6		µg/kg wet		20.0		108	70-130	5	25
Dibromomethane	21.1		µg/kg wet		20.0		106	70-130	3	25
1,2-Dichlorobenzene	19.2		µg/kg wet		20.0		96	70-130	6	25
1,3-Dichlorobenzene	20.6		µg/kg wet		20.0		103	70-130	2	25
1,4-Dichlorobenzene	18.4		µg/kg wet		20.0		92	70-130	6	25
Dichlorodifluoromethane (Freon12)	19.7		µg/kg wet		20.0		99	47.2-175	3	50
1,1-Dichloroethane	20.0		µg/kg wet		20.0		100	70-130	0.9	25
1,2-Dichloroethane	19.6		µg/kg wet		20.0		98	70-130	5	25
1,1-Dichloroethene	18.2		µg/kg wet		20.0		91	70-130	0.7	25
cis-1,2-Dichloroethene	21.2		µg/kg wet		20.0		106	70-130	3	25
trans-1,2-Dichloroethene	19.4		µg/kg wet		20.0		97	70-130	0.05	25
1,2-Dichloropropane	19.6		µg/kg wet		20.0		98	70-130	0.2	25
1,3-Dichloropropane	20.7		µg/kg wet		20.0		104	70-130	4	25
2,2-Dichloropropane	21.9		µg/kg wet		20.0		110	70-130	0.1	25
1,1-Dichloropropene	19.1		µg/kg wet		20.0		96	70-130	3	25
cis-1,3-Dichloropropene	20.9		µg/kg wet		20.0		104	70-130	0.1	25
trans-1,3-Dichloropropene	23.1		µg/kg wet		20.0		116	70-130	1	25
Ethylbenzene	20.2		µg/kg wet		20.0		101	70-130	3	25
Hexachlorobutadiene	15.4		µg/kg wet		20.0		77	62.4-142	7	50

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111480 - SW846 5030 Soil (high level)										
LCS Dup (7111480-BSD1)										
Prepared & Analyzed: 18-Nov-07										
2-Hexanone (MBK)	18.2		µg/kg wet		20.0		91	70-130	5	25
Isopropylbenzene	19.3		µg/kg wet		20.0		96	70-130	3	25
4-Isopropyltoluene	16.3		µg/kg wet		20.0		81	70-130	9	25
Methyl tert-butyl ether	20.8		µg/kg wet		20.0		104	70-130	5	25
4-Methyl-2-pentanone (MIBK)	18.5		µg/kg wet		20.0		93	70-135	6	50
Methylene chloride	18.9		µg/kg wet		20.0		94	70-130	2	25
Naphthalene	17.2		µg/kg wet		20.0		86	70-130	6	25
n-Propylbenzene	18.3		µg/kg wet		20.0		91	70-130	3	25
Styrene	21.9		µg/kg wet		20.0		110	70-130	2	25
1,1,1,2-Tetrachloroethane	21.3		µg/kg wet		20.0		107	70-130	5	25
1,1,2,2-Tetrachloroethane	20.3		µg/kg wet		20.0		101	70-130	0.3	25
Tetrachloroethene	20.5		µg/kg wet		20.0		103	70-130	1	25
Toluene	20.3		µg/kg wet		20.0		102	70-130	2	25
1,2,3-Trichlorobenzene	15.3		µg/kg wet		20.0		76	70-130	9	25
1,2,4-Trichlorobenzene	14.1		µg/kg wet		20.0		71	70-130	10	25
1,1,1-Trichloroethane	20.5		µg/kg wet		20.0		102	70-130	1	25
1,1,2-Trichloroethane	21.2		µg/kg wet		20.0		106	70-130	6	25
Trichloroethene	19.2		µg/kg wet		20.0		96	70-130	1	25
Trichlorofluoromethane (Freon 11)	18.6		µg/kg wet		20.0		93	58.4-143	4	50
1,2,3-Trichloropropane	22.2		µg/kg wet		20.0		111	70-130	0.5	25
1,2,4-Trimethylbenzene	18.4		µg/kg wet		20.0		92	70-130	4	25
1,3,5-Trimethylbenzene	19.3		µg/kg wet		20.0		97	70-130	3	25
Vinyl chloride	18.4		µg/kg wet		20.0		92	70-130	0.4	25
m,p-Xylene	40.4		µg/kg wet		40.0		101	70-130	2	25
o-Xylene	20.7		µg/kg wet		20.0		103	70-130	2	25
Tetrahydrofuran	18.6		µg/kg wet		20.0		93	70-130	4	25
Ethyl ether	19.6		µg/kg wet		20.0		98	70-130	8	50
Tert-amyl methyl ether	18.7		µg/kg wet		20.0		94	70-130	4	25
Ethyl tert-butyl ether	20.9		µg/kg wet		20.0		105	70-130	4	25
Di-isopropyl ether	18.6		µg/kg wet		20.0		93	70-130	3	25
Tert-Butanol / butyl alcohol	192		µg/kg wet		200		96	70-130	10	25
1,4-Dioxane	201		µg/kg wet		200		101	54.5-152	1	25
trans-1,4-Dichloro-2-butene	17.4		µg/kg wet		20.0		87	70-130	0.7	25
Ethanol	359		µg/kg wet		400		90	70-130	3	30
Surrogate: 4-Bromofluorobenzene	*32.1*		µg/kg wet		*30.0*		*107*	*70-130*		
Surrogate: Toluene-d8	*30.7*		µg/kg wet		*30.0*		*102*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*29.3*		µg/kg wet		*30.0*		*98*	*70-130*		
Surrogate: Dibromofluoromethane	*30.3*		µg/kg wet		*30.0*		*101*	*70-130*		
Matrix Spike (7111480-MS1)	Source: SA70868-08									
Prepared & Analyzed: 18-Nov-07										
Benzene	23.7		µg/kg dry		20.0	BRL	118	70-130		
Chlorobenzene	24.8		µg/kg dry		20.0	BRL	124	70-130		
1,1-Dichloroethene	22.8		µg/kg dry		20.0	BRL	114	70-130		
Toluene	26.8		µg/kg dry		20.0	3.2	118	70-130		
Trichloroethene	22.6		µg/kg dry		20.0	BRL	113	70-130		
Surrogate: 4-Bromofluorobenzene	*30.8*		µg/kg dry		*30.0*		*103*	*70-130*		
Surrogate: Toluene-d8	*31.0*		µg/kg dry		*30.0*		*103*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*28.4*		µg/kg dry		*30.0*		*95*	*70-130*		
Surrogate: Dibromofluoromethane	*29.1*		µg/kg dry		*30.0*		*97*	*70-130*		
Matrix Spike Dup (7111480-MSD1)	Source: SA70868-08									

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111480 - SW846 5030 Soil (high level)										
Prepared & Analyzed: 18-Nov-07										
Benzene	24.3		µg/kg dry		20.0	BRL	121	70-130	3	30
Chlorobenzene	25.0		µg/kg dry		20.0	BRL	125	70-130	0.8	30
1,1-Dichloroethene	22.3		µg/kg dry		20.0	BRL	112	70-130	2	30
Toluene	26.8		µg/kg dry		20.0	3.2	118	70-130	0.04	30
Trichloroethene	23.3		µg/kg dry		20.0	BRL	117	70-130	3	30
Surrogate: 4-Bromofluorobenzene	*31.9*		µg/kg dry		*30.0*		*106*	*70-130*		
Surrogate: Toluene-d8	*30.4*		µg/kg dry		*30.0*		*101*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*29.2*		µg/kg dry		*30.0*		*97*	*70-130*		
Surrogate: Dibromofluoromethane	*29.0*		µg/kg dry		*30.0*		*97*	*70-130*		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111248 - SW846 3550B										
Blank (7111248-BLK1)										
Prepared: 15-Nov-07 Analyzed: 16-Nov-07										
Acenaphthene	BRL		µg/kg wet	165						
Acenaphthene	BRL		µg/kg wet	33.2						
Acenaphthylene	BRL		µg/kg wet	33.2						
Acenaphthylene	BRL		µg/kg wet	165						
Aniline	BRL		µg/kg wet	165						
Anthracene	BRL		µg/kg wet	165						
Anthracene	BRL		µg/kg wet	33.2						
Atrazine	BRL		µg/kg wet	165						
Azobenzene/Diphenyldiazine	BRL		µg/kg wet	165						
Benzidine	BRL		µg/kg wet	165						
Benzo (a) anthracene	BRL		µg/kg wet	165						
Benzo (a) anthracene	BRL		µg/kg wet	33.2						
Benzo (a) pyrene	BRL		µg/kg wet	33.2						
Benzo (a) pyrene	BRL		µg/kg wet	165						
Benzo (b) fluoranthene	BRL		µg/kg wet	33.2						
Benzo (b) fluoranthene	BRL		µg/kg wet	165						
Benzo (g,h,i) perylene	BRL		µg/kg wet	33.2						
Benzo (g,h,i) perylene	BRL		µg/kg wet	165						
Benzo (k) fluoranthene	BRL		µg/kg wet	165						
Benzo (k) fluoranthene	BRL		µg/kg wet	33.2						
Benzoic acid	BRL		µg/kg wet	165						
Benzyl alcohol	BRL		µg/kg wet	165						
Bis(2-chloroethoxy)methane	BRL		µg/kg wet	165						
Bis(2-chloroethyl)ether	BRL		µg/kg wet	165						
Bis(2-chloroisopropyl)ether	BRL		µg/kg wet	165						
Bis(2-ethylhexyl)phthalate	BRL		µg/kg wet	165						
4-Bromophenyl phenyl ether	BRL		µg/kg wet	165						
Butyl benzyl phthalate	BRL		µg/kg wet	165						
Carbazole	BRL		µg/kg wet	165						
4-Chloro-3-methylphenol	BRL		µg/kg wet	165						
4-Chloroaniline	BRL		µg/kg wet	165						
2-Chloronaphthalene	BRL		µg/kg wet	165						
2-Chlorophenol	BRL		µg/kg wet	165						
4-Chlorophenyl phenyl ether	BRL		µg/kg wet	165						
Chrysene	BRL		µg/kg wet	33.2						
Chrysene	BRL		µg/kg wet	165						
Dibenzo (a,h) anthracene	BRL		µg/kg wet	165						
Dibenzo (a,h) anthracene	BRL		µg/kg wet	33.2						
Dibenzofuran	BRL		µg/kg wet	165						
1,2-Dichlorobenzene	BRL		µg/kg wet	165						
1,3-Dichlorobenzene	BRL		µg/kg wet	165						
1,4-Dichlorobenzene	BRL		µg/kg wet	165						
3,3´-Dichlorobenzidine	BRL		µg/kg wet	165						
2,4-Dichlorophenol	BRL		µg/kg wet	165						
Diethyl phthalate	BRL		µg/kg wet	165						
Dimethyl phthalate	BRL		µg/kg wet	165						
2,4-Dimethylphenol	BRL		µg/kg wet	165						
Di-n-butyl phthalate	BRL		µg/kg wet	165						
4,6-Dinitro-2-methylphenol	BRL		µg/kg wet	165						

Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111248 - SW846 3550B										
Blank (7111248-BLK1)										
Prepared: 15-Nov-07 Analyzed: 16-Nov-07										
2,4-Dinitrophenol	BRL		µg/kg wet	165						
2,4-Dinitrotoluene	BRL		µg/kg wet	165						
2,6-Dinitrotoluene	BRL		µg/kg wet	165						
Di-n-octyl phthalate	BRL		µg/kg wet	165						
Fluoranthene	BRL		µg/kg wet	33.2						
Fluoranthene	BRL		µg/kg wet	165						
Fluorene	BRL		µg/kg wet	33.2						
Fluorene	BRL		µg/kg wet	165						
Hexachlorobenzene	BRL		µg/kg wet	165						
Hexachlorobutadiene	BRL		µg/kg wet	165						
Hexachlorocyclopentadiene	BRL		µg/kg wet	165						
Hexachloroethane	BRL		µg/kg wet	165						
Indeno (1,2,3-cd) pyrene	BRL		µg/kg wet	165						
Indeno (1,2,3-cd) pyrene	BRL		µg/kg wet	33.2						
Isophorone	BRL		µg/kg wet	165						
1-Methylnaphthalene	BRL		µg/kg wet	165						
1-Methylnaphthalene	BRL		µg/kg wet	33.2						
2-Methylnaphthalene	BRL		µg/kg wet	165						
2-Methylnaphthalene	BRL		µg/kg wet	33.2						
2-Methylphenol	BRL		µg/kg wet	165						
3,4-Methylphenol	BRL		µg/kg wet	165						
Naphthalene	BRL		µg/kg wet	165						
Naphthalene	BRL		µg/kg wet	33.2						
2-Nitroaniline	BRL		µg/kg wet	165						
3-Nitroaniline	BRL		µg/kg wet	165						
4-Nitroaniline	BRL		µg/kg wet	660						
Nitrobenzene	BRL		µg/kg wet	165						
2-Nitrophenol	BRL		µg/kg wet	165						
4-Nitrophenol	BRL		µg/kg wet	660						
N-Nitrosodimethylamine	BRL		µg/kg wet	165						
N-Nitrosodi-n-propylamine	BRL		µg/kg wet	165						
N-Nitrosodiphenylamine	BRL		µg/kg wet	165						
Pentachlorophenol	BRL		µg/kg wet	165						
Phenanthrene	BRL		µg/kg wet	165						
Phenanthrene	BRL		µg/kg wet	33.2						
Phenol	BRL		µg/kg wet	165						
Pyrene	BRL		µg/kg wet	165						
Pyrene	BRL		µg/kg wet	33.2						
Pyridine	BRL		µg/kg wet	165						
1,2,4-Trichlorobenzene	BRL		µg/kg wet	165						
2,4,5-Trichlorophenol	BRL		µg/kg wet	165						
2,4,6-Trichlorophenol	BRL		µg/kg wet	165						
Pentachloronitrobenzene	BRL		µg/kg wet	165						
1,2,4,5-Tetrachlorobenzene	BRL		µg/kg wet	165						
Surrogate: 2-Fluorobiphenyl	*1110*		µg/kg wet		*1670*		*67*	*30-130*		
Surrogate: Terphenyl-dl4	*1160*		µg/kg wet		*1670*		*70*	*30-130*		
Surrogate: 2-Fluorobiphenyl	*1110*		µg/kg wet		*1670*		*67*	*30-130*		
Surrogate: 2-Fluorophenol	*1120*		µg/kg wet		*1670*		*67*	*15-110*		
Surrogate: Nitrobenzene-d5	*1070*		µg/kg wet		*1670*		*64*	*30-130*		
Surrogate: Phenol-d5	*929*		µg/kg wet		*1670*		*56*	*15-110*		
Surrogate: Terphenyl-dl4	*1160*		µg/kg wet		*1670*		*70*	*30-130*		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111248 - SW846 3550B										
Blank (7111248-BLK1)										
Prepared: 15-Nov-07 Analyzed: 16-Nov-07										
Surrogate: 2,4,6-Tribromophenol	*1220*		µg/kg wet		*1670*		*73*	*15-110*		
LCS (7111248-BS1)										
Prepared: 15-Nov-07 Analyzed: 16-Nov-07										
Acenaphthene	1190		µg/kg wet	165	1670		72	40-130		
Acenaphthene	1190		µg/kg wet	33.2	1670		72	40-140		
Acenaphthylene	1200		µg/kg wet	165	1670		72	40-130		
Acenaphthylene	1200		µg/kg wet	33.2	1670		72	40-140		
Aniline	761		µg/kg wet	165	1670		46	40-130		
Anthracene	1230		µg/kg wet	165	1670		74	40-130		
Anthracene	1230		µg/kg wet	33.2	1670		74	40-140		
Atrazine	1300		µg/kg wet	165	1670		78	40-130		
Azobenzene/Diphenyldiazine	1140		µg/kg wet	165	1670		68	40-130		
Benzidine	56.3		µg/kg wet	165	1670		3	0-178		
Benzo (a) anthracene	1270		µg/kg wet	33.2	1670		76	40-140		
Benzo (a) anthracene	1270		µg/kg wet	165	1670		76	40-130		
Benzo (a) pyrene	1240		µg/kg wet	165	1670		75	40-130		
Benzo (a) pyrene	1240		µg/kg wet	33.2	1670		75	40-140		
Benzo (b) fluoranthene	1200		µg/kg wet	33.2	1670		72	40-140		
Benzo (b) fluoranthene	1200		µg/kg wet	165	1670		72	40-130		
Benzo (g,h,i) perylene	1040		µg/kg wet	165	1670		62	40-130		
Benzo (g,h,i) perylene	1040		µg/kg wet	33.2	1670		62	40-140		
Benzo (k) fluoranthene	1280		µg/kg wet	165	1670		77	40-130		
Benzo (k) fluoranthene	1280		µg/kg wet	33.2	1670		77	40-140		
Benzoic acid	922		µg/kg wet	165	1670		55	0-130		
Benzyl alcohol	1140		µg/kg wet	165	1670		68	40-130		
Bis(2-chloroethoxy)methane	1240		µg/kg wet	165	1670		74	40-130		
Bis(2-chloroethyl)ether	1200		µg/kg wet	165	1670		72	40-130		
Bis(2-chloroisopropyl)ether	988		µg/kg wet	165	1670		59	40-130		
Bis(2-ethylhexyl)phthalate	1410		µg/kg wet	165	1670		85	40-130		
4-Bromophenyl phenyl ether	1250		µg/kg wet	165	1670		75	40-130		
Butyl benzyl phthalate	1360		µg/kg wet	165	1670		81	40-130		
Carbazole	1240		µg/kg wet	165	1670		74	40-130		
4-Chloro-3-methylphenol	1250		µg/kg wet	165	1670		75	40-130		
4-Chloroaniline	1060		µg/kg wet	165	1670		63	40-130		
2-Chloronaphthalene	1180		µg/kg wet	165	1670		71	40-130		
2-Chlorophenol	1170		µg/kg wet	165	1670		70	40-130		
4-Chlorophenyl phenyl ether	1260		µg/kg wet	165	1670		76	40-130		
Chrysene	1230		µg/kg wet	165	1670		74	40-130		
Chrysene	1230		µg/kg wet	33.2	1670		74	40-140		
Dibenzo (a,h) anthracene	1120		µg/kg wet	165	1670		67	40-130		
Dibenzo (a,h) anthracene	1120		µg/kg wet	33.2	1670		67	40-140		
Dibenzofuran	1200		µg/kg wet	165	1670		72	40-130		
1,2-Dichlorobenzene	1100		µg/kg wet	165	1670		66	40-130		
1,3-Dichlorobenzene	1090		µg/kg wet	165	1670		65	40-130		
1,4-Dichlorobenzene	1120		µg/kg wet	165	1670		67	40-130		
3,3´-Dichlorobenzidine	1220		µg/kg wet	165	1670		73	40-130		
2,4-Dichlorophenol	1250		µg/kg wet	165	1670		75	40-130		
Diethyl phthalate	1260		µg/kg wet	165	1670		75	40-130		
Dimethyl phthalate	1200		µg/kg wet	165	1670		72	40-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111248 - SW846 3550B										
LCS (7111248-BS1)										
Prepared: 15-Nov-07 Analyzed: 16-Nov-07										
2,4-Dimethylphenol	1190		µg/kg wet	165	1670		71	40-130		
Di-n-butyl phthalate	1270		µg/kg wet	165	1670		76	40-130		
4,6-Dinitro-2-methylphenol	1050		µg/kg wet	165	1670		63	40-130		
2,4-Dinitrophenol	990		µg/kg wet	165	1670		59	40-130		
2,4-Dinitrotoluene	1320		µg/kg wet	165	1670		79	40-130		
2,6-Dinitrotoluene	1340		µg/kg wet	165	1670		80	40-130		
Di-n-octyl phthalate	1560		µg/kg wet	165	1670		94	40-130		
Fluoranthene	1230		µg/kg wet	165	1670		74	40-130		
Fluoranthene	1230		µg/kg wet	33.2	1670		74	40-140		
Fluorene	1200		µg/kg wet	33.2	1670		72	40-140		
Fluorene	1200		µg/kg wet	165	1670		72	40-130		
Hexachlorobenzene	1210		µg/kg wet	165	1670		73	40-130		
Hexachlorobutadiene	1180		µg/kg wet	165	1670		71	40-130		
Hexachlorocyclopentadiene	752		µg/kg wet	165	1670		45	40-130		
Hexachloroethane	1010		µg/kg wet	165	1670		61	40-130		
Indeno (1,2,3-cd) pyrene	1040		µg/kg wet	33.2	1670		62	40-140		
Indeno (1,2,3-cd) pyrene	1040		µg/kg wet	165	1670		62	40-130		
1-Methylnaphthalene	1200		µg/kg wet	33.2	1670		72	40-140		
Isophorone	1140		µg/kg wet	165	1670		68	40-130		
1-Methylnaphthalene	1200		µg/kg wet	165	1670		72	40-140		
2-Methylnaphthalene	1180		µg/kg wet	33.2	1670		71	40-140		
2-Methylnaphthalene	1180		µg/kg wet	165	1670		71	40-130		
2-Methylphenol	1100		µg/kg wet	165	1670		66	40-130		
3,4-Methylphenol	1080		µg/kg wet	165	1670		65	40-130		
Naphthalene	1170		µg/kg wet	33.2	1670		70	40-140		
Naphthalene	1170		µg/kg wet	165	1670		70	40-130		
2-Nitroaniline	1260		µg/kg wet	165	1670		76	40-130		
3-Nitroaniline	1100		µg/kg wet	165	1670		66	40-130		
4-Nitroaniline	1200		µg/kg wet	660	1670		72	40-130		
Nitrobenzene	1150		µg/kg wet	165	1670		69	40-130		
2-Nitrophenol	1450		µg/kg wet	165	1670		87	40-130		
4-Nitrophenol	1340		µg/kg wet	660	1670		81	40-130		
N-Nitrosodimethylamine	1740		µg/kg wet	165	1670		104	40-130		
N-Nitrosodi-n-propylamine	1040		µg/kg wet	165	1670		62	40-130		
N-Nitrosodiphenylamine	1360		µg/kg wet	165	1670		81	40-130		
Pentachlorophenol	1450		µg/kg wet	165	1670		87	40-130		
Phenanthrene	1210		µg/kg wet	33.2	1670		73	40-140		
Phenanthrene	1210		µg/kg wet	165	1670		73	40-130		
Phenol	1190		µg/kg wet	165	1670		72	40-130		
Pyrene	1290		µg/kg wet	33.2	1670		77	40-140		
Pyrene	1290		µg/kg wet	165	1670		77	40-130		
Pyridine	396	QC2	µg/kg wet	165	1670		24	40-130		
1,2,4-Trichlorobenzene	1190		µg/kg wet	165	1670		71	40-130		
2,4,5-Trichlorophenol	1280		µg/kg wet	165	1670		77	40-130		
2,4,6-Trichlorophenol	1180		µg/kg wet	165	1670		71	40-130		
Pentachloronitrobenzene	1160		µg/kg wet	165				40-140		
1,2,4,5-Tetrachlorobenzene	1240		µg/kg wet	165				40-140		
Surrogate: 2-Fluorobiphenyl	*1070*		µg/kg wet		*1670*		*64*	*30-130*		
Surrogate: Terphenyl-dl4	*1180*		µg/kg wet		*1670*		*71*	*30-130*		
Surrogate: 2-Fluorobiphenyl	*1070*		µg/kg wet		*1670*		*64*	*30-130*		

Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111248 - SW846 3550B										
LCS (7111248-BS1)										
Prepared: 15-Nov-07 Analyzed: 16-Nov-07										
Surrogate: 2-Fluorophenol	*1000*		µg/kg wet		*1670*		*60*	*15-110*		
Surrogate: Nitrobenzene-d5	*1030*		µg/kg wet		*1670*		*62*	*30-130*		
Surrogate: Phenol-d5	*773*		µg/kg wet		*1670*		*46*	*15-110*		
Surrogate: Terphenyl-dl4	*1180*		µg/kg wet		*1670*		*71*	*30-130*		
Surrogate: 2,4,6-Tribromophenol	*1220*		µg/kg wet		*1670*		*73*	*15-110*		
Duplicate (7111248-DUP1) Source: SA70868-05										
Prepared: 15-Nov-07 Analyzed: 17-Nov-07										
Acenaphthene	BRL		µg/kg dry	240		BRL				50
Acenaphthene	BRL		µg/kg dry	48.3		BRL				50
Acenaphthylene	BRL		µg/kg dry	48.3		BRL				50
Acenaphthylene	BRL		µg/kg dry	240		BRL				50
Aniline	BRL		µg/kg dry	240		BRL				50
Anthracene	BRL		µg/kg dry	240		BRL				50
Anthracene	BRL		µg/kg dry	48.3		BRL				50
Atrazine	BRL		µg/kg dry	240		BRL				50
Azobenzene/Diphenyldiazine	BRL		µg/kg dry	240		BRL				50
Benzidine	BRL		µg/kg dry	240		BRL				50
Benzo (a) anthracene	BRL		µg/kg dry	240		36.5				50
Benzo (a) anthracene	BRL		µg/kg dry	48.3		36.5				50
Benzo (a) pyrene	BRL		µg/kg dry	48.3		BRL				50
Benzo (a) pyrene	BRL		µg/kg dry	240		BRL				50
Benzo (b) fluoranthene	BRL		µg/kg dry	240		BRL				50
Benzo (b) fluoranthene	BRL		µg/kg dry	48.3		BRL				50
Benzo (g,h,i) perylene	BRL		µg/kg dry	240		BRL				50
Benzo (g,h,i) perylene	BRL		µg/kg dry	48.3		BRL				50
Benzo (k) fluoranthene	BRL		µg/kg dry	240		BRL				50
Benzo (k) fluoranthene	BRL		µg/kg dry	48.3		BRL				50
Benzoic acid	BRL		µg/kg dry	240		BRL				50
Benzyl alcohol	BRL		µg/kg dry	240		BRL				50
Bis(2-chloroethoxy)methane	BRL		µg/kg dry	240		BRL				50
Bis(2-chloroethyl)ether	BRL		µg/kg dry	240		BRL				50
Bis(2-chloroisopropyl)ether	BRL		µg/kg dry	240		BRL				50
Bis(2-ethylhexyl)phthalate	BRL		µg/kg dry	240		BRL				50
4-Bromophenyl phenyl ether	BRL		µg/kg dry	240		BRL				50
Butyl benzyl phthalate	BRL		µg/kg dry	240		BRL				50
Carbazole	BRL		µg/kg dry	240		BRL				50
4-Chloro-3-methylphenol	BRL		µg/kg dry	240		BRL				50
4-Chloroaniline	BRL		µg/kg dry	240		BRL				50
2-Chloronaphthalene	BRL		µg/kg dry	240		BRL				50
2-Chlorophenol	BRL		µg/kg dry	240		BRL				50
4-Chlorophenyl phenyl ether	BRL		µg/kg dry	240		BRL				50
Chrysene	BRL		µg/kg dry	240		33.5				50
Chrysene	BRL		µg/kg dry	48.3		33.5				50
Dibenzo (a,h) anthracene	BRL		µg/kg dry	240		BRL				50
Dibenzo (a,h) anthracene	BRL		µg/kg dry	48.3		BRL				50
Dibenzofuran	BRL		µg/kg dry	240		BRL				50
1,2-Dichlorobenzene	BRL		µg/kg dry	240		BRL				50
1,3-Dichlorobenzene	BRL		µg/kg dry	240		BRL				50
1,4-Dichlorobenzene	BRL		µg/kg dry	240		BRL				50
3,3´-Dichlorobenzidine	BRL		µg/kg dry	240		BRL				50

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111248 - SW846 3550B										
Duplicate (7111248-DUP1) Source: SA70868-05										
Prepared: 15-Nov-07 Analyzed: 17-Nov-07										
2,4-Dichlorophenol	BRL		µg/kg dry	240		BRL				50
Diethyl phthalate	BRL		µg/kg dry	240		BRL				50
Dimethyl phthalate	BRL		µg/kg dry	240		BRL				50
2,4-Dimethylphenol	BRL		µg/kg dry	240		BRL				50
Di-n-butyl phthalate	BRL		µg/kg dry	240		BRL				50
4,6-Dinitro-2-methylphenol	BRL		µg/kg dry	240		BRL				50
2,4-Dinitrophenol	BRL		µg/kg dry	240		BRL				50
2,4-Dinitrotoluene	BRL		µg/kg dry	240		BRL				50
2,6-Dinitrotoluene	BRL		µg/kg dry	240		BRL				50
Di-n-octyl phthalate	BRL		µg/kg dry	240		BRL				50
Fluoranthene	35.4	J,QM4	µg/kg dry	240		69.5			65	50
Fluoranthene	35.4	J,QM4	µg/kg dry	48.3		69.5			65	50
Fluorene	BRL		µg/kg dry	240		BRL				50
Fluorene	BRL		µg/kg dry	48.3		BRL				50
Hexachlorobenzene	BRL		µg/kg dry	240		BRL				50
Hexachlorobutadiene	BRL		µg/kg dry	240		BRL				50
Hexachlorocyclopentadiene	BRL		µg/kg dry	240		BRL				50
Hexachloroethane	BRL		µg/kg dry	240		BRL				50
Indeno (1,2,3-cd) pyrene	BRL		µg/kg dry	240		BRL				50
Indeno (1,2,3-cd) pyrene	BRL		µg/kg dry	48.3		BRL				50
1-Methylnaphthalene	BRL		µg/kg dry	240		BRL				50
Isophorone	BRL		µg/kg dry	240		BRL				50
1-Methylnaphthalene	BRL		µg/kg dry	48.3		BRL				50
2-Methylnaphthalene	BRL		µg/kg dry	240		BRL				50
2-Methylnaphthalene	BRL		µg/kg dry	48.3		BRL				50
2-Methylphenol	BRL		µg/kg dry	240		BRL				50
3,4-Methylphenol	BRL		µg/kg dry	240		BRL				50
Naphthalene	BRL		µg/kg dry	48.3		BRL				50
Naphthalene	BRL		µg/kg dry	240		BRL				50
2-Nitroaniline	BRL		µg/kg dry	240		BRL				50
3-Nitroaniline	BRL		µg/kg dry	240		BRL				50
4-Nitroaniline	BRL		µg/kg dry	959		BRL				50
Nitrobenzene	BRL		µg/kg dry	240		BRL				50
2-Nitrophenol	BRL		µg/kg dry	240		BRL				50
4-Nitrophenol	BRL		µg/kg dry	959		BRL				50
N-Nitrosodimethylamine	BRL		µg/kg dry	240		BRL				50
N-Nitrosodi-n-propylamine	BRL		µg/kg dry	240		BRL				50
N-Nitrosodiphenylamine	BRL		µg/kg dry	240		BRL				50
Pentachlorophenol	BRL		µg/kg dry	240		BRL				50
Phenanthrene	BRL		µg/kg dry	48.3		38.9				50
Phenanthrene	BRL		µg/kg dry	240		38.9				50
Phenol	BRL		µg/kg dry	240		BRL				50
Pyrene	33.4	J,QM4	µg/kg dry	240		60.3			57	50
Pyrene	33.4	J,QM4	µg/kg dry	48.3		60.3			57	50
Pyridine	BRL		µg/kg dry	240		BRL				50
1,2,4-Trichlorobenzene	BRL		µg/kg dry	240		BRL				50
2,4,5-Trichlorophenol	BRL		µg/kg dry	240		BRL				50
2,4,6-Trichlorophenol	BRL		µg/kg dry	240		BRL				50
Pentachloronitrobenzene	BRL		µg/kg dry	240		BRL				50

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111248 - SW846 3550B										
Duplicate (7111248-DUP1) **Source: SA70868-05**										
Prepared: 15-Nov-07 Analyzed: 17-Nov-07										
1,2,4,5-Tetrachlorobenzene	BRL		µg/kg dry	240		BRL				50
Surrogate: 2-Fluorobiphenyl	*1090*		µg/kg dry		*2420*		*45*	*30-130*		
Surrogate: Terphenyl-dl4	*1450*		µg/kg dry		*2420*		*60*	*30-130*		
Surrogate: 2-Fluorobiphenyl	*1090*		µg/kg dry		*2420*		*45*	*30-130*		
Surrogate: 2-Fluorophenol	*1660*		µg/kg dry		*2420*		*68*	*15-110*		
Surrogate: Nitrobenzene-d5	*1150*		µg/kg dry		*2420*		*47*	*30-130*		
Surrogate: Phenol-d5	*1060*		µg/kg dry		*2420*		*44*	*15-110*		
Surrogate: Terphenyl-dl4	*1450*		µg/kg dry		*2420*		*60*	*30-130*		
Surrogate: 2,4,6-Tribromophenol	*1470*		µg/kg dry		*2420*		*61*	*15-110*		
Matrix Spike (7111248-MS1) **Source: SA70868-05**										
Prepared: 15-Nov-07 Analyzed: 17-Nov-07										
Acenaphthene	1760		µg/kg dry	243	2450	BRL	72	40-140		
Acenaphthene	1760		µg/kg dry	48.9	2450	BRL	72	40-140		
Benzo (b) fluoranthene	BRL		µg/kg dry	243		BRL		40-140		
Benzo (k) fluoranthene	BRL		µg/kg dry	243		BRL		40-140		
4-Chloro-3-methylphenol	3330		µg/kg dry	243	4910	BRL	68	30-130		
2-Chlorophenol	3400		µg/kg dry	243	4910	BRL	69	30-130		
Chrysene	30.4		µg/kg dry	243		33.5		40-140		
1,4-Dichlorobenzene	1630		µg/kg dry	243	2450	BRL	66	40-140		
Indeno (1,2,3-cd) pyrene	BRL		µg/kg dry	243		BRL		40-140		
Naphthalene	BRL		µg/kg dry	243		BRL		40-140		
4-Nitrophenol	3580		µg/kg dry	972	4910	BRL	73	30-130		
N-Nitrosodi-n-propylamine	1360		µg/kg dry	243	2450	BRL	56	40-140		
Pentachlorophenol	3760		µg/kg dry	243	4910	BRL	77	30-130		
Phenol	3150		µg/kg dry	243	4910	BRL	64	30-130		
Pyrene	1920		µg/kg dry	243	2450	60.3	76	40-140		
Pyrene	1920		µg/kg dry	48.9	2450	60.3	76	40-140		
1,2,4-Trichlorobenzene	1610		µg/kg dry	243	2450	BRL	66	40-140		
Surrogate: 2-Fluorobiphenyl	*1700*		µg/kg dry		*2450*		*69*	*30-130*		
Surrogate: Terphenyl-dl4	*1850*		µg/kg dry		*2450*		*75*	*30-130*		
Surrogate: 2-Fluorobiphenyl	*1700*		µg/kg dry		*2450*		*69*	*30-130*		
Surrogate: 2-Fluorophenol	*1670*		µg/kg dry		*2450*		*68*	*15-110*		
Surrogate: Nitrobenzene-d5	*1380*		µg/kg dry		*2450*		*56*	*30-130*		
Surrogate: Phenol-d5	*1300*		µg/kg dry		*2450*		*53*	*15-110*		
Surrogate: Terphenyl-dl4	*1850*		µg/kg dry		*2450*		*75*	*30-130*		
Surrogate: 2,4,6-Tribromophenol	*1980*		µg/kg dry		*2450*		*81*	*15-110*		
Matrix Spike Dup (7111248-MSD1) **Source: SA70868-05**										
Prepared: 15-Nov-07 Analyzed: 17-Nov-07										
Acenaphthene	1630		µg/kg dry	238	2400	BRL	68	40-140	5	30
Acenaphthene	1630		µg/kg dry	47.9	2400	BRL	68	40-140	5	30
Benzo (b) fluoranthene	BRL		µg/kg dry	238		BRL		40-140		30
Benzo (k) fluoranthene	BRL		µg/kg dry	238		BRL		40-140		30
4-Chloro-3-methylphenol	3560		µg/kg dry	238	4800	BRL	74	30-130	9	30
2-Chlorophenol	3110		µg/kg dry	238	4800	BRL	65	30-130	7	30
Chrysene	42.7		µg/kg dry	238		33.5		40-140		30
1,4-Dichlorobenzene	1500		µg/kg dry	238	2400	BRL	62	40-140	6	30
Indeno (1,2,3-cd) pyrene	BRL		µg/kg dry	238		BRL		40-140		30
Naphthalene	BRL		µg/kg dry	238		BRL		40-140		30
4-Nitrophenol	3110		µg/kg dry	951	4800	BRL	65	30-130	12	30
N-Nitrosodi-n-propylamine	1580		µg/kg dry	238	2400	BRL	66	40-140	17	30
Pentachlorophenol	3360		µg/kg dry	238	4800	BRL	70	30-130	9	30
Phenol	2950		µg/kg dry	238	4800	BRL	61	30-130	4	30

Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111248 - SW846 3550B										
Matrix Spike Dup (7111248-MSD1) **Source: SA70868-05**										
Prepared: 15-Nov-07 Analyzed: 17-Nov-07										
Pyrene	1750		µg/kg dry	47.9	2400	60.3	71	40-140	7	30
Pyrene	1750		µg/kg dry	238	2400	60.3	71	40-140	7	30
1,2,4-Trichlorobenzene	1480		µg/kg dry	238	2400	BRL	62	40-140	6	30
Surrogate: 2-Fluorobiphenyl	*1530*		µg/kg dry		*2400*		*64*	*30-130*		
Surrogate: Terphenyl-dl4	*1630*		µg/kg dry		*2400*		*68*	*30-130*		
Surrogate: 2-Fluorobiphenyl	*1530*		µg/kg dry		*2400*		*64*	*30-130*		
Surrogate: 2-Fluorophenol	*1470*		µg/kg dry		*2400*		*61*	*15-110*		
Surrogate: Nitrobenzene-d5	*1720*		µg/kg dry		*2400*		*72*	*30-130*		
Surrogate: Phenol-d5	*1160*		µg/kg dry		*2400*		*48*	*15-110*		
Surrogate: Terphenyl-dl4	*1630*		µg/kg dry		*2400*		*68*	*30-130*		
Surrogate: 2,4,6-Tribromophenol	*1700*		µg/kg dry		*2400*		*71*	*15-110*		

Total Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111330 - EPA200/SW7000 Series										
Blank (7111330-BLK1)										
Prepared: 16-Nov-07 Analyzed: 19-Nov-07										
Mercury	BRL		mg/kg wet	0.0295						
Duplicate (7111330-DUP1) **Source: SA70868-11**										
Prepared: 16-Nov-07 Analyzed: 19-Nov-07										
Mercury	BRL		mg/kg dry	0.0333		BRL				20
Matrix Spike (7111330-MS1) **Source: SA70868-10**										
Prepared: 16-Nov-07 Analyzed: 19-Nov-07										
Mercury	0.414		mg/kg dry	0.0264	0.367	BRL	113	75-125		
Reference (7111330-SRM1)										
Prepared: 16-Nov-07 Analyzed: 19-Nov-07										
Mercury	1.30		mg/kg wet	0.0300	1.12		116	66-132.7		
Batch 7111615 - EPA200/SW7000 Series										
Blank (7111615-BLK1)										
Prepared: 20-Nov-07 Analyzed: 21-Nov-07										
Mercury	BRL		mg/kg wet	0.0291						
Duplicate (7111615-DUP1) **Source: SA70868-01**										
Prepared: 20-Nov-07 Analyzed: 21-Nov-07										
Mercury	1.14	QR6	mg/kg dry	0.0376		2.23			65	20
Matrix Spike (7111615-MS1) **Source: SA70868-02**										
Prepared: 20-Nov-07 Analyzed: 21-Nov-07										
Mercury	4.09		mg/kg dry	0.0430	1.19	3.06	86	75-125		
Matrix Spike Dup (7111615-MSD1) **Source: SA70868-02**										
Prepared: 20-Nov-07 Analyzed: 21-Nov-07										
Mercury	4.40		mg/kg dry	0.0424	1.18	3.06	114	75-125	7	20
Reference (7111615-SRM1)										
Prepared: 20-Nov-07 Analyzed: 21-Nov-07										
Mercury	1.18		mg/kg wet	0.0300	1.15		102	66-132.7		

Total Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111328 - EPA 200 Series										
Blank (7111328-BLK1)										
Prepared: 16-Nov-07 Analyzed: 20-Nov-07										
Antimony	BRL		mg/kg wet	2.80						
Zinc	BRL		mg/kg wet	0.932						
Vanadium	BRL		mg/kg wet	1.40						
Thallium	BRL		mg/kg wet	2.80						
Nickel	BRL		mg/kg wet	0.932						
Selenium	BRL		mg/kg wet	1.40						
Silver	BRL		mg/kg wet	1.40						
Manganese	BRL		mg/kg wet	0.932						
Arsenic	BRL		mg/kg wet	1.40						
Copper	BRL		mg/kg wet	0.932						
Cadmium	BRL		mg/kg wet	0.466						
Lead	BRL		mg/kg wet	1.40						
Chromium	BRL		mg/kg wet	0.932						
Beryllium	BRL		mg/kg wet	0.466						
Barium	BRL		mg/kg wet	0.932						
Duplicate (7111328-DUP1) **Source: SA70868-11**										
Prepared: 16-Nov-07 Analyzed: 21-Nov-07										
Selenium	BRL		mg/kg dry	1.48		BRL				35
Manganese	171		mg/kg dry	0.985		168			2	35
Thallium	1.40	J	mg/kg dry	2.96		1.56			11	35
Zinc	10.9		mg/kg dry	0.985		11.9			8	35
Vanadium	5.16		mg/kg dry	1.48		5.47			6	35
Silver	BRL		mg/kg dry	1.48		BRL				35
Nickel	1.61		mg/kg dry	0.985		1.58			2	35
Antimony	BRL		mg/kg dry	2.96		BRL				35
Beryllium	0.246	J	mg/kg dry	0.493		0.267			8	35
Lead	0.670	J	mg/kg dry	1.48		0.612			9	35
Chromium	3.10		mg/kg dry	0.985		3.13			0.8	35
Arsenic	BRL		mg/kg dry	1.48		BRL				35
Cadmium	0.128	J	mg/kg dry	0.493		0.117			9	35
Copper	BRL		mg/kg dry	0.985		BRL				35
Barium	7.60		mg/kg dry	0.985		8.09			6	35
Matrix Spike (7111328-MS1) **Source: SA70868-09**										
Prepared: 16-Nov-07 Analyzed: 21-Nov-07										
Selenium	120		mg/kg dry	1.51	126	BRL	95	70-130		
Nickel	123		mg/kg dry	1.00	126	1.76	96	70-130		
Silver	119		mg/kg dry	1.51	126	BRL	95	70-130		
Zinc	127		mg/kg dry	1.00	126	7.67	95	70-130		
Vanadium	124		mg/kg dry	1.51	126	4.69	95	70-130		
Antimony	122		mg/kg dry	3.01	126	0.426	97	70-130		
Thallium	116		mg/kg dry	3.01	126	BRL	92	70-130		
Manganese	177		mg/kg dry	1.00	126	55.2	97	70-130		
Chromium	124		mg/kg dry	1.00	126	3.75	96	70-130		
Lead	119		mg/kg dry	1.51	126	1.45	94	70-130		
Cadmium	121		mg/kg dry	0.502	126	0.124	96	70-130		
Arsenic	116		mg/kg dry	1.51	126	BRL	92	70-130		
Copper	128		mg/kg dry	1.00	126	2.71	100	70-130		
Beryllium	119		mg/kg dry	0.502	126	0.160	94	70-130		
Barium	131		mg/kg dry	1.00	126	7.93	98	70-130		

Total Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111328 - EPA 200 Series										
Matrix Spike (7111328-MS1) **Source: SA70868-09**										
Prepared: 16-Nov-07 Analyzed: 21-Nov-07										
Matrix Spike (7111328-MS2) **Source: SA70868-10**										
Prepared: 16-Nov-07 Analyzed: 21-Nov-07										
Silver	111		mg/kg dry	1.42	118	BRL	94	70-130		
Nickel	112		mg/kg dry	0.945	118	1.37	93	70-130		
Selenium	108		mg/kg dry	1.42	118	BRL	92	70-130		
Manganese	526		mg/kg dry	0.945	118	380	123	70-130		
Vanadium	116		mg/kg dry	1.42	118	8.05	92	70-130		
Thallium	107		mg/kg dry	2.84	118	1.40	89	70-130		
Zinc	123		mg/kg dry	0.945	118	13.2	93	70-130		
Antimony	109		mg/kg dry	2.84	118	BRL	92	70-130		
Beryllium	109		mg/kg dry	0.473	118	0.192	92	70-130		
Lead	108		mg/kg dry	1.42	118	1.41	90	70-130		
Cadmium	111		mg/kg dry	0.473	118	0.197	93	70-130		
Chromium	114		mg/kg dry	0.945	118	4.27	93	70-130		
Arsenic	105		mg/kg dry	1.42	118	BRL	89	70-130		
Copper	116		mg/kg dry	0.945	118	1.51	97	70-130		
Barium	133		mg/kg dry	0.945	118	18.1	97	70-130		
Post Spike (7111328-PS1) **Source: SA70868-09**										
Prepared: 16-Nov-07 Analyzed: 21-Nov-07										
Antimony	116		mg/kg dry	2.99	125	0.426	93	85-115		
Thallium	114		mg/kg dry	2.99	125	BRL	91	85-115		
Vanadium	123		mg/kg dry	1.50	125	4.69	95	85-115		
Manganese	175		mg/kg dry	0.998	125	55.2	96	85-115		
Nickel	120		mg/kg dry	0.998	125	1.76	95	85-115		
Zinc	124		mg/kg dry	0.998	125	7.67	93	85-115		
Selenium	117		mg/kg dry	1.50	125	BRL	93	85-115		
Copper	124		mg/kg dry	0.998	125	2.71	98	85-115		
Arsenic	114		mg/kg dry	1.50	125	BRL	92	85-115		
Chromium	122		mg/kg dry	0.998	125	3.75	95	85-115		
Lead	116		mg/kg dry	1.50	125	1.45	92	85-115		
Cadmium	119		mg/kg dry	0.499	125	0.124	95	85-115		
Beryllium	117		mg/kg dry	0.499	125	0.160	94	85-115		
Barium	127		mg/kg dry	0.998	125	7.93	96	85-115		
Post Spike (7111328-PS2) **Source: SA70868-10**										
Prepared: 16-Nov-07 Analyzed: 21-Nov-07										
Nickel	111		mg/kg dry	0.938	117	1.37	93	85-115		
Thallium	107		mg/kg dry	2.81	117	1.40	90	85-115		
Zinc	121		mg/kg dry	0.938	117	13.2	92	85-115		
Manganese	502		mg/kg dry	0.938	117	380	104	85-115		
Selenium	108		mg/kg dry	1.41	117	BRL	92	85-115		
Antimony	108		mg/kg dry	2.81	117	BRL	92	85-115		
Vanadium	117		mg/kg dry	1.41	117	8.05	93	85-115		
Lead	109		mg/kg dry	1.41	117	1.41	91	85-115		
Beryllium	107		mg/kg dry	0.469	117	0.192	92	85-115		
Chromium	113		mg/kg dry	0.938	117	4.27	93	85-115		
Cadmium	110		mg/kg dry	0.469	117	0.197	94	85-115		
Copper	114		mg/kg dry	0.938	117	1.51	96	85-115		
Arsenic	106		mg/kg dry	1.41	117	BRL	90	85-115		

Total Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111328 - EPA 200 Series										
Post Spike (7111328-PS2) **Source: SA70868-10**										
Prepared: 16-Nov-07 Analyzed: 21-Nov-07										
Barium	130		mg/kg dry	0.938	117	18.1	95	85-115		
Reference (7111328-SRM1)										
Prepared: 16-Nov-07 Analyzed: 21-Nov-07										
Nickel	58.6		mg/kg wet	1.00	59.3		99	82.6-117.2		
Selenium	78.7		mg/kg wet	1.50	79.3		99	77.4-122.6		
Manganese	153		mg/kg wet	1.00	154		99	79.1-120.9		
Thallium	64.6		mg/kg wet	3.00	67.0		96	77.1-122.9		
Vanadium	53.2		mg/kg wet	1.50	54.2		98	77.1-122.6		
Zinc	110		mg/kg wet	1.00	118		94	79.1-120.9		
Silver	41.6		mg/kg wet	1.50	41.7		100	66.3-133.6		
Antimony	110		mg/kg wet	3.00	54.7		200	0-211.2		
Arsenic	43.2		mg/kg wet	1.50	45.4		95	80.9-119.4		
Cadmium	31.6		mg/kg wet	0.500	32.2		98	82.1-117.9		
Copper	43.1		mg/kg wet	1.00	44.5		97	82.4-117.2		
Lead	44.4		mg/kg wet	1.50	45.5		98	81.8-118.1		
Chromium	48.5		mg/kg wet	1.00	50.1		97	78.9-120.5		
Beryllium	30.7		mg/kg wet	0.500	31.4		98	83-117		
Barium	218		mg/kg wet	1.00	218		100	82.7-117.3		

SPLP Metals by EPA 1312 & 6000/7000 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111473 - SW846 3010A										
Blank (7111473-BLK1)										
Prepared: 15-Nov-07 Analyzed: 17-Nov-07										
Lead	BRL		mg/l	0.0150						
LCS (7111473-BS1)										
Prepared: 15-Nov-07 Analyzed: 17-Nov-07										
Lead	2.17		mg/l	0.0150	2.50		87	82.2-105		
LCS Dup (7111473-BSD1)										
Prepared: 15-Nov-07 Analyzed: 17-Nov-07										
Lead	2.24		mg/l	0.0150	2.50		90	82.2-105	3	20
Duplicate (7111473-DUP1) **Source: SA70825-12**										
Prepared: 15-Nov-07 Analyzed: 18-Nov-07										
Lead	BRL		mg/l	0.0150		0.0064				20
Matrix Spike (7111473-MS1) **Source: SA70825-02**										
Prepared: 15-Nov-07 Analyzed: 17-Nov-07										
Lead	2.22		mg/l	0.0150	2.50	BRL	89	81.9-105		
Matrix Spike (7111473-MS2) **Source: SA70825-09**										
Prepared: 15-Nov-07 Analyzed: 17-Nov-07										
Lead	2.30		mg/l	0.0150	2.50	0.0053	92	81.9-105		
Matrix Spike (7111473-MS3) **Source: SA70825-12**										
Prepared: 15-Nov-07 Analyzed: 18-Nov-07										
Lead	2.26		mg/l	0.0150	2.50	0.0064	90	81.9-105		
Matrix Spike Dup (7111473-MSD1) **Source: SA70825-02**										
Prepared: 15-Nov-07 Analyzed: 17-Nov-07										
Lead	2.22		mg/l	0.0150	2.50	BRL	89	81.9-105	0.2	35
Matrix Spike Dup (7111473-MSD2) **Source: SA70825-09**										
Prepared: 15-Nov-07 Analyzed: 17-Nov-07										
Lead	2.21		mg/l	0.0150	2.50	0.0053	88	81.9-105	4	35
Matrix Spike Dup (7111473-MSD3) **Source: SA70825-12**										
Prepared: 15-Nov-07 Analyzed: 18-Nov-07										
Lead	2.16		mg/l	0.0150	2.50	0.0064	86	81.9-105	5	35
Post Spike (7111473-PS1) **Source: SA70825-02**										
Prepared: 15-Nov-07 Analyzed: 17-Nov-07										
Lead	2.22		mg/l	0.0150	2.50	BRL	89	85.9-104		
Post Spike (7111473-PS2) **Source: SA70825-09**										
Prepared: 15-Nov-07 Analyzed: 17-Nov-07										
Lead	2.21		mg/l	0.0150	2.50	0.0053	88	85.9-104		
Post Spike (7111473-PS3) **Source: SA70825-12**										
Prepared: 15-Nov-07 Analyzed: 18-Nov-07										
Lead	2.23		mg/l	0.0150	2.50	0.0064	89	85.9-104		

General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7111396 - General Preparation										
Duplicate (7111396-DUP1) Source: SA70839-01										
Prepared & Analyzed: 16-Nov-07										
% Solids	91.5		%			93.9			3	20
Batch 7111397 - General Preparation										
Duplicate (7111397-DUP1) Source: SA70868-08										
Prepared & Analyzed: 16-Nov-07										
% Solids	67.7		%			65.3			4	20

Notes and Definitions

QC1	Analyte out of acceptance range.
QC2	Analyte out of acceptance range in QC spike but no reportable concentration present in sample
QM4	Visual evaluation of the sample indicates the RPD is above the control limit due to a non-homogeneous sample matrix.
QM7	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
QR6	The RPD exceeded the QC control limits; however precision is demonstrated with acceptable RPD values for MS/MSD.
BRL	Below Reporting Limit - Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
NR	Not Reported
RPD	Relative Percent Difference
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).

A plus sign (+) in the Method Reference column indicates the method is not accredited by NELAC

Laboratory Control Sample (LCS): A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix

Matrix Spike: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure The method blank is used to document contamination resulting from the analytical process

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

Surrogate: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

Validated by:
Hanibal C. Tayeh, Ph.D.
Nicole Brown

SA 70868 RY

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 2

Special Handling:
- ☒ Standard TAT - 7 to 10 business days
- ☐ Rush TAT - Date Needed: _____
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: Jacques Whitford Co
24 Albion Rd. Suite 220
Lincoln, RI 02865

Project Mgr.: Joe Unsworth

Invoice To: Same

P.O. No.: 100825.04/100 RQN: _____

Project No.: 100825.04/100
Site Name: Potter Hill Mill
Location: Westerly State: RI
Sampler(s): JTU/RLS

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid
7=CH_3OH 8= $NaHSO_4$ 9=_____ 10=_____

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1=_____ X2=_____ X3=_____

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Preservative	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analyses: VOCs 8260	SVOCs 8270	16 Metals*	PAHs-8270	QA Reporting Notes:
70868-01	Sed 1	11/8/07		G	SO	+/-	1	1			X	X	X		* 16-Metals: Antimony,
02	Sed 2	11/8/07		G	SO	+/-	1	1			X	X	X		Arsenic, Barium, Beryllium,
03	Sed 3	11/8/07		G	SO	+/-	1	1			X	X	X		Cadmium, Chromium, Copper,
04	Sed 4	11/8/07		G	SO	+/-	1	1			X	X	X		Lead, Manganese, Mercury,
05	Sed 5	11/8/07		G	SO	+/-	1	1			X	X	X		Nickel, Selenium, Silver,
06	Sed 6	11/8/07		G	SO	+/-	1	1			X	X	X		Thallium, Vanadium, Zinc
07	Sed 7	11/8/07		G	SO	+/-	1	1			X	X	X		
08	Sed 8	11/8/07		G	SO	+/-	1	1			X	X	X		
09	SS-27	11/8/07		G	SO	+/-	1	1			X		X	X	
10	SS-28	11/8/07		G	SO	+/-	1	1			X		X	X	

☐ Fax results when available to (____) _____
☒ E-mail to junswort@jacqueswhitford.com
EDD Format _____

Condition upon receipt: ☑ Iced ☐ Ambient ☑ °C 5.8 Rec

Relinquished by:	Received by:	Date:	Time:
Joe Unsworth	Bill Hennessy	11/9/07	1225
Bill Hennessy		11/9/07	1555

☐ Provide MA DEP MCP CAM Report
☐ Provide CT DPH RCP Report

QA/QC Reporting Level
☐ Standard ☐ No QC
☐ Other _____

State specific reporting standards: _____

Rep 32.2°F

SA 70868 EM

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 2 of 2

Special Handling:
- ☒ Standard TAT - 7 to 10 business days
- ☐ Rush TAT - Date Needed:
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: Jacques Whitford Co
24 Albion Rd, Suite 220
Lincoln, RI 02865

Project Mgr.: Joe Unsworth

Invoice To: Same

P.O. No.: 1009825.04/100 RQN:

Project No.: 1009825.04/100
Site Name: Potter Hill Mill
Location: Westerly State: RI
Sampler(s): JTU/RLS

1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid
7=CH_3OH 8= $NaHSO_4$ 9= 10=

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Preservative	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic		VOCs 8260	PAHs 8270	16 Metals	Priority Poll 13 Metals	SPLP Lead				QA Reporting Notes: (check if needed)
70868-11	SS-29	11/8/07		G	SO	7/-	1	1				Y	Y	X						* 16 Metals - same as page 1 of 1
12	SS-30	11/8/07		G	SO	7/-	1	1				Y	Y		X					
13	SS-31	11/8/07		G	SO	7/-	1	1				Y	Y		Y					
14	SS-32	11/8/07		G	SO	7/-		1								X				
15	SS-33	11/8/07		G	SO	7/-		1								Y				

QA Reporting Notes:
☐ Provide MA DEP MCP CAM Report
☐ Provide CT DPH RCP Report

QA/QC Reporting Level
☐ Standard ☐ No QC
☐ Other

State specific reporting standards:

☐ Fax results when available to (____)
☒ E-mail to junswort@jacqueswhitford.com
EDD Format

Condition upon receipt: ☐ Iced ☐ Ambient ☒ °C 5.8 Ref

Relinquished by:	Received by:	Date:	Time:
Joe Unsworth	Bill Hastings	11/9/07	1225
Bill Hastings	[signature]	11/9/07	1555

Ref 32.2

Report Date:
13-Dec-07 14:09

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

Jacques Whitford Company, Inc.
24 Albion Rd, Suite 220
Lincoln, RI 02865
Attn: Joe Unsworth

Project: Potter Hill Mill - Westerly, RI
Project 1009825.04/100

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SA71936-01	Sed-9	Soil	05-Dec-07 00:00	06-Dec-07 14:23
SA71936-02	Sed-10	Soil	05-Dec-07 00:00	06-Dec-07 14:23

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.
All applicable NELAC requirements have been met
Please note that this report contains 8 pages of analytical data plus Chain of Custody document(s).
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Massachusetts Certification # M-MA138/MA1110
Connecticut # PH-0777
Florida # E87600/E87936
Maine # MA138
New Hampshire # 2538/2972
New Jersey # MA011/MA012
New York # 11393/11840
Rhode Island # 98
USDA # S-51435
Vermont # VT-11393

Authorized by:

Hanibal C. Tayeh, Ph.D.
President/Laboratory Director

Technical Reviewer's Initial:

Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Spectrum is currently accredited for the specific method or analyte indicated. Please refer to our "Quality" web page at www.spectrum-analytical.com for a full listing of our current certifications and fields of accreditation. States in which Spectrum Analytical, Inc. holds NELAC certification are New York, New Hampshire, New Jersey and Florida. All analytical work for Volatile Organic and Air analysis are transferred to and conducted at our 830 Silver Street location (NH-2972, NY-11840, FL-E87936 and NJ-MA012).

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed-9 SA71936-01	1009825.04/100	Soil	05-Dec-07 00:00	06-Dec-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3550B											
83-32-9	Acenaphthene	194		µg/kg dry	152	1	SW846 8270C	11-Dec-07	12-Dec-07	7120633	M.B
208-96-8	Acenaphthylene	BRL		µg/kg dry	152	1	"	"	"	"	"
120-12-7	Anthracene	198		µg/kg dry	152	1	"	"	"	"	"
56-55-3	Benzo (a) anthracene	458		µg/kg dry	152	1	"	"	"	"	"
50-32-8	Benzo (a) pyrene	432		µg/kg dry	152	1	"	"	"	"	"
205-99-2	Benzo (b) fluoranthene	365		µg/kg dry	152	1	"	"	"	"	"
191-24-2	Benzo (g,h,i) perylene	240		µg/kg dry	152	1	"	"	"	"	"
207-08-9	Benzo (k) fluoranthene	385		µg/kg dry	152	1	"	"	"	"	"
218-01-9	Chrysene	473		µg/kg dry	152	1	"	"	"	"	"
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/kg dry	152	1	"	"	"	"	"
206-44-0	Fluoranthene	1,250		µg/kg dry	152	1	"	"	"	"	"
86-73-7	Fluorene	BRL		µg/kg dry	152	1	"	"	"	"	"
193-39-5	Indeno (1,2,3-cd) pyrene	293		µg/kg dry	152	1	"	"	"	"	"
90-12-0	1-Methylnaphthalene	BRL		µg/kg dry	152	1	"	"	"	"	"
91-57-6	2-Methylnaphthalene	BRL		µg/kg dry	152	1	"	"	"	"	"
91-20-3	Naphthalene	BRL		µg/kg dry	152	1	"	"	"	"	"
85-01-8	Phenanthrene	943		µg/kg dry	152	1	"	"	"	"	"
129-00-0	Pyrene	934		µg/kg dry	152	1	"	"	"	"	"
Surrogate recoveries:											
321-60-8	*2-Fluorobiphenyl*	*75*		*30-130 %*			"	"	"	"	"
1718-51-0	*Terphenyl-dl4*	*76*		*30-130 %*			"	"	"	"	"
Total Metals by EPA 6000/7000 Series Methods											
7439-97-6	Mercury	0.0602		mg/kg dry	0.0338	1	SW846 7471A	11-Dec-07	11-Dec-07	7120649	CRM
Total Metals by EPA 200 Series Methods											
7440-22-4	Silver	BRL		mg/kg dry	1.63	1	EPA 200.7	10-Dec-07	12-Dec-07	7120600	HB
7440-38-2	Arsenic	3.72		mg/kg dry	1.63	1	"	"	"	"	"
7440-39-3	Barium	27.1		mg/kg dry	1.08	1	"	"	12-Dec-07	"	TBG
7440-43-9	Cadmium	BRL		mg/kg dry	0.542	1	"	"	"	"	"
7440-47-3	Chromium	30.2		mg/kg dry	1.08	1	"	"	"	"	"
7439-92-1	Lead	26.2		mg/kg dry	1.63	1	"	"	"	"	"
7782-49-2	Selenium	2.38		mg/kg dry	1.63	1	"	"	"	"	"
General Chemistry Parameters											
	% Solids	86.3		%		1	SM2540 G Mod.	12-Dec-07	12-Dec-07	7120825	DBM

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed-10 SA71936-02	1009825.04/100	Soil	05-Dec-07 00:00	06-Dec-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3550B											
83-32-9	Acenaphthene	823		µg/kg dry	158	1	SW846 8270C	11-Dec-07	12-Dec-07	7120633	M.B
208-96-8	Acenaphthylene	187		µg/kg dry	158	1	"	"	"	"	"
120-12-7	Anthracene	1,210		µg/kg dry	158	1	"	"	"	"	"
56-55-3	Benzo (a) anthracene	3,320		µg/kg dry	158	1	"	"	"	"	"
50-32-8	Benzo (a) pyrene	2,890		µg/kg dry	158	1	"	"	"	"	"
205-99-2	Benzo (b) fluoranthene	3,000		µg/kg dry	158	1	"	"	"	"	"
191-24-2	Benzo (g,h,i) perylene	1,630		µg/kg dry	158	1	"	"	"	"	"
207-08-9	Benzo (k) fluoranthene	1,730		µg/kg dry	158	1	"	"	"	"	"
218-01-9	Chrysene	2,910		µg/kg dry	158	1	"	"	"	"	"
53-70-3	Dibenzo (a,h) anthracene	389		µg/kg dry	158	1	"	"	"	"	"
206-44-0	Fluoranthene	7,070		µg/kg dry	158	1	"	"	"	"	"
86-73-7	Fluorene	731		µg/kg dry	158	1	"	"	"	"	"
193-39-5	Indeno (1,2,3-cd) pyrene	1,950		µg/kg dry	158	1	"	"	"	"	"
90-12-0	1-Methylnaphthalene	178		µg/kg dry	158	1	"	"	"	"	"
91-57-6	2-Methylnaphthalene	214		µg/kg dry	158	1	"	"	"	"	"
91-20-3	Naphthalene	468		µg/kg dry	158	1	"	"	"	"	"
85-01-8	Phenanthrene	5,880		µg/kg dry	158	1	"	"	"	"	"
129-00-0	Pyrene	5,480		µg/kg dry	158	1	"	"	"	"	"
Surrogate recoveries:											
321-60-8	*2-Fluorobiphenyl*	*80*		*30-130 %*			"	"	"	"	"
1718-51-0	*Terphenyl-dl4*	*81*		*30-130 %*			"	"	"	"	"
Total Metals by EPA 6000/7000 Series Methods											
7439-97-6	Mercury	0.245		mg/kg dry	0.0360	1	SW846 7471A	11-Dec-07	11-Dec-07	7120649	CRM
Total Metals by EPA 200 Series Methods											
7440-22-4	Silver	BRL		mg/kg dry	1.64	1	EPA 200.7	10-Dec-07	12-Dec-07	7120600	HB
7440-38-2	Arsenic	1.72		mg/kg dry	1.64	1	"	"	"	"	"
7440-39-3	Barium	22.9		mg/kg dry	1.09	1	"	"	12-Dec-07	"	TBG
7440-43-9	Cadmium	BRL		mg/kg dry	0.545	1	"	"	"	"	"
7440-47-3	Chromium	27.4		mg/kg dry	1.09	1	"	"	"	"	"
7439-92-1	Lead	116		mg/kg dry	1.64	1	"	"	"	"	"
7782-49-2	Selenium	2.89		mg/kg dry	1.64	1	"	"	"	"	"
General Chemistry Parameters											
	% Solids	82.8		%		1	SM2540 G Mod.	12-Dec-07	12-Dec-07	7120825	DBM

Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7120633 - SW846 3550B										
Blank (7120633-BLK1)										
Prepared & Analyzed: 11-Dec-07										
Acenaphthene	BRL		µg/kg wet	33.2						
Acenaphthylene	BRL		µg/kg wet	33.2						
Anthracene	BRL		µg/kg wet	33.2						
Benzo (a) anthracene	BRL		µg/kg wet	33.2						
Benzo (a) pyrene	BRL		µg/kg wet	33.2						
Benzo (b) fluoranthene	BRL		µg/kg wet	33.2						
Benzo (g,h,i) perylene	BRL		µg/kg wet	33.2						
Benzo (k) fluoranthene	BRL		µg/kg wet	33.2						
Chrysene	BRL		µg/kg wet	33.2						
Dibenzo (a,h) anthracene	BRL		µg/kg wet	33.2						
Fluoranthene	BRL		µg/kg wet	33.2						
Fluorene	BRL		µg/kg wet	33.2						
Indeno (1,2,3-cd) pyrene	BRL		µg/kg wet	33.2						
1-Methylnaphthalene	BRL		µg/kg wet	33.2						
2-Methylnaphthalene	BRL		µg/kg wet	33.2						
Naphthalene	BRL		µg/kg wet	33.2						
Phenanthrene	BRL		µg/kg wet	33.2						
Pyrene	BRL		µg/kg wet	33.2						
Surrogate: 2-Fluorobiphenyl	*1140*		µg/kg wet		*1670*		*69*	*30-130*		
Surrogate: Terphenyl-dl4	*1130*		µg/kg wet		*1670*		*68*	*30-130*		
LCS (7120633-BS1)										
Prepared & Analyzed: 11-Dec-07										
Acenaphthene	1130		µg/kg wet	33.2	1670		68	40-140		
Acenaphthylene	1080		µg/kg wet	33.2	1670		65	40-140		
Anthracene	1220		µg/kg wet	33.2	1670		73	40-140		
Benzo (a) anthracene	1200		µg/kg wet	33.2	1670		72	40-140		
Benzo (a) pyrene	1200		µg/kg wet	33.2	1670		72	40-140		
Benzo (b) fluoranthene	1120		µg/kg wet	33.2	1670		67	40-140		
Benzo (g,h,i) perylene	1120		µg/kg wet	33.2	1670		67	40-140		
Benzo (k) fluoranthene	1180		µg/kg wet	33.2	1670		71	40-140		
Chrysene	1190		µg/kg wet	33.2	1670		71	40-140		
Dibenzo (a,h) anthracene	1110		µg/kg wet	33.2	1670		67	40-140		
Fluoranthene	1210		µg/kg wet	33.2	1670		73	40-140		
Fluorene	1140		µg/kg wet	33.2	1670		68	40-140		
Indeno (1,2,3-cd) pyrene	1080		µg/kg wet	33.2	1670		65	40-140		
1-Methylnaphthalene	1100		µg/kg wet	33.2	1670		66	40-140		
2-Methylnaphthalene	1140		µg/kg wet	33.2	1670		69	40-140		
Naphthalene	1150		µg/kg wet	33.2	1670		69	40-140		
Phenanthrene	1180		µg/kg wet	33.2	1670		71	40-140		
Pyrene	1230		µg/kg wet	33.2	1670		74	40-140		
Surrogate: 2-Fluorobiphenyl	*1020*		µg/kg wet		*1670*		*61*	*30-130*		
Surrogate: Terphenyl-dl4	*1150*		µg/kg wet		*1670*		*69*	*30-130*		
Duplicate (7120633-DUP1)	**Source: SA72039-02**									
Prepared & Analyzed: 11-Dec-07										
Acenaphthene	BRL		µg/kg dry	36.5		BRL				50
Acenaphthylene	BRL		µg/kg dry	36.5		BRL				50
Anthracene	BRL		µg/kg dry	36.5		BRL				50
Benzo (a) anthracene	BRL		µg/kg dry	36.5		BRL				50
Benzo (a) pyrene	BRL		µg/kg dry	36.5		BRL				50

Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7120633 - SW846 3550B										
Duplicate (7120633-DUP1)	**Source: SA72039-02**									
Prepared & Analyzed: 11-Dec-07										
Benzo (b) fluoranthene	BRL		µg/kg dry	36.5		BRL				50
Benzo (g,h,i) perylene	BRL		µg/kg dry	36.5		BRL				50
Benzo (k) fluoranthene	BRL		µg/kg dry	36.5		BRL				50
Chrysene	BRL		µg/kg dry	36.5		BRL				50
Dibenzo (a,h) anthracene	BRL		µg/kg dry	36.5		BRL				50
Fluoranthene	BRL		µg/kg dry	36.5		BRL				50
Fluorene	BRL		µg/kg dry	36.5		BRL				50
Indeno (1,2,3-cd) pyrene	BRL		µg/kg dry	36.5		BRL				50
1-Methylnaphthalene	BRL		µg/kg dry	36.5		BRL				50
2-Methylnaphthalene	BRL		µg/kg dry	36.5		BRL				50
Naphthalene	BRL		µg/kg dry	36.5		BRL				50
Phenanthrene	BRL		µg/kg dry	36.5		BRL				50
Pyrene	BRL		µg/kg dry	36.5		BRL				50
Surrogate: 2-Fluorobiphenyl	*1100*		µg/kg dry		*1830*		*60*	*30-130*		
Surrogate: Terphenyl-dl4	*1070*		µg/kg dry		*1830*		*59*	*30-130*		
Matrix Spike (7120633-MS1)	**Source: SA72039-02**									
Prepared & Analyzed: 11-Dec-07										
Acenaphthene	1090		µg/kg dry	36.5	1830	BRL	59	40-140		
Pyrene	1150		µg/kg dry	36.5	1830	BRL	63	40-140		
Surrogate: 2-Fluorobiphenyl	*1030*		µg/kg dry		*1830*		*57*	*30-130*		
Surrogate: Terphenyl-dl4	*1050*		µg/kg dry		*1830*		*57*	*30-130*		
Matrix Spike Dup (7120633-MSD1)	**Source: SA72039-02**									
Prepared & Analyzed: 11-Dec-07										
Acenaphthene	1080		µg/kg dry	37.2	1860	BRL	58	40-140	3	30
Pyrene	1160		µg/kg dry	37.2	1860	BRL	63	40-140	0.4	30
Surrogate: 2-Fluorobiphenyl	*973*		µg/kg dry		*1860*		*52*	*30-130*		
Surrogate: Terphenyl-dl4	*1070*		µg/kg dry		*1860*		*57*	*30-130*		

Total Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7120649 - EPA200/SW7000 Series										
Blank (7120649-BLK1)										
Prepared & Analyzed: 11-Dec-07										
Mercury	BRL		mg/kg wet	0.0299						
Duplicate (7120649-DUP1)	**Source: SA71908-01**									
Prepared & Analyzed: 11-Dec-07										
Mercury	BRL		mg/kg dry	0.0324		BRL				20
Matrix Spike (7120649-MS1)	**Source: SA71936-01**									
Prepared & Analyzed: 11-Dec-07										
Mercury	0.599		mg/kg dry	0.0346	0.480	0.0602	112	75-125		
Post Spike (7120649-PS1)	**Source: SA71936-01**									
Prepared & Analyzed: 11-Dec-07										
Mercury	0.598		mg/kg dry	0.0342	0.475	0.0602	113	85-115		
Reference (7120649-SRM1)										
Prepared & Analyzed: 11-Dec-07										
Mercury	1.70		mg/kg wet	0.0300	1.46		116	66-132.6		

Total Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7120600 - EPA 200 Series										
Blank (7120600-BLK1)										
Prepared: 10-Dec-07 Analyzed: 12-Dec-07										
Silver	BRL		mg/kg wet	1.45						
Selenium	BRL		mg/kg wet	1.45						
Cadmium	BRL		mg/kg wet	0.482						
Chromium	BRL		mg/kg wet	0.964						
Lead	BRL		mg/kg wet	1.45						
Arsenic	BRL		mg/kg wet	1.45						
Barium	BRL		mg/kg wet	0.964						
Duplicate (7120600-DUP1) Source: SA71908-02										
Prepared: 10-Dec-07 Analyzed: 12-Dec-07										
Silver	BRL		mg/kg dry	1.53		BRL				35
Selenium	BRL		mg/kg dry	1.53		BRL				35
Arsenic	1.35	J	mg/kg dry	1.53		1.35			0.2	35
Cadmium	BRL		mg/kg dry	0.509		0.0977				35
Chromium	17.4		mg/kg dry	1.02		16.2			7	35
Lead	10.7		mg/kg dry	1.53		8.49			23	35
Barium	69.4		mg/kg dry	1.02		61.2			13	35
Matrix Spike (7120600-MS1) Source: SA71908-01										
Prepared: 10-Dec-07 Analyzed: 12-Dec-07										
Selenium	123		mg/kg dry	1.54	128	BRL	96	70-130		
Silver	124		mg/kg dry	1.54	128	BRL	97	70-130		
Arsenic	117		mg/kg dry	1.54	128	0.769	91	70-130		
Chromium	125		mg/kg dry	1.02	128	15.2	86	70-130		
Lead	121		mg/kg dry	1.54	128	1.07	94	70-130		
Cadmium	112		mg/kg dry	0.512	128	BRL	87	70-130		
Barium	181		mg/kg dry	1.02	128	60.4	94	70-130		
Post Spike (7120600-PS1) Source: SA71908-01										
Prepared: 10-Dec-07 Analyzed: 12-Dec-07										
Selenium	114		mg/kg dry	1.47	123	BRL	93	85-115		
Arsenic	109		mg/kg dry	1.47	123	0.769	88	85-115		
Cadmium	106		mg/kg dry	0.491	123	BRL	86	85-115		
Chromium	120		mg/kg dry	0.982	123	15.2	85	85-115		
Lead	112		mg/kg dry	1.47	123	1.07	90	85-115		
Barium	168		mg/kg dry	0.982	123	60.4	88	85-115		
Reference (7120600-SRM1)										
Prepared: 10-Dec-07 Analyzed: 12-Dec-07										
Silver	56.6		mg/kg wet	1.50	49.3		115	66.3-133.3		
Selenium	80.6		mg/kg wet	1.50	70.3		115	77.5-122.5		
Arsenic	86.2		mg/kg wet	1.50	77.0		112	76.8-123.2		
Cadmium	51.7		mg/kg wet	0.500	48.6		106	80.1-119.6		
Lead	71.9		mg/kg wet	1.50	61.2		118	78.4-120.1		
Chromium	64.6		mg/kg wet	1.00	61.2		106	80.5-119.2		
Barium	154		mg/kg wet	1.00	139		111	82.1-118		

General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7120825 - General Preparation										
Duplicate (7120825-DUP1)	Source: SA71810-01									
Prepared & Analyzed: 12-Dec-07										
% Solids	90.2		%			90.2			0.04	20

Notes and Definitions

BRL	Below Reporting Limit - Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
NR	Not Reported
RPD	Relative Percent Difference
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration(CLP J-Flag).

A plus sign (+) in the Method Reference column indicates the method is not accredited by NELAC

Laboratory Control Sample (LCS): A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix

Matrix Spike: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure The method blank is used to document contamination resulting from the analytical process

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction Sample RDLs are highly matrix-dependent.

Surrogate: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

Validated by:
Hanibal C. Tayeh, Ph.D.
Nicole Brown

SA71936 SM

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
- ☐ Standard TAT - 7 to 10 business days
- ☒ Rush TAT - Date Needed: 12-13-07
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: Jacques Whitford Co
24 Albion Rd, Suite 220
Lincoln, RI 02865

Project Mgr.: Joe Unsworth

Invoice To: Same

P.O. No.: 1009625.04/100 RQN:

Project No.: 1009625.04/100
Site Name: Potter Hill M.V.
Location: Westerly State: RI
Sampler(s): JTU

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid
7=CH_3OH 8= $NaHSO_4$ 9=_____ 10=_____

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1=_____ X2=_____ X3=_____

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Preservative	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Containers:	Analyses: RCRA 8 Metals	Analyses: PAHs	QA Reporting Notes: (check if needed)
71936-01	Sed-9	12-5-07		G	SO	1		1				X	X	☐ Provide MA DEP MCP CAM Report ☐ Provide CT DPH RCP Report **QA/QC Reporting Level** ☒ Standard ☐ No QC ☐ Other State specific reporting standards:
↓ 02	Sed-10	12-5-07		G	SO	-		1				X	X	

☐ Fax results when available to (_____) _____
☒ E-mail to junswort@jacqueswhitford.com
EDD Format _____

Condition upon receipt: ☐ Iced ☐ Ambient ☐ °C 0.8

Relinquished by:	Received by:	Date:	Time:
		12/6/07	1230
		12/6/07	1423

Report Date:
19-Dec-07 16:32

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

Laboratory Report

Jacques Whitford Company, Inc.
24 Albion Rd, Suite 220
Lincoln, RI 02865
Attn: Joe Unsworth

Project: Potter Hill Mill - Westerly, RI
Project 1009825.04/100

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SA72400-01	Sed-11	Soil	05-Dec-07 00:00	17-Dec-07 16:44

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.
All applicable NELAC requirements have been met
Please note that this report contains 7 pages of analytical data plus Chain of Custody document(s).
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Massachusetts Certification # M-MA138/MA1110
Connecticut # PH-0777
Florida # E87600/E87936
Maine # MA138
New Hampshire # 2538/2972
New Jersey # MA011/MA012
New York # 11393/11840
Rhode Island # 98
USDA # S-51435
Vermont # VT-11393

ACCREDITED IN ACCORDANCE WITH nelac

Authorized by:

Hanibal C. Tayeh, Ph.D.
President/Laboratory Director

Technical Reviewer's Initial:

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Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Sed-11 SA72400-01	1009825.04/100	Soil	05-Dec-07 00:00	17-Dec-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3550B											
83-32-9	Acenaphthene	BRL		µg/kg dry	168	1	SW846 8270C	18-Dec-07	19-Dec-07	7121206	M.B
208-96-8	Acenaphthylene	BRL		µg/kg dry	168	1	"	"	"	"	"
120-12-7	Anthracene	BRL		µg/kg dry	168	1	"	"	"	"	"
56-55-3	Benzo (a) anthracene	BRL		µg/kg dry	168	1	"	"	"	"	"
50-32-8	Benzo (a) pyrene	BRL		µg/kg dry	168	1	"	"	"	"	"
205-99-2	Benzo (b) fluoranthene	BRL		µg/kg dry	168	1	"	"	"	"	"
191-24-2	Benzo (g,h,i) perylene	BRL		µg/kg dry	168	1	"	"	"	"	"
207-08-9	Benzo (k) fluoranthene	BRL		µg/kg dry	168	1	"	"	"	"	"
218-01-9	Chrysene	BRL		µg/kg dry	168	1	"	"	"	"	"
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/kg dry	168	1	"	"	"	"	"
206-44-0	Fluoranthene	BRL		µg/kg dry	168	1	"	"	"	"	"
86-73-7	Fluorene	BRL		µg/kg dry	168	1	"	"	"	"	"
193-39-5	Indeno (1,2,3-cd) pyrene	BRL		µg/kg dry	168	1	"	"	"	"	"
90-12-0	1-Methylnaphthalene	BRL		µg/kg dry	168	1	"	"	"	"	"
91-57-6	2-Methylnaphthalene	BRL		µg/kg dry	168	1	"	"	"	"	"
91-20-3	Naphthalene	BRL		µg/kg dry	168	1	"	"	"	"	"
85-01-8	Phenanthrene	BRL		µg/kg dry	168	1	"	"	"	"	"
129-00-0	Pyrene	BRL		µg/kg dry	168	1	"	"	"	"	"
Surrogate recoveries:											
321-60-8	*2-Fluorobiphenyl*	*67*		*30-130 %*			"	"	"	"	"
1718-51-0	*Terphenyl-dl4*	*71*		*30-130 %*			"	"	"	"	"
Total Metals by EPA 6000/7000 Series Methods											
7439-97-6	Mercury	BRL		mg/kg dry	0.0332	1	SW846 7471A	18-Dec-07	19-Dec-07	7121241	CRM
Total Metals by EPA 200 Series Methods											
7440-22-4	Silver	BRL		mg/kg dry	1.81	1	EPA 200.7	18-Dec-07	18-Dec-07	7121240	SA
7440-38-2	Arsenic	BRL		mg/kg dry	1.81	1	"	"	"	"	"
7440-41-7	Beryllium	BRL		mg/kg dry	0.602	1	"	"	"	"	"
7440-43-9	Cadmium	BRL		mg/kg dry	0.602	1	"	"	"	"	"
7440-47-3	Chromium	2.01		mg/kg dry	1.20	1	"	"	"	"	"
7440-50-8	Copper	BRL		mg/kg dry	1.20	1	"	"	"	"	"
7440-02-0	Nickel	BRL		mg/kg dry	1.20	1	"	"	"	"	"
7439-92-1	Lead	BRL		mg/kg dry	1.81	1	"	"	"	"	"
7440-36-0	Antimony	BRL		mg/kg dry	3.61	1	"	"	"	"	"
7782-49-2	Selenium	BRL		mg/kg dry	1.81	1	"	"	"	"	"
7440-28-0	Thallium	BRL		mg/kg dry	3.61	1	"	"	"	"	"
7440-66-6	Zinc	4.72		mg/kg dry	1.20	1	"	"	"	"	"
General Chemistry Parameters											
	% Solids	79.4		%		1	SM2540 G Mod.	18-Dec-07	18-Dec-07	7121262	DBM

Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7121206 - SW846 3550B										
Blank (7121206-BLK1)										
Prepared: 18-Dec-07 Analyzed: 19-Dec-07										
Acenaphthene	BRL		µg/kg wet	33.2						
Acenaphthylene	BRL		µg/kg wet	33.2						
Anthracene	BRL		µg/kg wet	33.2						
Benzo (a) anthracene	BRL		µg/kg wet	33.2						
Benzo (a) pyrene	BRL		µg/kg wet	33.2						
Benzo (b) fluoranthene	BRL		µg/kg wet	33.2						
Benzo (g,h,i) perylene	BRL		µg/kg wet	33.2						
Benzo (k) fluoranthene	BRL		µg/kg wet	33.2						
Chrysene	BRL		µg/kg wet	33.2						
Dibenzo (a,h) anthracene	BRL		µg/kg wet	33.2						
Fluoranthene	BRL		µg/kg wet	33.2						
Fluorene	BRL		µg/kg wet	33.2						
Indeno (1,2,3-cd) pyrene	BRL		µg/kg wet	33.2						
1-Methylnaphthalene	BRL		µg/kg wet	33.2						
2-Methylnaphthalene	BRL		µg/kg wet	33.2						
Naphthalene	BRL		µg/kg wet	33.2						
Phenanthrene	BRL		µg/kg wet	33.2						
Pyrene	BRL		µg/kg wet	33.2						
Surrogate: 2-Fluorobiphenyl	*1230*		µg/kg wet		*1670*		*74*	*30-130*		
Surrogate: Terphenyl-dl4	*1200*		µg/kg wet		*1670*		*72*	*30-130*		
LCS (7121206-BS1)										
Prepared: 18-Dec-07 Analyzed: 19-Dec-07										
Acenaphthene	1210		µg/kg wet	33.2	1670		72	40-140		
Acenaphthylene	1250		µg/kg wet	33.2	1670		75	40-140		
Anthracene	1240		µg/kg wet	33.2	1670		74	40-140		
Benzo (a) anthracene	1400		µg/kg wet	33.2	1670		84	40-140		
Benzo (a) pyrene	1300		µg/kg wet	33.2	1670		78	40-140		
Benzo (b) fluoranthene	1310		µg/kg wet	33.2	1670		79	40-140		
Benzo (g,h,i) perylene	1320		µg/kg wet	33.2	1670		79	40-140		
Benzo (k) fluoranthene	1110		µg/kg wet	33.2	1670		67	40-140		
Chrysene	1210		µg/kg wet	33.2	1670		73	40-140		
Dibenzo (a,h) anthracene	1280		µg/kg wet	33.2	1670		77	40-140		
Fluoranthene	1390		µg/kg wet	33.2	1670		84	40-140		
Fluorene	1270		µg/kg wet	33.2	1670		76	40-140		
Indeno (1,2,3-cd) pyrene	1390		µg/kg wet	33.2	1670		83	40-140		
1-Methylnaphthalene	1260		µg/kg wet	33.2	1670		75	40-140		
2-Methylnaphthalene	1270		µg/kg wet	33.2	1670		76	40-140		
Naphthalene	1240		µg/kg wet	33.2	1670		74	40-140		
Phenanthrene	1430		µg/kg wet	33.2	1670		86	40-140		
Pyrene	1350		µg/kg wet	33.2	1670		81	40-140		
Surrogate: 2-Fluorobiphenyl	*1150*		µg/kg wet		*1670*		*69*	*30-130*		
Surrogate: Terphenyl-dl4	*1250*		µg/kg wet		*1670*		*75*	*30-130*		
Duplicate (7121206-DUP1) **Source: SA72299-03**										
Prepared: 18-Dec-07 Analyzed: 19-Dec-07										
Acenaphthene	BRL		µg/kg wet	32.9		BRL				50
Acenaphthylene	BRL		µg/kg wet	32.9		BRL				50
Anthracene	BRL		µg/kg wet	32.9		BRL				50
Benzo (a) anthracene	BRL		µg/kg wet	32.9		BRL				50
Benzo (a) pyrene	BRL		µg/kg wet	32.9		BRL				50

Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7121206 - SW846 3550B										
Duplicate (7121206-DUP1) **Source: SA72299-03**										
Prepared: 18-Dec-07 Analyzed: 19-Dec-07										
Benzo (b) fluoranthene	BRL		µg/kg wet	32.9		BRL				50
Benzo (g,h,i) perylene	BRL		µg/kg wet	32.9		BRL				50
Benzo (k) fluoranthene	BRL		µg/kg wet	32.9		BRL				50
Chrysene	BRL		µg/kg wet	32.9		BRL				50
Dibenzo (a,h) anthracene	BRL		µg/kg wet	32.9		BRL				50
Fluoranthene	16.5	J	µg/kg wet	32.9		BRL				50
Fluorene	BRL		µg/kg wet	32.9		BRL				50
Indeno (1,2,3-cd) pyrene	BRL		µg/kg wet	32.9		BRL				50
1-Methylnaphthalene	BRL		µg/kg wet	32.9		BRL				50
2-Methylnaphthalene	BRL		µg/kg wet	32.9		BRL				50
Naphthalene	BRL		µg/kg wet	32.9		BRL				50
Phenanthrene	BRL		µg/kg wet	32.9		BRL				50
Pyrene	16.5	J	µg/kg wet	32.9		BRL				50
Surrogate: 2-Fluorobiphenyl	*872*		µg/kg wet		*1650*		*53*	*30-130*		
Surrogate: Terphenyl-dl4	*871*		µg/kg wet		*1650*		*53*	*30-130*		
Matrix Spike (7121206-MS1) **Source: SA72299-03**										
Prepared: 18-Dec-07 Analyzed: 19-Dec-07										
Acenaphthene	1070		µg/kg wet	33.0	1660	BRL	65	40-140		
Pyrene	1110		µg/kg wet	33.0	1660	BRL	67	40-140		
Surrogate: 2-Fluorobiphenyl	*1010*		µg/kg wet		*1660*		*61*	*30-130*		
Surrogate: Terphenyl-dl4	*1040*		µg/kg wet		*1660*		*63*	*30-130*		
Matrix Spike Dup (7121206-MSD1) **Source: SA72299-03**										
Prepared: 18-Dec-07 Analyzed: 19-Dec-07										
Acenaphthene	938		µg/kg wet	32.9	1650	BRL	57	40-140	13	30
Pyrene	1000		µg/kg wet	32.9	1650	BRL	61	40-140	10	30
Surrogate: 2-Fluorobiphenyl	*876*		µg/kg wet		*1650*		*53*	*30-130*		
Surrogate: Terphenyl-dl4	*921*		µg/kg wet		*1650*		*56*	*30-130*		

Total Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7121241 - EPA200/SW7000 Series										
Blank (7121241-BLK1)										
Prepared: 18-Dec-07 Analyzed: 19-Dec-07										
Mercury	BRL		mg/kg wet	0.0287						
Duplicate (7121241-DUP1) **Source: SA72400-01**										
Prepared: 18-Dec-07 Analyzed: 19-Dec-07										
Mercury	BRL		mg/kg dry	0.0343		BRL				20
Matrix Spike (7121241-MS1) **Source: SA72383-11**										
Prepared: 18-Dec-07 Analyzed: 19-Dec-07										
Mercury	0.462		mg/kg dry	0.0305	0.424	0.0113	106	75-125		
Post Spike (7121241-PS1) **Source: SA72383-11**										
Prepared: 18-Dec-07 Analyzed: 19-Dec-07										
Mercury	0.498		mg/kg dry	0.0327	0.455	0.0113	107	85-115		
Reference (7121241-SRM1)										
Prepared: 18-Dec-07 Analyzed: 19-Dec-07										
Mercury	1.53		mg/kg wet	0.0300	1.45		106	66-132.6		

Total Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7121240 - EPA 200 Series										
Blank (7121240-BLK1)										
Prepared & Analyzed: 18-Dec-07										
Antimony	BRL		mg/kg wet	2.91						
Thallium	BRL		mg/kg wet	2.91						
Zinc	BRL		mg/kg wet	0.971						
Selenium	BRL		mg/kg wet	1.46						
Silver	BRL		mg/kg wet	1.46						
Nickel	BRL		mg/kg wet	0.971						
Cadmium	BRL		mg/kg wet	0.485						
Chromium	BRL		mg/kg wet	0.971						
Beryllium	BRL		mg/kg wet	0.485						
Arsenic	BRL		mg/kg wet	1.46						
Lead	BRL		mg/kg wet	1.46						
Copper	BRL		mg/kg wet	0.971						
Duplicate (7121240-DUP1)	**Source: SA72400-01**									
Prepared & Analyzed: 18-Dec-07										
Thallium	BRL		mg/kg dry	3.46		BRL				35
Zinc	4.94		mg/kg dry	1.15		4.72			5	35
Nickel	1.98		mg/kg dry	1.15		0.656			101	35
Silver	BRL		mg/kg dry	1.73		BRL				35
Antimony	BRL		mg/kg dry	3.46		1.19				35
Selenium	BRL		mg/kg dry	1.73		BRL				35
Chromium	2.09		mg/kg dry	1.15		2.01			4	35
Arsenic	BRL		mg/kg dry	1.73		BRL				35
Beryllium	BRL		mg/kg dry	0.576		0.235				35
Cadmium	0.0634	J,QR8	mg/kg dry	0.576		0.187			99	35
Copper	1.22		mg/kg dry	1.15		0.951			24	35
Lead	1.24	J	mg/kg dry	1.73		1.75			34	35
Matrix Spike (7121240-MS1)	**Source: SA72383-11**									
Prepared & Analyzed: 18-Dec-07										
Thallium	127		mg/kg dry	3.11	130	BRL	98	70-130		
Nickel	140		mg/kg dry	1.04	130	5.30	104	70-130		
Silver	133		mg/kg dry	1.55	130	BRL	103	70-130		
Antimony	130		mg/kg dry	3.11	130	0.420	100	70-130		
Zinc	199		mg/kg dry	1.04	130	52.8	113	70-130		
Selenium	142		mg/kg dry	1.55	130	BRL	109	70-130		
Arsenic	133		mg/kg dry	1.55	130	1.80	102	70-130		
Lead	281		mg/kg dry	1.55	130	138	111	70-130		
Chromium	145		mg/kg dry	1.04	130	10.2	104	70-130		
Copper	154		mg/kg dry	1.04	130	15.7	106	70-130		
Cadmium	133		mg/kg dry	0.518	130	0.318	102	70-130		
Beryllium	127		mg/kg dry	0.518	130	0.137	98	70-130		
Post Spike (7121240-PS1)	**Source: SA72383-11**									
Prepared & Analyzed: 18-Dec-07										
Silver	95.0		mg/kg dry	1.49	124	BRL	76	85-115		
Selenium	135		mg/kg dry	1.49	124	BRL	108	85-115		
Antimony	118		mg/kg dry	2.99	124	0.420	95	85-115		
Thallium	124		mg/kg dry	2.99	124	BRL	100	85-115		
Zinc	185		mg/kg dry	0.995	124	52.8	107	85-115		
Nickel	134		mg/kg dry	0.995	124	5.30	103	85-115		

Total Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7121240 - EPA 200 Series										
Post Spike (7121240-PS1)	**Source: SA72383-11**									
Prepared & Analyzed: 18-Dec-07										
Copper	147		mg/kg dry	0.995	124	15.7	105	85-115		
Chromium	140		mg/kg dry	0.995	124	10.2	104	85-115		
Lead	282		mg/kg dry	1.49	124	138	116	85-115		
Arsenic	126		mg/kg dry	1.49	124	1.80	100	85-115		
Cadmium	125		mg/kg dry	0.498	124	0.318	100	85-115		
Beryllium	122		mg/kg dry	0.498	124	0.137	98	85-115		
Reference (7121240-SRM1)										
Prepared & Analyzed: 18-Dec-07										
Thallium	82.1		mg/kg wet	3.00	85.0		97	77.6-122.4		
Nickel	48.1		mg/kg wet	1.00	51.0		94	79.4-120.6		
Silver	46.7		mg/kg wet	1.50	48.4		97	66.3-133.3		
Zinc	50.2		mg/kg wet	1.00	58.5		86	79.1-121.4		
Selenium	69.6		mg/kg wet	1.50	69.0		101	77.5-122.5		
Antimony	129	QC2	mg/kg wet	3.00	56.5		228	0-210.6		
Arsenic	70.9		mg/kg wet	1.50	75.5		94	76.8-123.2		
Beryllium	46.2		mg/kg wet	0.500	51.0		91	82.1-118.6		
Lead	56.8		mg/kg wet	1.50	60.0		95	78.4-120.1		
Copper	40.6		mg/kg wet	1.00	41.5		98	78.2-121.7		
Chromium	58.3		mg/kg wet	1.00	60.0		97	80.5-119.2		
Cadmium	44.6		mg/kg wet	0.500	47.7		94	80.1-119.6		

General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 7121262 - General Preparation										
Duplicate (7121262-DUP1)	**Source: SA72341-05**									
Prepared & Analyzed: 18-Dec-07										
% Solids	95.7		%			95.6			0.1	20

Notes and Definitions

QC2	Analyte out of acceptance range in QC spike but no reportable concentration present in sample
QR8	Analyses are not controlled on RPD values from sample concentrations that are less than5 times the reporting level. The batch is accepted based upon the difference between the sample and duplicate is less than or equal to the reporting limit
BRL	Below Reporting Limit - Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
NR	Not Reported
RPD	Relative Percent Difference
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration(CLP J-Flag).

A plus sign (+) in the Method Reference column indicates the method is not accredited by NELAC

Laboratory Control Sample (LCS): A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix

Matrix Spike: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure The method blank is used to document contamination resulting from the analytical process

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction Sample RDLs are highly matrix-dependent.

Surrogate: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

Validated by:
Hanibal C. Tayeh, Ph.D.
Nicole Brown

SA 72400 (R) CL

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
- ☐ Standard TAT - 7 to 10 business days
- ☒ Rush TAT - Date Needed: 12- -07
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: Jacques Whitford Co. Inc
24 Albion Rd. Suite 220
Lincoln, RI 02865

Project Mgr.: Joe Unsworth

Invoice To: same

P.O. No.: 109825.04/100 RQN:

Project No.: 109825.04/100
Site Name: Potter Hill M, N
Location: Westerly State: RI
Sampler(s): JTU

1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid
7=CH_3OH 8= $NaHSO_4$ 9=_____ 10=_____

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1=_____ X2=_____ X3=_____

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Preservative	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Containers:	Analyses: PAHs 8270	Analyses: RCP 13 Metals	QA Reporting Notes (check if needed)
72400-01	Sed-11	12-5-07		G	SO	-		1				X	X	

QA Reporting Notes (check if needed):
- ☐ Provide MA DEP MCP CAM Report
- ☐ Provide CT DPH RCP Report

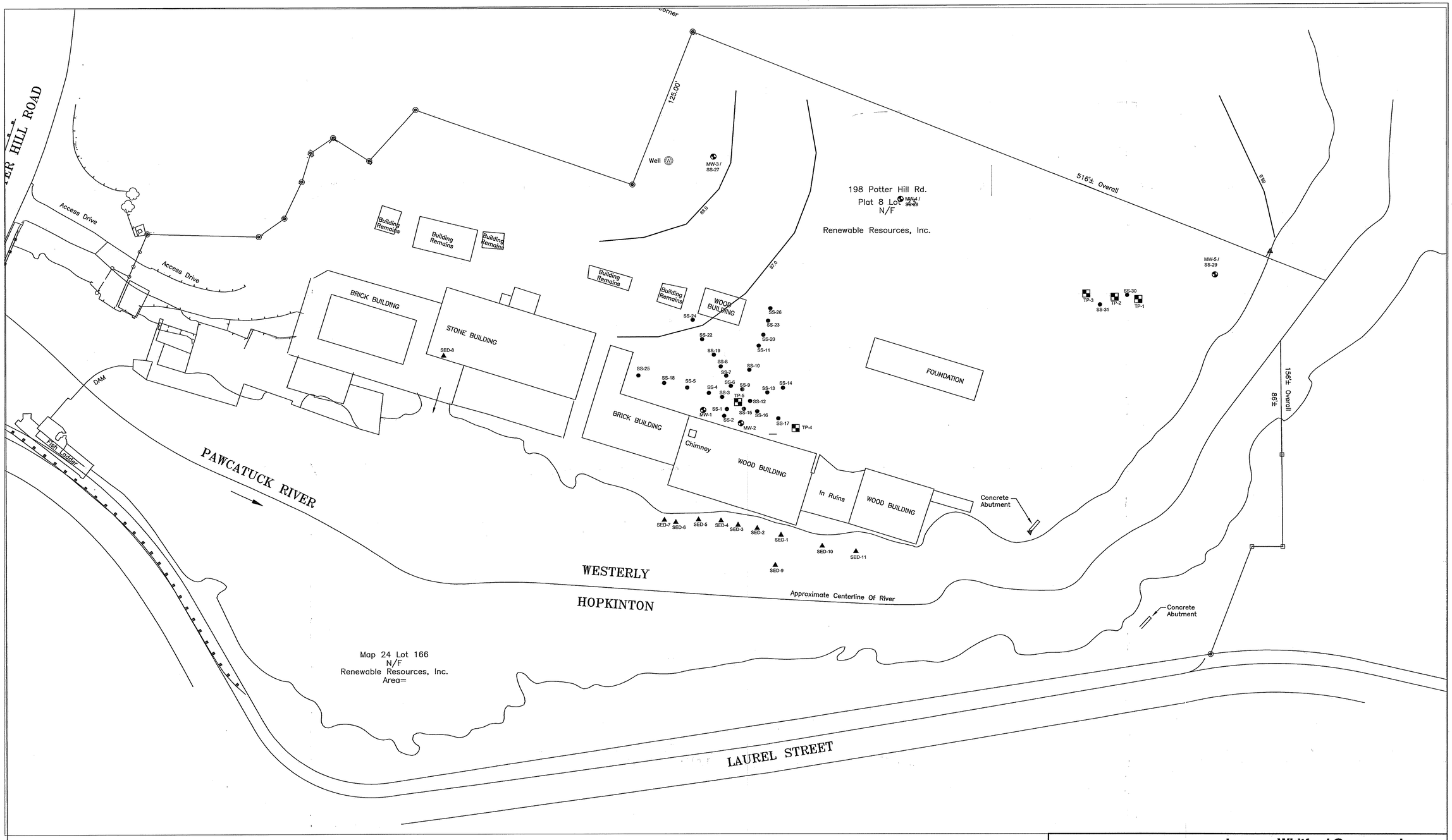
QA/QC Reporting Level
- ☒ Standard ☐ No QC
- ☐ Other _____

State specific reporting standards: _____

☐ Fax results when available to (____) _____
☒ E-mail to junswort@jacqueswhitford.com
EDD Format _____

Condition upon receipt: ☐ Iced ☐ Ambient ☑ °C 5.9 Rep

Relinquished by:	Received by:	Date:	Time:
Joe Unsworth	Bill Hanning	12/17/07	1430
Bill Hanning	Michael Graham	12-17-07	1644



LEGEND

MW-1 MONITORING WELLS

SS-1 SOIL SAMPLES

TP-1 TEST PITS

MW-1 SEDIMENT SAMPLES

NOTE

1. PLAN DEVELOPED FROM AN UNTITLED, UNDATED SITE PLAN PROVIDED BY THE CLIENT IN ELECTRONIC FORMAT.
2. MONITORING WELL LOCATIONS DETERMINED IN THE FIELD BY REFERENCING EXISTING SITE FEATURES. ALL LOCATIONS ARE APPROXIMATE.

Jacques Whitford Company, Inc.

Jacques Whitford

JACQUES WHITFORD LOCATION: Lincoln, Rhode Island					DRAWING TITLE: SAMPLE LOCATION PLAN POTTER HILL MILL POTTER HILL ROAD WESTERLY, RHODE ISLAND
DATE PREPARED: 1/4/08	DESIGNED BY: –	DRAWN BY: RLS	CHECKED BY: JTU	REVIEWED BY: –	
REVISION DATE:	REVISION NO:	DRAWN BY:	CHECKED BY:	REVIEWED BY:	DWG NO. 3
PROJECT NAME/FILE NAME: Potter Hill Mill		PROJECT NUMBER/PHASE: 1009825.		SCALE: 1"=40'	PREPARED FOR: RENEWABLE RESOURCES

RI DEM - Office of Compliance and Inspection
Case Summary Report

Case ID: OCI-FW-13-15

Facility/Site Name:	POTTER HILL MILL			PLOVER ID:	11343
Address:	198 POTTER HILL RD			Dams #, Type:	,
Address 2:				RCRA #, Type:	,
City, Zip:	WESTERLY	Zip:		UST #:	
Facility Plat:	8	Lot:	23	Pole #:	

Project Manager:	STEPHEN TYRRELL	**Foxpro Complaint #:**	
Media:	OCI-FW	**Foxpro Permit #:**	
Case Plat:		**Parcel ID:**	
Case Lot:		**Case Pole #:**	
Comments:			

Workflow Tasks

(Total Processing Time to Date: 0 business days, DEM Decision Time to Date: 0 business days)

Task Name	Receipt Date	Start Date	Complete Date	Comments/Task Details
Admin. Close Out Referred Other	01/31/2013	01/31/2013	01/31/2013	

Complaints

ID	Date Received	Time Received	Nature of Complaint
1431	01/02/2013	2:30PM	Demolished a building on the Pawcatuck River. Lisa Primiano (x4307), Planning & Development may have some additional information....call her with any questions
1602	03/28/2013	3:00PM	Edward Carapezza is demolishing the Potter Hill Mill on the Pawtuxet River without a permit - ceiling and wall in the river.

RI DEM - Office of Compliance and Inspection
Case Summary Report

Case ID: OCI-FW-14-56

Facility/Site Name:	POTTER HILL MILL			PLOVER ID:	11343
Address:	198 POTTER HILL RD			Dams #, Type:	,
Address 2:				RCRA #, Type:	,
City, Zip:	WESTERLY	Zip:		UST #:	
Facility Plat:	8	Lot:	23	Pole #:	

Project Manager:	STEPHEN TYRRELL	**Foxpro Complaint #:**	C14-0085
Media:	OCI-FW	**Foxpro Permit #:**	
Case Plat:		**Parcel ID:**	
Case Lot:		**Case Pole #:**	
Comments:			

Workflow Tasks

(Total Processing Time to Date: 0 business days, DEM Decision Time to Date: 0 business days)

Task Name	Receipt Date	Start Date	Complete Date	Comments/Task Details
Admin. Close Out Lack of Resources	04/04/2014	04/04/2014	04/04/2014	

Complaints

ID	Date Received	Time Received	Nature of Complaint
3157	04/02/2014		She is concerned about the wood and debris floating down river from the Potter Hill Dam.

248

Patrick Hogan

WP-13-2, WP13-002

From: Ed Carapezza [edward.carapezza.rri@gmail.com]

Sent: Wednesday, March 06, 2013 5:00 PM

To: David Chopy

Cc: Frances Ethier; John Gingerella; Stephen Tyrrell; Hank Ellis; Patrick Hogan; Tracey Tyrrell; Bruce Ahern; Daniel Lawton

Subject: Re: Work undertaken at Potter Hill property

Dave,
Thank you for contacting the various DEM people that we have spoken with individually over the past months and clarifying DEM's direction on how we should proceed with our site work. I believe that your email accurately recounts the individual discussions that we had with the various individuals mentioned.

Our immediate plans are to continue to sort and remove the materials already on the ground in areas not immediately adjacent to the river bank. Once this sorting and removal work is complete, we will prepare to work closer to the river bank. Before proceeding with any demo work closer to the river bank, we will implement the proper sediment/boom barriers. We may ask for advice or a site review by DEM prior to proceeding with the work immediately adjacent to the river to ensure that we are properly implementing these protective barriers. About 6 years ago, we accomplished a good deal of related demo, sorting, and removal of materials on this property. During these activities, we received advice and onsite assistance from various DEM personnel, including a number of the individual addressees to your email, so we believe we understand the proper procedures.

Again, thank you for your efforts to clarify how we should proceed.

Ed Carapezza, PhD
President
Renewable Resources Inc
PO Box 365
Hopkinton, RI 02833

Office Phone: 401-622-4528
Mobile Phone: 401-207-2643
email: edward.carapezza.rri@gmail.com
website: www.PotterHillMill.com

On Wed, Mar 6, 2013 at 12:18 PM, David Chopy <david.chopy@dem.ri.gov> wrote:

> Mr. Carapezza, in response to our telephone conversation yesterday and on Saturday, I've discussed the work you are performing with staff within the DEM's Office of Compliance and Inspection (OC&I). You have spoken with Pat Hogan in OC&I's water pollution program, Bruce Ahern in OC&I's freshwater wetlands program, and Dan Lawton in OC&I's solid waste program.
>
> On 1/25/13 Mr. Lawton spoke with you. You told Mr. Lawton that your intention was to recycle the demolition materials expeditiously. Mr. Lawton informed you that the materials may be considered solid waste, but OC&I would consider your plan before issuing any action. At this time, OC&I is willing to allow you to recycle the demolition materials. If the recycling is not accomplished in a reasonable amount of time, OC&I could still cite the materials as solid waste and order it to be immediately disposed of at a licensed solid waste management facility.

On 1/29/13 Mr. Hogan advised you to take all necessary actions to keep any building demolition debris along with any sediment from related land disturbance from getting into the river. You informed Mr. Hogan that you understood and that you would not do any further demolition work until adequate protection was in place.

On or around 2/7/13 Mr. Ahern spoke with you just before the "blizzard". You stated that you were not working within or adjacent to the river and that the only work that you were undertaking was sorting wood material from your prior demolition activities in "interior" portions of the property. You further stated to Mr. Ahern that you were directed/authorized to perform this work by Dan Lawton within OC&I and that you were moving your equipment off the property in anticipation of the blizzard. Mr. Ahern directed you to install proper E/S controls (including but not limited to staked silt fence and/or hay bales and, if necessary, a properly installed boom in the river), if and when you begin working in close proximity to the river. You responded that you understood the need for these controls and would comply with this requirement if/when you were working in areas adjacent to the river.

Be advised that the work you are undertaking would generally be considered an **exempt activity**, described as follows in DEM's Wetland Rules & Regulations:

6.04 Demolition of Buildings or Accessory Structures

Demolition of buildings, parking areas or *accessory structures* is allowed in accordance with Rule 6.01 only where:

- Building, parking area or *accessory structure* is not to be rebuilt;
- Disposal of material is accomplished in accordance with all state laws and rules and the material is not disposed of or stockpiled in wetlands;
- All pre-demolition grades are restored and all disturbed soils are stabilized;
- Clean *fill* is used, where foundation holes or cellars of demolished buildings are to be filled;
- All rubble and demolition debris are removed from the soil surface when demolition is complete;
- Demolition activity and equipment operation are maintained within *existing* or approved disturbed areas on the property; and
- All disturbed soils are loamed and seeded.

The above exemption applies only provided that you and the property meet the general conditions, including accepted soil erosion/sediment control and site stabilization BMPs, as outlined below:

6.01 General Conditions for Exempt Activities

The following general restrictions apply to all activities performed under this Rule:

- Exempted activities do not obviate the need to obtain other applicable federal, state, or local *permits*, approvals, or authorizations required by law;
- Any structure or *fill* exempt under this Rule shall be properly maintained to ensure public safety, and to protect wetland functions and values;
- *Best management practices* for erosion and *sediment* controls must be used and maintained in

effective operating condition during the activity, and all exposed soil and other *fills* must be permanently stabilized at the earliest possible date. (See "Rhode Island Soil Erosion and Sediment Control Handbook" ("RISESC Handbook") and the latest version of the "Rhode Island Stormwater Design and Installation Standards Manual ("RISDIS Manual") for design guidance and additional requirements");

- No activity exempted herein may jeopardize the continued existence of a *rare* wetland type, or a *rare* species; likewise, no activity exempted herein may destroy or adversely modify the critical habitat of such species;

- Following the limited activity, all equipment used in installation or maintenance activities shall be removed from any wetland; and

- All wetland functions and values must be protected to the maximum extent possible so as to prevent *pollutants*, *sediment*, direct discharge of storm water runoff, or any material foreign to a wetland or hazardous to life, from entering any wetland.

David E. Chopy, Chief

DEM Office of Compliance and Inspection

235 Promenade Street, Suite 220

Providence, RI 02908-5767

(401) 222-1360 extension 7400

email: david.chopy@dem.ri.gov

Closed 1/29/13

WP-13-2

Patrick Hogan

From: David Chopy
Sent: Monday, March 04, 2013 11:59 AM
To: Frances Ethier
Cc: John Gingerella; Bruce Ahern; Hank Ellis; Stephen Tyrrell; Daniel Lawton; Tracey Tyrrell; Patrick Hogan
Subject: RE: Potter Mill

Fran, after we coordinate internally (one supervisor out sick today), I will send you an email explaining what he was given the okay to do.

David

From: Bruce Ahern
Sent: Monday, March 04, 2013 11:57 AM
To: Frances Ethier; David Chopy; Hank Ellis; Stephen Tyrrell; Daniel Lawton; Tracey Tyrrell
Cc: John Gingerella
Subject: RE: Potter Mill

I spoke to Carapezza on or around 2/7/13, just before the "blizzard". He indicated at that time that he was not working within or adjacent to the River and was only sorting wood in interior locations. He also said he was moving his equipment off the site in anticipation of the blizzard. I directed him at that time, to install proper E/S controls if and when he begins working in close proximity to the River. He replied that he would do so, as required, in the future.

- BSA

Bruce S. Ahern
Senior Environmental Scientist
Freshwater Wetlands Compliance Program
Office of Compliance & Inspection
Department of Environmental Management
235 Promenade Street, Suite 220
Providence, RI 02908-5767

Phone: (401) 222-1360, ext. 7703
Fax: (401) 222-3811
E-Mail: bruce.ahern@dem.ri.gov

From: Frances Ethier
Sent: Monday, March 04, 2013 11:03 AM
To: Bruce Ahern; David Chopy; Hank Ellis; Stephen Tyrrell; Daniel Lawton; Tracey Tyrrell
Cc: John Gingerella
Subject: Re: Potter Mill

Could you tell me when you directed Mr Carpezza to install soil controls. EPO Gingerella has responded there three times and has photos of activity in the river and on the river bank.
Thank you, Fran Ethier

From: Bruce Ahern
To: David Chopy; Hank Ellis; Stephen Tyrrell; Daniel Lawton; Tracey Tyrrell
Cc: Frances Ethier; John Gingerella
Sent: Mon Mar 04 10:09:03 2013
Subject: RE: Potter Mill
I neglected to mention that, when I spoke to Mr. Carapezza, I directed him to install proper soil E/S controls (including but not limited to staked silt fence and/or haybales and, if necessary, a properly installed boom in the River). He had responded that he understood the need for these controls and would comply with this requirement if/when he is working in areas adjacent to the River.

- BSA

Bruce S. Ahern
Senior Environmental Scientist
Freshwater Wetlands Compliance Program
Office of Compliance & Inspection
Department of Environmental Management
235 Promenade Street, Suite 220
Providence, RI 02908-5767

Phone: (401) 222-1360, ext. 7703
Fax: (401) 222-3811
E-Mail: bruce.ahern@dem.ri.gov

From: Bruce Ahern
Sent: Monday, March 04, 2013 9:32 AM
To: David Chopy; Hank Ellis; Stephen Tyrrell; Daniel Lawton; Tracey Tyrrell
Cc: Frances Ethier; John Gingerella
Subject: RE: Potter Mill

I have not been to the site in regard to these recent issues; have only spoken to Mr. Carapezza (and Dan Lawton) about his activities. During a telephone conversation with Mr. Carapezza, he stated that the only work he is undertaking on-site is sorting wood material from his prior demolition activities. He had indicated that he was directed/authorized to perform this work by Dan.

- BSA

Bruce S. Ahern
Senior Environmental Scientist
Freshwater Wetlands Compliance Program
Office of Compliance & Inspection
Department of Environmental Management
235 Promenade Street, Suite 220
Providence, RI 02908-5767

Phone: (401) 222-1360, ext. 7703
Fax: (401) 222-3811
E-Mail: bruce.ahern@dem.ri.gov

From: David Chopy

Sent: Monday, March 04, 2013 9:18 AM
To: Hank Ellis; Stephen Tyrrell; Bruce Ahern; Daniel Lawton; Tracey Tyrrell
Cc: Frances Ethier; John Gingerella
Subject: Potter Mill

I spoke with EPOs Ethier and Gingerella on Saturday morning regarding a complaint they responded to at Potter Mill. The owner, Ed Carapezza (p.207.2643) stated that he had spoken with officials at DEM (Bruce Ahern and Dan Lawton?) regarding the work he was doing and that what he was doing was in accordance with what he was told. This is the 3rd time that the EPOs have responded to this site. Please let me know what, if any, inspections we've done on this property or discussions we've had with Mr. Carapezza.

David

RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF COMPLIANCE AND INSPECTION

TELEPHONE CONVERSATION MEMORANDUM

DATE: January 29, 2013 (Tuesday)
TIME: 10:10 a.m.

CALL TO: Edward Carapezza
Renewable Resources, Inc.
telephone no. (401) 207-2643

CALL FROM: Patrick J. Hogan PJH
Office of Compliance and Inspection
(401) 222-4700 extension 7119

RE: WP-13-2 & WP13-002
Potter Hill Mill, Potter Hill Road, Westerly

VERBAL WARNING

CONVERSATION SUMMARY

I called Mr. Carapezza to discuss DEM's inspection results related to a complaint of building demolition debris entering the Pawcatuck River. I explained that the DEM inspector observed at least 6 or 8 pieces of lumber from the adjacent abandoned mill at the bank and within the river. I explained that there may be more solid waste beneath the surface of the water which may not have been visible.

Mr. Carapezza explained that they were removing large machinery from the building in preparation of its demolition at which time the building began to collapse resulting in a small amount of lumber falling down the steep embankment to the edge of the river.

I explained to Mr. Carapezza that he must take any measure necessary to keep the building demolition debris along with any sediment from related land disturbance from getting into the river. I further explained that this phone call is considered a Verbal Warning and that fines for this type of violation can run from a minimum of $2,500 up to 25,000 per violation.

Mr. Carapezza said that he understood and that he will remove the pieces of lumber from the water right away. Mr. Carapezza further explained that he will not be doing any further demolition work on the mill until he has adequate protection in place. He also understood that any debris that does land in the river must be removed immediately.

SITE INSPECTION REPORT

FILE NUMBER: 13-002	LOCATION: #198 Potter Hill Road
FILE NAME: Westerly	INSPECTION DATE: 1-25-2013
DETAILS OF INSPECTION:	

I arrived at #198 Potter Hill Road with Daniel Lawton from the Solid Waster Division about 10:00am.

We met the property owner, Edward Carapezza (401-207-2643) on site. Mr. Carapezza purchased the property in 1992 and is intending on having businesses located on the site once it has been developed.

Currently the buildings are in a state of disrepair.

Some of the wooden buildings are being demolished and during this demolition, it appears that a small amount of wood has been deposited into the Pawcatuck River. The demolition is ongoing (though not at the time of inspection) and the owner is in the process of culling the wood for salvageable pieces that could be reused. The rest of the wood will be disposed of.

The buildings and the demolition are on the banks of the Pawcatuck River so there is issues with Wetlands Permitting that need to be addressed.

Some kind of capture system would be necessary to keep the wood from leaving the site by water once the Wetland issues have been satisfied.

Robert S. Fritsche

INSPECTOR

PHOTOGRAPHS

File Number: WP-13-2/WP13-002 **Date of Photo(s):** 1-25-13

File Name: 198 Potter Hill Road **Photographer:** R. Fritsche

Location: Westerly

PHOTO NO. 1	PHOTO NO. 2
	
These photos accurately represent the condition of the area on the date taken.	
View of the remainder of the building leaning against trees on the river bank.	Slightly to the right of Photo #1.

PHOTOGRAPHS

File Number: WP-13-2/WP13-002 **Date of Photo(s):** 1-25-13

File Name: 198 Potter Hill Road **Photographer:** R. Fritsche

Location: Westerly

PHOTO NO. 3	PHOTO NO. 4
	
These photos accurately represent the condition of the area on the date taken.	View of small amounts of wood from the demolished building in the water.
Slightly to the right of Photo #2.	

PHOTOGRAPHS

File Number: WP-13-2/WP13-002 **Date of Photo(s):** 1-25-13

File Name: 198 Potter Hill Road **Photographer:** R. Fritsche

Location: Westerly

PHOTO NO. 5	PHOTO NO. 6
	
These photos accurately represent the condition of the area on the date taken.	
View of a very small amount of wood from the demolished building caught down stream.	View of another building that is being demolished.

PHOTOGRAPHS

File Number: WP-13-2/WP13-002 **Date of Photo(s):** 1-25-13

File Name: 198 Potter Hill Road **Photographer:** R. Fritsche

Location: Westerly

PHOTO NO. 7	PHOTO NO. 8
	
These photos accurately represent the condition of the area on the date taken.	
Slightly to the right of Photo #6.	Alternate view of demolished building. Houses are across the river.

WP-13-2 / WR13-002



RI DEM - Office of Compliance and Inspection
Complaint Form

Complaint ID: 1463 **Date Received:** 01/16/2013 **Time Received:** 8:50AM

Program: OCI-SW **Case:** **Received By:** ANNACOLE

Complainant Info:		Facility Info:	
Name:	RACHEL DOYLE	**Fac/Site:**	POTTER HILL ROAD
Address:		**Street:**	POTTER HILL RD
City/St:	,	**Street2:**	
Email:	rachdoyle6@gmail.com	**City:**	WESTERLY
Phone:	401-741-0590	**Plat:**	**Lot:**
Notify:	N	**Pole #:**	
Repeat:	N	**Contractor:**	Potter Hill Mills

Alias/Log Number:

UST Number:

Foxpro Permit #:

Nature of Complaint:

Complaint received via e-mail.

Demolition of buildings on the property; debris going into the River

Directions:

Anna Cole

From: Rachel Doyle [rachdoyle6@gmail.com]
Sent: Wednesday, January 16, 2013 8:50 AM
To: Compliance
Cc: Bonnie Bennett
Subject: Potter Hill Mill

Hello.

I live near the Potter Hill Mill in Westerly, RI and am very concerned with demolition that has been occurring on the property the last several weeks.

There have been construction vehicles on the property and they have been demolishing buildings on the property. It is my understanding that the Owner of the property does not have a demolition permit. There is a great amount of demolition debris on the property and, most concerning, in the Pawcatuck River. I am very concerned with how the debris on the property and the river is going to be removed.

I wanted to make you aware of this concerning situation and thank you for your time.

Please feel free to contact me with any questions that you may have.

Thank you,
Rachel Doyle
rachdoyle6@gmail.com
401-741-0590

Rhode Island DEM/Division of Law Enforcement
Call Number Printed: 01/13/2013

For Date: 01/13/2013 - Sunday

Call Number	Time	Call Reason	Action	Priority	Duplicate
13-558	0956	Phone - ^WET LANDS VILOATION	Services Rendered	3	

Call Taker: VLB - BERNARDO, VALERIE
Primary Id: JRG - GINGERELLA, JOHN
Call Closed By: JJO - O'CONNOR, JAMES 01/13/2013 1211
Call Modified By: JJO - O'CONNOR, JAMES
Location: [504] POTTER HILL MILL
Party Entered By: 01/13/2013 1000 VLB - BERNARDO, VALERIE
Calling Party: EVANS, MATTHEW @ ***UNKNOWN*** - WESTERLY, RI 02891 401-578-9997
Party Entered By: 01/13/2013 1137 VLB - BERNARDO, VALERIE
Involved Party: CAPWELL, JOHN H @ 90 CEDAR GROVE DR - EXETER, RI 02822
SSN: 037462491 DOB: 07/06/1975 Sex: M
Party Entered By: 01/13/2013 1139 VLB - BERNARDO, VALERIE
Involved Party: CARAPEZZA, EDWARD M @ 900 N STAFFORD ST Apt. #2428 - ARLINGTON, VA
SSN: DOB: 10/25/1947 Race: U Sex: M
ID: JRG - GINGERELLA, JOHN
Disp-10:01:32 Enrt-10:02:02 Arvd-11:16:36 Clrd-12:10:48
Cleared By: JJO - O'CONNOR, JAMES
Narrative: **01/13/2013 1000 BERNARDO, VALERIE**
REPORT OF EXCAVATION TAKING PLACE ON THE OLD MILL BUILDING AND THE RIVER IS NOT PROTECTED.

Narrative: **01/13/2013 1141 BERNARDO, VALERIE**
VERBAL CEASE AND DESIST ORDER ISSUED.

Narrative: **01/13/2013 1157 GINGERELLA, JOHN**
Mr Carapezza was told to stop demolition and given a verbal C&D They were demolishing a building along the river. Lots of wood and granite cut rocks fell into river. There was no protection boom in place. Mr Carapezza said that he knew he should have put some up.
Upon leaving the site a neibor approached and asked if the old boiler that was in the building that was torn down was around. He said the boiler was full of asbestos. I was also told that all the demolition matrial was being burried on site. I was told that no trucks ever left the site with material. I was told that they head "out back some where"

Narrative: **01/13/2013 1244 BERNARDO, VALERIE**
Modified By: **01/13/2013 1247 BERNARDO, VALERIE**
NAME OF CALLER: MATTHEW EVANS
CALLERS PHONE NUMBER:5789997
CALLERS ADDRESS;
STREET;
CITY/TOWN:

EXACT LOCATION OF VIOLATION:SITE OF POTTER HILL MILL
STREET AND #;
CITY/TOWN;
BODY OF WATER.PAWCATUCK RIVER

EXACT NATURE OF VIOLATION:NO PROTECTION BOOM
WHEN IS VIOLATION OCCURRING: 1/13/13 09:56
IS THIS AN ONGOING VIOLATION:YES
WHO IS COMMITTING THE VIOLATION:ED CARAPEZZA

WAS AN OFFICER DISPATCHED:YES
OFFICER'S NAME:U26 GINGERELLA
REPORT NUMBER ASSIGNED:13-11-OF

Refer To Incident: 13-11-OF

OP# 1: Fax Call To: 401-222-3811
1. IF DURING A WORK DAY REFER CALL TO COMPLIANCE AND INSPECTION AT 222-1360.

RECEIVED
JAN 14 2013
Environmental Management
Office of Compliance Inspection

198 Potter Hill Mill
Potter Hill Road
Westerly

WP13-002
WP-13-2

Powered by Vision Government Solutions, Inc.



MBLU : 8/ 23/ / /

Location: 198 POTTER HILL RD

Owner Name: RENEWABLE RESOURCES INC

Account Number: 008-023

Parcel Value

Item	Current Assessed Value	FY 2009 Assessed Value
Buildings	0	0
Xtra Bldg Features	0	0
Outbuildings	0	0
Land	163,300	163,300
Total:	**163,300**	**163,300**

Owner of Record

RENEWABLE RESOURCES INC
C/O ED CARAPEZZA

Ownership History

Owner Name	Book/Page	Sale Date	Sale Price
RENEWABLE RESOURCES INC	432/ 53	10/8/1992	50,000
COTTRELL HELEN E	74/ 354	8/15/1955	0

Land Use

Land Use Code	Land Use Description
400V	INDUSTRL MDL-00

Land Line Valuation

Size	Zone	Assessed Value
4.55 AC	R60	163,300

Construction Detail

Building # 1

STYLE Vacant Land **MODEL** Vacant

Building Valuation

Living Area: 0 square feet **Year Built**: **Depreciation**: 100%

Building Value: 0

Extra Features

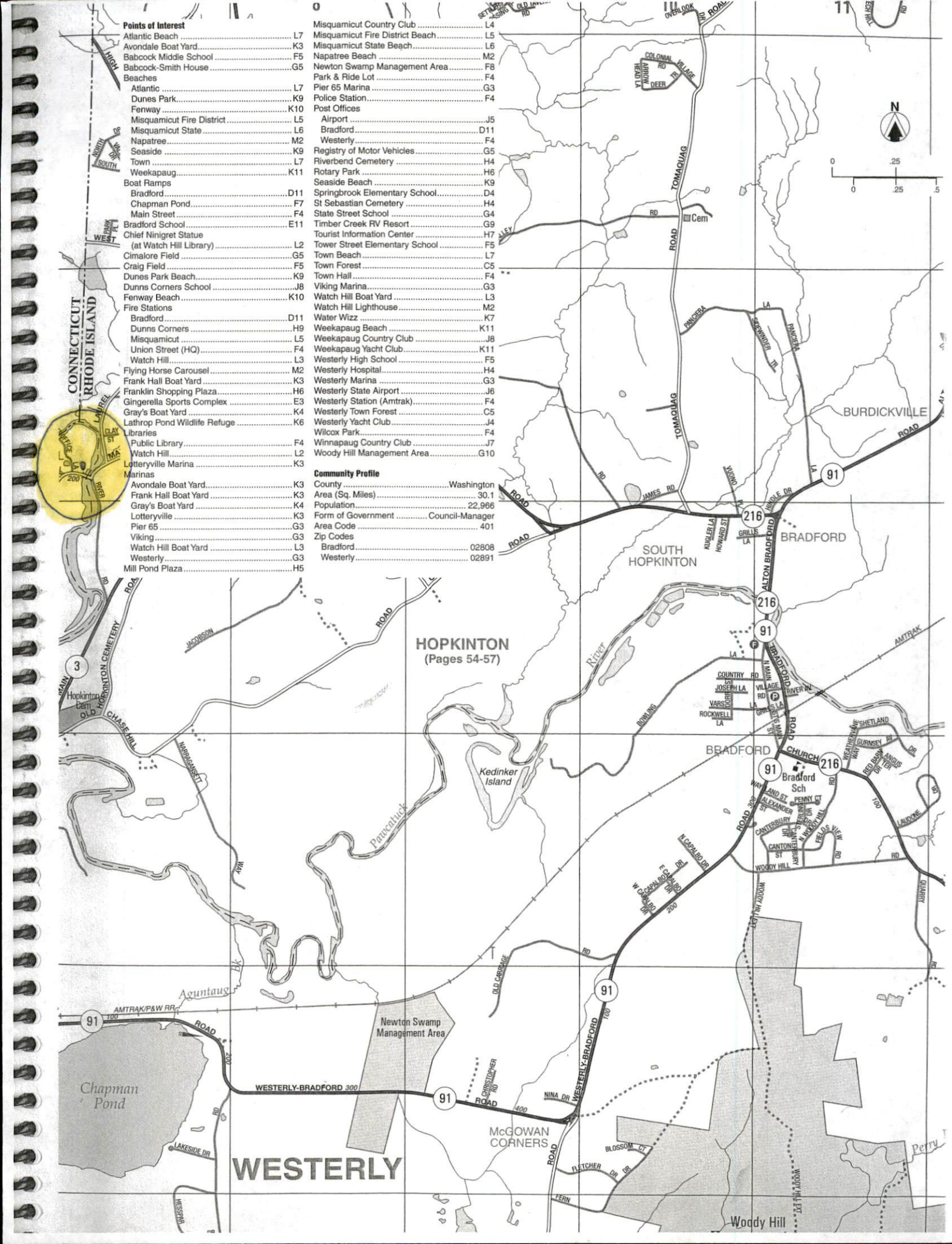
Code	Description	Units
No Extra Building Features		

Outbuildings

Code	Description	Units
No Outbuildings		

Building Sketch

Vacant Land, No Sketch


Points of Interest
Atlantic Beach L7
Avondale Boat Yard K3
Babcock Middle School F5
Babcock-Smith House G5
Beaches
Atlantic L7
Dunes Park K9
Fenway K10
Misquamicut Fire District L5
Misquamicut State L6
Napatree M2
Seaside K9
Town L7
Weekapaug K11
Boat Ramps
Bradford D11
Chapman Pond F7
Main Street F4
Bradford School E11
Chief Ninigret Statue
(at Watch Hill Library) L2
Cimalore Field G5
Craig Field F5
Dunes Park Beach K9
Dunns Corners School J8
Fenway Beach K10
Fire Stations
Bradford D11
Dunns Corners H9
Misquamicut L5
Union Street (HQ) F4
Watch Hill L3
Flying Horse Carousel M2
Frank Hall Boat Yard K3
Franklin Shopping Plaza H6
Gingerella Sports Complex E3
Gray's Boat Yard K4
Lathrop Pond Wildlife Refuge K6
Libraries
Public Library F4
Watch Hill L2
Lotteryville Marina K3
Marinas
Avondale Boat Yard K3
Frank Hall Boat Yard K3
Gray's Boat Yard K4
Lotteryville K3
Pier 65 ..... G3
Viking G3
Watch Hill Boat Yard L3
Westerly G3
Mill Pond Plaza H5
Misquamicut Country Club L4
Misquamicut Fire District Beach L5
Misquamicut State Beach L6
Napatree Beach M2
Newton Swamp Management Area F8
Park & Ride Lot F4
Pier 65 Marina G3
Police Station F4
Post Offices
Airport J5
Bradford D11
Westerly F4
Registry of Motor Vehicles G5
Riverbend Cemetery H4
Rotary Park H6
Seaside Beach K9
Springbrook Elementary School D4
St Sebastian Cemetery H4
State Street School G4
Timber Creek RV Resort G9
Tourist Information Center H7
Tower Street Elementary School F5
Town Beach L7
Town Forest C5
Town Hall F4
Viking Marina G3
Watch Hill Boat Yard L3
Watch Hill Lighthouse M2
Water Wizz K7
Weekapaug Beach K11
Weekapaug Country Club J8
Weekapaug Yacht Club K11
Westerly High School F5
Westerly Hospital H4
Westerly Marina G3
Westerly State Airport J6
Westerly Station (Amtrak) F4
Westerly Town Forest C5
Westerly Yacht Club J4
Wilcox Park F4
Winnapaug Country Club J7
Woody Hill Management Area G10
Community Profile
County ..... Washington
Area (Sq. Miles) 30.1
Population 22,966
Form of Government ..... Council-Manager
Area Code 401
Zip Codes
Bradford 02808
Westerly 02891
CONNECTICUT
RHODE ISLAND
HOPKINTON
(Pages 54-57)
WESTERLY
BURDICKVILLE
BRADFORD
SOUTH HOPKINTON
McGOWAN CORNERS
Newton Swamp Management Area
Chapman Pond
Kedinker Island
Pawcatuck River
Ayuntaug Bk
Woody Hill
TOMAQUAG ROAD
ALTON BRADFORD ROAD
WESTERLY-BRADFORD ROAD
CHURCH ROAD
OLD CARRIAGE RD
CHASE HILL RD
HOPKINTON CEMETERY RD
JACOBSON ROAD
JAMES RD
KINDLE DR
PANCIERA LA
KUSLER LA
HOWARD ST
GRILLIS LA
COUNTRY RD
JOSEPH LA
VARS ROAD
ROCKWELL LA
VILLAGE RD
RIVER VIEW
BOWLING
N MAIN ST
WAYLAND ST
ALEXANDER ST
PENNY CT
CANTERBURY DR
CANTON ST
FIELDS VIEW DR
WOODY HILL RD
N CAPALBO DR
E CAPALBO DR
W CAPALBO DR
NINA DR
CHRISTOPHER RD
BLOSSOM CT
FLETCHER DR
FERN
LAKESIDE DR
HESPAR
AMTRAK/P&W RR
AMTRAK
WESTERLY-BRADFORD 300
Bradford Sch
Cem
N
0
.25
.5
11
91
216
3
100
200
300
400

Appendix D – Additional Documentation

Pre-Survey Questionnaire (Owner)

Phase I Environmental Site Assessment

Return by e-mail to:	hpallein@gesonline.com

GES has been retained to conduct a Phase I Environmental Site Assessment (ESA) of the following property. The ESA will involve site observations, interviews, and a review of available documentation. To ensure the success of the ESA, and in accordance with the Scope of Work for this assessment, ***we request that you complete this questionnaire and return it to GES within one business day of receipt.***

Company Name:	**Town of Westerly**
Property Name / Street Address:	**Potter Hill Mill / 198 Potter Hill Road, Westerly, RI**
Name of Person Completing Questionnaire:	**Dale Faulkner**
Role / Title:	**Grant Administrator**
Length of Association with the Property:	
Please Check One:	**User:** ☐ **User Representative:** ☐
Phone Number:	**401-348-2643**
Fax Number:	
Email Address:	**dfaulkner@westerlyri.gov**

Instructions: Please answer all questions to the best of your knowledge and in good faith. Please include comments as necessary to provide additional detail for your responses. Note: U indicates "Unknown", NR indicates "No Response", and "N/A" indicates not applicable.

	Question	RESPONSE				Comments
		Y	N	U	NR	
1	Are you aware of any pending, threatened, or past litigation relevant to hazardous substances or petroleum products in, on or from the property?	☐	☒	☐	☐	
2	Are you aware of any pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on or from the property?	☐	☒	☐	☐	
3	Are you aware of any notices from any governmental entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products?	☐	☒	☐	☐	
4	Are you aware of any environmental cleanup liens against the property that are filed or recorded under federal, tribal, state or local law?	☐	☒	☐	☐	
5	Are you aware of any Activity and Use Limitations, such as engineering controls, land use restrictions or institutional controls that are in place at the site and/or have been filed or recorded in a registry under federal, tribal, state, or local law?	☐	☒	☐	☐	
6	As the user pf this ESA do you have any specialized knowledge or experience related to the property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the property or an adjoining property so that you would have specialized knowledge of the chemical and processes used by this type of business?	☐	☒	☐	☐	

7		Does the purchase price being paid for this property reasonably reflect the fair market value of the property? If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the property?	☐	☐	☐	☐	Not applicable.
8		Are you aware of commonly known or reasonably ascertainable information within the local community about the property that is material to recognized environmental conditions in connection with the property? For example, as user	☒	☐	☐	☐	The site contains the dilapidated remains of a former three-story mill. The property's history as a mill (including grist and textile) site for more than 250 years is well known. The propoerty was also once used for ship building. A fire destroyed much of the property in 1977.
	8a	Do you know the past uses of the property?	☒	☐	☐	☐	The property's history as a mill (including grist and textile) site for more than 250 years is well known. The propoerty was also once used for ship building. A fire destroyed much of the property in 1977.
	8b	Do you know of specific chemicals that are present or once were present at the property?	☒	☐	☐	☐	A Limited Phase II ESA conducted in 2006 reportedly identified arsenic and beryllium in soil samples. A related Site Investigation Report reported the presence of lead in soil samples.
	8c	Do you know of spills or other chemical releases that have taken place at the property?	☒	☐	☐	☐	RIDEM was reportedly notified of a hazardous materials release of arsenic and beryllium to soil on the subject site on Sept. 27, 2006.
	8d	Do you know of any environmental cleanups that have taken place at the property?	☐	☒	☐	☐	
9		As the user of this ESA, based on your knowledge and experience related to the property are there any obvious indicators that point to the presence or likely presence of contamination at the property?	☒	☐	☐	☐	See answers 8-8c.

If you have access to any of the following helpful documents, please indicate them below and then send them to your GES contact via email/fax along with this questionnaire.

- ☒ Environmental site assessment reports (i.e., Phase I, Phase II, tank testing results, radon, lead paint, or asbestos testing, etc.)
- ☐ Environmental compliance audit reports; risk assessments; and recorded Activity and Use Limitations (AULs)
- ☐ Environmental permits (i.e., solid waste disposal, hazardous waste disposal, wastewater, NPDES, underground injection, etc.)
- ☐ Registrations for underground storage tanks (USTs) and aboveground storage tanks (ASTs)
- ☐ Material safety data sheets; and Community right-to-know plan
- ☐ Safety plans; preparedness and prevention plans; spill prevention, countermeasure, and control plans, etc.
- ☐ Reports regarding hydrogeological conditions on the property and surrounding area; and geotechnical studies
- ☐ Notices/correspondence from any agency relating to past/current violations of environmental laws, or liens encumbering the property.
- ☐ Hazardous waste generator notices or reports.
- ☐ Other:

Field Pack for Phase I ESAs

General Information ******REVIEW THE PROTOCOL CHECKLIST AT THE END OF THIS FIELD PACK******

Project No. : 1524007 Project: Potter Hill Mill

Date: 7/1/2024 **PM or DC:** Hannah Pallein

Project Address: 198 Potter Hill Road, Westerly, Rhode Island 02891

POC Information: Point of Contact (POC): Dale Faulkner Phone Number: (401) 348-2643

POC relation to Project : Town of Westerly, Grant Administrator Length of time at Project:

Weather conditions: ☒ Clear ☐ Cloudy ☐ Rain ☐ Snow Inches of snow N/A

☐ Light winds ☐ Moderate winds ☐ Heavy winds Temperature 71°F

Project Information, Use, and Access Number of Buildings: None, what remains are in ruins Number of Units:

Construction date(s): 1762 (grist & sawmill), 1847 (mills) Land Area: 4.55 acres Building Area:

Occupant Name	Address/Unit #	Description of Operations
Site abandoned		Retail fuel sales and convenience store Year Opened:

Access Limitation: What remains of structures are in ruins and/or dilapidated w/ collapsed walls/roofs. Subject Property is heavily vegetated and Overgrown. Difficult to traverse and observe lot.

Auto Repair: ☐ Yes ☒ No Occupant Name:

Year Opened: Cleaning Solvent: Former Solvent:

Hydraulic Lifts: ☐ Yes ☐ No Floor Condition: ☐ Good ☐ Fair ☐ Poor Housekeeping: ☐ Good ☐ Fair ☐ Poor

Oil/Water Separator: ☐ Yes ☐ No Disposal Contract: Manifests Available: ☐ Yes ☐ No

Discuss hazardous materials, wastes, OWS, hydraulic lifts, floor drains staining, etc. in the appropriate sections below.

Car Wash: ☐ Yes ☒ No Car Wash Name:

Year Opened: Describe Equipment:

Reported Condition: Disposal Contractor:

Sand/Grit Trap: Discharge Location:

Permit Required:

Hazardous Materials and Petroleum Products

Type of Material	Quantity	Storage Location	Use
☐ Routine janitorial & maintenance	Retail size containers		Project maintenance and upkeep
☐ Retail sales (auto fluids/cleaning)	Retail size containers	Sales floor/Stock Room	Retail sales, not used at Project
☐ Propane	Retail size containers	Exterior cage	Retail sales, not used at Project
☐ General automotive fluids			Auto repair
☐ Oil			
☐			

Concern Identified: ☐ No ☒ Yes, identify concern: Former boiler room, Former oil house, Former engine room, Former elevator

Notes: Aforementioned concerns not entirely assessed due to safety concerns & access limitations.

Storage Tanks – Group tanks with similar details if possible.

	Tank No. _____	Tank No. _____	Tank No. _____
Type: AST/UST			
Tank Status			
Registered (Yes/No)			
Location			
Construction Material			
Year Installed			
Tank Size/Capacity			
Contents:			
Use of Contents			
Tank Construction			
Piping Construction			
Leak Detection			
Release (Yes/No)			

Pipelines ☐ Visual observations did not identify any surface markings indicating the existence of subsurface product pipelines

Owner	Location	Product	Operating Pressure	Status
☐				
☐				

Emergency Generator # of units: _____ Location: _____ Fuel Source: _____

Environmental issues? _____

Transformers ☐ Pad-mounted ☐ Pole -mounted # of Units: _____ ☐ Labeled Non-PCB ☐ Not labeled

Ownership: ☐ Utility or ☐ Property Staining/Leaking: ☐ No ☐ Yes, describe: _____

Location/Notes: _____

Hydraulic Equipment Trash Compactors: ☐ No ☐ Yes, # of units: ____ Box Compactors: ☐ No ☐ Yes, # of units: _____

Hydraulic Lifts: ☐ No ☐ Yes ☐ Electric only Below Grade Hydraulics: ☐ No ☐ Yes, # of units: _____

Evidence of Former Lifts: ☐ No ☐ Yes, describe: _____

Location/Notes: _____

Waste Generation, Storage, and Disposal

	Waste Stream	Process	Type or Occupant	Disposal Method
☐	Municipal trash	N/A	☐ Dumpster ☐ Compactor	Contracted Waste Hauler (CWH)
☐	Sewage	N/A	N/A	☐ Sanitary Sewer or ☐ Septic
☐	Cooking Grease	Food Preparation	☐ Trap and/or ☐ Bin / Drum	☐ CWH ☐ Sanitary Sewer ☐ Septic ☐ Storm Sewer
☐	Drums			
☐				
☐				

Concern Identified: ☐ No ☒ Yes, identify concern: Coal area west of boiler room, coal & coal combustion residuals northern lot, abandoned car/debris pile northern lot.

Notes: Aforementioned concerns not entirely assessed due to safety concerns & access limitations.

Oil-Water Separator: ☐ No ☐ Yes, number and location: _____

Above/Below Grade: ☐ Above ☐ Below Age of System: _____ Construction: _____

Discharge To: _____ Waste Manifest: ☐ Available (obtain copy) ☐ Not Available

Concern Identified: ☐ No ☐ Yes, identify concern: _____

Grease Trap: ☐ No ☐ Yes, number and location: _____

Above/Below Grade: _____ Age of System: _____ Construction: _____

Discharge To: _____ Waste Manifest: ☐ Available (obtain copy) ☐ Not Available

Concern Identified: ☐ No ☐ Yes, identify concern: _____

Septic System: ☐ No ☐ Yes, location of tank and drain field: Identified on field card, no other records

Condition of System: _____ Age of System: _____ Violations: ☐ No ☐ Yes

Concern Identified: ☐ No ☐ Yes, identify concern: _____

Surface Area

Environmentally Significant Floor/Trench Drains: ☐ Yes ☒ No How Many: _____ Connect to OWS: ☐ Yes ☐ No

Discharge Point: _____ Staining/Odor: ☐ Yes ☐ No Location: _____

Notes: _____

Environmentally Significant Surface Staining: ☐ Yes ☐ No, minor staining near dispensers and parking areas

Ongoing Release: ☐ Yes ☐ No Surface Media: _____ Surface Condition: _____

Location/Notes: _____

Significant Stressed Vegetation: ☐ Yes ☒ No Location: _____ Source: _____

Location/Notes: _____

Stormwater Basins: ☐ No ☐ Retention, quantity: _____ ☐ Detention, quantity: _____ Location: _____

Staining: ☐ Yes ☐ No Stressed Vegetation: ☐ Yes ☐ No Water Sheen: ☐ Yes ☐ No Dumping: ☐ Yes ☐ No

Notes: _____

Monitoring/Observation/Other Wells

Monitoring Wells Observed: ☐ Yes ☒ No Number of wells: 5 MWs allegedly, unable to locate Type: ☐ Flush-mounted ☐ Stick-Up

Location (on field sketch too): _____ Adequately Secured: ☐ Yes ☐ No

Notes: _____

Observation Wells (leak detection): ☐ Yes ☐ No Number of wells: _____ Adequately Secured: ☐ Yes ☐ No

Location/Notes: _____

Water Wells: ☐ No ☐ Yes, potable: # Yes, irrigation: # Location: _____

Notes: _____

Utilities and Heating/Cooling

Drinking water: ☒ Public Utility or ☒ On-site water well, # of Wells: _____ Locations: See previous maps. Public available

Sewage: ☐ Public Utility or ☒ On-Site Septic or ☒ Other: Reported historic discharge to Pawcatuck River

On-Site System: Reported on field Card, however, records do not indicate location of septic

Natural Gas: (available) ☒ Public Utility or ☐ Propane or ☐ N/A Electric Power: ☐ Public Utility or ☐ N/A

Heating: Source: ☐ Natural Gas ☐ Propane ☐ Fuel Oil ☐ Electric ☐ Other: _____

☐ Central Plant ☐ Boiler ☐ Furnace ☐ Heat Pump ☐ Package Units ☐ Other: _____

Cooling: ☐ Package Units ☐ Central Plant ☐ Window Unit ☐ Heat Pump ☐ Other: _____

Moisture Conditions

☐ No obvious indications of significant suspect microbial growth/moisture conditions were observed in readily accessible areas.

The following was observed/noted: ☐ Visible suspect microbial growth ☒ Significant moisture conditions

Describe and estimate SF: A lot

Suspect Asbestos Containing Materials (ACM) *– not within scope*

Adjacent Properties including diagonally! - Name, property use, address, evidence of releases, and monitoring wells identified.

North: Pawcatuck River followed by Residence Located in Hopkinton, RI

MWs observed: ☐ Yes ☒ No

East: Pawcatuck River followed by Laurel Street (Hopkinton, RI) followed by residences

MWs observed: ☐ Yes ☒ No

South: Residential MBL 8/24, Followed by Potter Hill Rd, followed by Public "The Westerly Land Trust.

MWs observed: ☐ Yes ☒ No

West: Residential (MBL 8/22) & State of RI (MBL 8/20)

MWs observed: ☐ Yes ☒ No

Local Agency Records – Only online records. No FOIA/requests for information or in-person visits.

Town of Westerly Building Department Online Records Available: ☐ Yes ☐ No

Records Back To: _____ Environmentally suspect information identified: ☐ Yes ☒ No

Existing Conditions Plan & Demo Plan. Existing conditions plan depicts well and former water tower on property. Buildings in ruins at time (2006). Limited ACM survey did not detect >1% ACM.

Town of Westerly Fire Department Online Records Available: ☒ Yes ☐ No

Records Back To: 1977 Fire Environmentally suspect information identified: ☐ Yes ☒ No

1977 Fire fought with sumps/water from Pawcatuck River

Health records are only required for on-site water wells or on-site septic/sewage treatment

_____ Health Department Online Records Available: ☐ Yes ☐ No

Records Back To: _____ Environmentally suspect information identified: ☐ Yes ☐ No

Bk: 2022 Pg: 14733
Instr #: 2022-3521
08/18/2022 03:33:41 PM
7 Pages

DEED

RECEIVED FOR RECORD
WESTERLY RI

SPECIAL MASTER'S DEED

I, **John A. Dorsey, Esq.**, in my capacity as the duly appointed and qualified Special Master (the "Special Master" or "Grantor") of the property located and identified as 198 Potter Hill Road, Westerly, RI, more specifically identified as the Town of Westerly Tax Assessor's Parcel 8, Lot 23 (the "Real Estate") by the powers conferred by the Order of the Washington County Superior Court of the State of Rhode Island entered on the 10th day of February, 2020, in the Mastership Proceeding docketed as WM-2020-0057, granting the appointment of Special Master and by the Order of the Washington County Superior Court entered on the 27th day of July, 2022, granting authority to the Special Master to convey that certain parcel of Real Estate as more particularly described in **Exhibit "A"** annexed hereto, for the consideration of One Dollar and 00/100 ($1.00) and for good and valuable other consideration, the receipt of which is hereby acknowledged, grants to **The Town of Westerly** with a mailing address of 45 Broad Street, Westerly, RI ("Grantee"), free and clear of all interests, claims, liens and encumbrances, but subject to all municipal ordinances, federal and state laws and regulations and all restrictions of record, all of my right, title and interest as said Special Master in and to that certain parcel of Real Estate as more particularly described in **Exhibit "A"** annexed hereto and hereby incorporated herein.

This conveyance is made "as is" and "where is" and without any representations or warranties of any kind whatsoever, including but not limited to, any representations or warranties concerning quantity, quality, durability, habitability, condition, merchantability, legal status, fitness for any purpose, or any other aspect of said Real Estate.

This conveyance is made by a Special Master appointed by the Washington County Superior Court of the State of Rhode Island, and no withholding tax is required under Rhode Island Gen. Laws 1956 [1988 Reenactment] §44-30-71.3.

Notwithstanding anything herein to the contrary, the Special Master's execution of this instrument in his capacity as Special Master shall not render him personally liable.

This conveyance of the Real Estate is exempt from Section 8 of the Rhode Island Fire Safety Code regarding inspection of smoke and carbon monoxide detectors, as the conveyance is pursuant to a court order.

WITNESS my hand this 17th day of August, 2022.

John A. Dorsey, Esq., in and only in his capacity as Special Master and not individually

STATE OF RHODE ISLAND
COUNTY OF PROVIDENCE

In Providence, in said County on the 17th day of August, 2022, personally appeared John A. Dorsey, Esq., Special Master, to me known and known by me to be the party executing the foregoing instrument, and he acknowledged said instrument by him executed to be his free act and deed as and only as Special Master, and not individually.

JOHN R. MORETTA MY COMM. EXPIRES 08-26-2025 NOTARY PUBLIC Commission # 755703 STATE OF RHODE ISLAND

755703

Notary Public:
My commission expires: 8/26/2025

JOHN R. MORETTA
Notary Public, State of Rhode Island
My Commission Expires Aug. 26, 2025
Commission # 755703

Index Information:
Property Address: 198 Potter Hill Road, Westerly (A/P 8, Lot 23)

Owner: Renewable Resources, Inc.

EXHIBIT A

TRACT ONE - A certain lot or parcel of land, lying and being in said Town of Westerly, bounded and described as follows: Beginning at a stone post, on the westerly bank of the Pawcatuck River, said point being the southeasterly corner of the premises now being described; thence northwesterly a distance of 60 feet, more or less, to a wall marking the northerly and easterly boundary line of land now or formerly of Howard E. Thorp, et ux; thence northeasterly along said wall, a distance of 85.0 feet to an angle in said wall; thence northwesterly, along said wall, a distance of 24.0 feet, to an angle; thence northwesterly, along said wall, a distance of 35 feet, to a point; thence northwesterly, a distance of 23.25 feet, to an iron pipe at an angle, said pipe being about 1.75 feet southwesterly from the southwesterly corner of the southwest pier of the water tower; thence northwesterly a distance of 20.55 feet to an iron pipe at an angle; thence northeasterly, a distance of 32.54 feet, more or less, to a stone post at an angle, said point being the northwest corner of the water tower lot, so-called, as described in a deed from William H. Thorp to the Pawcatuck Woolen Mills, dated October 29, 1903, and recorded in the Land Evidence Records of said Town of Westerly, in Book No. 35, at page 301; thence northwesterly, a distance of 52.10 feet to an iron pipe driven in the ground at an angle, said point being located 37.40 feet easterly of a drill hole in a large boulder; thence northeasterly, a distance of 174.15 feet to an iron pipe; thence northwesterly, a distance of 125 feet, to a point on the westerly line of a parcel of land conveyed by William H. Thorp and Alice E. Thorp to the Pawcatuck Woolen Mills, by deed dated July 15, 1920, and recorded in the Land Evidence Records of said Town of Westerly in Book No. 46, at Page 161, said point being located 100 feet northerly along said boundary line, from the center line of a wall, thence northeasterly, a distance of 463 feet, more or less, to the Pawcatuck River, said last mentioned line passing through an oak tree located near the edge of the Pawcatuck River; thence in a prolongation of said last mentioned line, to the boundary line between the said Town of Westerly and the said Town of Hopkinton, at the center of the Pawcatuck River; thence southerly and southwesterly, along the boundary line between the said

Tract One Continued:

Town of Westerly and the said Town of Hopkinton, to a point on the prolongation easterly of the first described boundary line of the premises now being described; thence westerly to the point and place of beginning. Said premises are shown and delineated on a plat entitled, "Plat Showing Location of Properties belonging to The Pawcatuck Woolen Mills, Potter Hill--Westerly--R.I. Scale 40 feet to an Inch, July 1920. George W. Woodward, Surveyor, Revised March 1930, Rossi & Lewis, Engineers," on file or to be placed on file in the office of the Town Clerk of said Town of Westerly, reference to which plat being hereby had and made, and the same being made a part hereof. Reserving and excepting the same right to pass over and across so much of said premises as are designated as Lot No. 5 on said plat, and by the same parties as is mentioned and are named in certain deeds to Edwin Babcock and Horace Babcock of said Lot No. 5, which said deeds are now on record in the Records of Land Evidence of said Town of Westerly reference thereto being hereby made. Being Lots Nos. 3A, 5 and 11, as shown on said revised plat dated March, 1930, but not including lot No. 11A, as shown on said plat.

Being the same premises described as Parcel No. 1 in that certain deed of Frederick T. Lawrence and Carrie K. Lawrence to Swift River Woolen Co. dated April 15, 1930 and recorded in the Land Evidence Records of said Town of Hopkinton in Book No. 37 at Page 489.

Being the same premises described as Tract One in that certain deed of Swift River Woolen Co. to Helen E. Cottrell dated August 4, 1955 and recorded in the Land Evidence Records of the Town of Westerly in Book 74 at Page 350.

TRACT THREE - A certain lot or parcel of land, lying and being in the Village of Potter Hill, in said Town of Westerly, which formerly contained an office building and other improvements bounded and described as follows, to wit:- Beginning at a stone post on the westerly bank of the Pawcatuck River, said point being the southeasterly corner of land now or formerly of Frederick T. Lawrence, and the northeasterly corner of the premises herein conveyed; thence run southerly, 13 feet, more or less, along said Pawcatuck River, to a point three (3) feet southerly from the southerly side of the southerly side extended to the former office building, as the stood in 1955; thence run westerly, in a line three (3) feet southerly from and parallel with the southerly side of the former office building, to a point three (3) westerly from the westerly side of the former office building, if extended southerly; thence run northerly, in a line three (3) feet westerly from the westerly side of the former office building, to land now or formerly of said Frederick T. Lawrence; thence run easterly, along land now or formerly of said Frederick T. Lawrence, to the point and place of beginning.

Being the same premises conveyed to Swift River Woolen Co. by deed of Frederick T. Lawrence, dated May 6, 1930 and recorded in the Land Evidence Records of said Town of Westerly in Book No. 53 at Page 443.

Being the same premises described as TRACT THREE in that certain deed of the Swift River Woolen Co. to Helen E. Cottrell dated August 4, 1955 and recorded in the Land Evidence Records of the Town of Westerly in Book 74 at Page 354.

Together with all and singular the factories, store houses, barns and other improvements standing upon each of said tracts and premises aforedescribed, and the dam and water power and water rights and water privileges connected with and belonging to the said premises; subject, however, to the obligations made and contained in a certain agreement between Thomas W. Potter and Edwin Babcock and Horace Babcock, dated January 7, A.D. 1850, and recorded in Book 18, at Page 707, and in a certain deed from Thomas W. Potter to Edwin Babcock and Horace Babcock, of the same date, and recorded in the said agreement and to said deed being hereby made. Subject also to the obligations, if any, that the said Potter Hill Woolen Co., Inc., may be under by virtue of a certain agreement between the Potter Hill Manufacturing Company and the White Rock Company, so-called, dated September 25, 1828, and recorded in the records of Land Evidence in said Town of Westerly, in deed Book 18, at Page 584, reference to said agreement being hereby made. Subject, also, to any changes in the bank of said Pawcatuck River by reason of the action of the water thereof, since the year 1873.

Subject also to a certain pole line agreement granted to the Narragansett Electric Company by the Swift River Woolen Co.

Tract Three Continued:

Subject also to a Condemnation Order of the Town of Westerly which has been affirmed by the Rhode Island Washington County Superior Court in Civil Action File No. 80-4 entitled "Helen E. Cottrell, d/b/a Westerly Woolen Company vs. R.I. State Board of Standards and Appeals."

MARY L. LEBLANC, MMC TOWN CLERK
WESTERLY, RI RET:
JOHN A. DORSEY ESQ

Town of Westerly
Rhode Island

DEPARTMENT OF
DEVELOPMENT SERVICES

Town Hall
45 Broad Street
Westerly, RI 02891

July 1, 2024 — Date printed

Ronald N. Gagnon, P.E., Chief
Rhode Island Department of Environmental Management
Office of Customer and Technical Assistance
235 Promenade Street
Providence, RI 02908

RE: Demolition Plan
Potter Hill Mill
198 Potter Hill Road, Westerly, RI
Assessor's Map '8', Lot '23'

Dear Mr. Gagnon,

As requested during our meeting with Rhode Island Department of Environmental Management (RIDEM) Staff on Wednesday, February 10, 2016, this document serves as the Town of Westerly's Demolition Plan for the Potter Hill Mill site at the above referenced address.

Background

Industrial activity at the subject property dates back to 1762 with its primary use for the manufacturing of woolen products occurring from 1843 up until 1958 when the mill operations were closed permanently. The mill and associated buildings have remained vacant since. Sometime in 1977 the buildings were extensively damaged by fire and in 1981 the Town of Westerly was granted a Court Order to demolish the facility due to safety concerns; however, this Court Order was never followed through.

Since that time the Town of Westerly (the Building Department, specifically) has attempted to initiate demolition procedures to eliminate the public nuisance and safety hazard that the structures represent. After significant effort and litigation, the Town was finally issued another Court Order to demolish the building on December 20, 2012. Appeals of this Order were subsequently taken by the owner to the Town of Westerly Building Board of Appeals, State of Rhode Island Building Board of Appeals, Superior Court, District Court, and Supreme Court. In all cases the appeal requests were denied and the rulings were in favor of the Town.

Court Order & Intent

The current Court Order...

Existing Conditions

Currently there are seven (7) structures that exist on this 4.55 acre property in various states of disrepair and the remnants of several other buildings that have collapsed or have been removed with their remnants stockpiled in several areas on the Site. The property, as well as most of the buildings, is immediately adjacent to the Pawcatuck River.

The buildings, some of which are interconnected, are identified and described below:

Building #1: Existing brick building closest to the main gate to the south. The roofing and/or flooring system is partially or substantially collapsed in this building with building contents still inside.

Building #2: Existing stone building just north of Building #1. The roofing and/or flooring system is partially or substantially collapsed in this building with building contents still inside.

Building #3: Existing brick building just north of Building #1 & #2

Building #5: Existing wood structure just north of Building #3 with internal steel beams. This building also contains a large brick chimney that extends from the center of this building.

Building #6: Wood building just north of Building #5 that is completely collapsed and on the ground.

Building #7: Wood building just north of Building #6 that is almost completely collapsed with only a small wall section remaining upright. The majority of building materials associated with this building are already on the ground.

Building #8: Wood building inland from the river and just west of Building #5 that is almost completely collapsed with only a very small part of a wall section remaining upright. The majority of building materials associated with this building are already on the ground.

Other Site Conditions

Areas around the buildings are relatively open with an access drive that exits just after the bridge on Potter Hill Road. This access drive extends from the entrance gate at the southern end of the property into the center of the property as it extends north, adjacent to the west side of Buildings #1, #2, and #3 before it terminates at the northern end of Building #3. The vegetation to the west and north west of the access drive (central portion of the Site) consists of relatively sparse shrubs and small trees as this area had been cleared of overgrown vegetation at some point in the past. Vegetation towards the north and western portions of the property is more densely vegetated with thicker groundcover and larger diameter trees. A forested wetland approximately 12,800 square feet in size is also located in the northern portion of the property.

Previous Investigations

In 2013 the property owner contracted with Alternative Technologies, LLC (AltTech) to conduct bulk sampling of suspect asbestos containing materials (ACMs) from buildings located on Site. AltTech produced four (4) letters dated April 4, 2013, included as **Appendix A**, documenting their findings. In summary, AltTech sampled ACMs from four structures (granite building, boiler building; steel-framed building, and shed) which primarily consisted of roofing, plaster, tar and gravel roofing, sheetrock, building paper, boiler brick, fiberboard, and asphalt shingles. Analytical results indicated that none of the suspected were found to contain at least 1%

asbestos, and therefore, the buildings associated with those samples were considered to be free of asbestos.

No information associated with the identification of Lead Contaminated Materials (LCMs) or any other analytical information was available for the Town to review in regards to other types of building materials at this property.

Demolition Activities

As previously indicated, the intent of this demolition activity is to eliminate the public nuisance and safety issues associated with the deteriorated structures which have posed a hazard to the public for the last several decades. To do this, the Town plans to contract with a demolition company to remove the existing structures and segregate and stockpile building materials by type, as follows:

- Concrete/Brick/Stone Debris
- Wood Debris
- Metal Debris
- Debris suspected of containing ACMs
- Debris suspected of containing LCMs

Due to the extremely poor and unsafe conditions for entry into and around the existing buildings, the Town proposes to employ professional asbestos and lead abatement contractors to perform debris assessment of building material as it is being removed. Building material will be inspected and sampled for ACMs and LCMs and then segregated and stockpiled accordingly.

1.0 SCOPE OF SERVICES

1.1 PROJECT UNDERSTANDING

1.1.1 Site Description

The former Potter Hill Mill site is located at 198 Potter Hill Road in Westerly, Rhode Island and consists of 14 buildings, attached and free standing, on 4.55 acres of land adjacent to the Pawcatuck River. The Town of Westerly desires to develop demolition plans and specifications with the objective of removing all of the above ground structures and securing the property in the interest of public safety.

This proposal contains the tasks and activities necessary to achieve the goals of the Town, including inspecting the site to prepare an inventory of existing structures and document structural hazards and hazardous materials, land surveying, permitting, and development of demolition plans and specifications. Following completion of this phase of the project, cost estimates to complete the work will be developed to quantify the overall costs for the project and assist the Town in securing adequate funding to begin the work. Finally, procurement assistance and construction inspections will be provided to ensure that the Town completes the project in a timely and cost effective manner.

1.1.2 Project Considerations

The Cherenzia Team's project management approach is based on the philosophy that the proposed team is an accountable, functional, technical extension of the Town of Westerly and will remain a supporting partner throughout the project's duration. Cherenzia's philosophy is to offer our clients a fully integrated project team. Mr. Regan will be able to integrate the appropriate mix of disciplines to implement each task.

Our approach to permitting is to submit a complete application and supporting documentation package, in order to obtain an expeditious review and approval by the approving authority. For this project, a Preliminary Determination permit will be required from RIDEM for all proposed road improvements within freshwater wetlands jurisdiction.

1.2 SCOPE OF WORK

Upon notice to proceed, Cherenzia will arrange a kick-off meeting with the Cherenzia Team and Town of Westerly personnel to ensure that the work proposed for the site is adequately coordinated. A detailed agenda will be prepared and distributed prior to the meeting, and the proposed Cherenzia Team Project Manager will moderate the kick-off meeting. The proposed scope of work to complete the work contained in the RFP is outlined in the following sections.

1.2.1 Site Investigation

Following the kick off meeting, a thorough investigation of the complete complex of the Potter Hill Mill will be performed and all unstable and unsafe structures to be demolished will be identified. All buildings will be observed and photographed, materials of construction for each building will be documented, and comment will be prepared on the condition of each building.

1.2.2 Site Survey

Survey and mapping of the entire project area identifying all features necessary to safely remove all structures and secure the site for long term safety will be performed. Included in this task are the following activities:

- Retain the services of a biologist to update wetlands flagging and prepare a Letter of Findings for application support.
- Update the existing site survey dated August 2006 to reflect current conditions to include building locations, observable utility and water connections, concrete support beams visible due to debris removal and locate wetland flagging.
- Prepare an updated site plan for application support and use by project team members.

1.2.3 Hazardous Materials Survey

The Cherenzia Team will conduct an extensive survey of the project site to identify, sample and quantify all hazardous materials to be removed prior to demolition. The following sections detail the activities associated with this task.

1.2.3.1 Asbestos Inspection

A comprehensive inspection will be initiated to identify all asbestos-containing materials (ACM) prior to the demolition of the Potter Hill Mill. The purpose of this inspection will be to identify, document, and sample materials suspected to contain asbestos. Every effort will be made to identify all suspect asbestos containing materials, but it must be understood that due to the poor condition of the building(s), Cherenzia's Team may have to make assumptions about suspect materials and their quantities. For the purpose of safety, a minimum of two inspectors are required to perform the survey. All materials will be evaluated so long as they are accessible. If roof samples can be safely collected, they will be marked. Otherwise, samples will be collected of materials that have fallen within the buildings.

After collection and documentation, samples will be analyzed by Rhode Island Analytical's in-house certified asbestos laboratory. Samples are analyzed for the content and type of asbestos present (if any). Positive stop sample techniques will be utilized, meaning once a sample of a homogeneous material has tested positive for asbestos content, the remaining similar components will not be analyzed. A report, including all documentation and laboratory analyses will be compiled from the data gathered from the asbestos inspection.

1.2.3.2 Lead Inspection

A lead determination inspection will be performed to include collection of Toxicity Characteristic Leachate Procedure (TCLP) samples for all buildings to be demolished. This type of inspection will identify lead paint hazards prior to impacting the surfaces and provide information on which materials need to be handled carefully during demolition and disposal procedures.

1.2.4 Utility Disconnection and Abandonment Design

Existing utility services to the site will be disconnected and abandoned per requirements of the corresponding utility company. Cherenzia will work with the local utility providers to develop a plan

that is suitable for all parties. Utility lines within the site will be removed as required for potential future development.

1.2.5 Permitting

At a minimum, a Rhode Island Department of Environmental Management (RIDEM) Freshwater Wetlands Permit along with Town of Westerly Demolition and Land Disturbance Permits will be required to complete this project. The Freshwater Wetlands Permit will include an erosion and sedimentation control plan, a narrative describing the methods to be used for the demolition, removal and restoration/stabilization activities, an impact avoidance and minimization statement, and associated demolition drawings and specifications. Since RIDEM is the State agency designated to coordinate with the U.S. Army Corps of Engineers as required for a Programmatic General Permit (PGP), a separate submittal to the Army Corps should not be necessary and is not included inthis proposal.

1.2.6 Preparation of Demolition Drawings and Specifications

Information collected during the activities outlined in previous sections will be utilized to prepare demolition drawings and specifications identifying each building scheduled to be demolished, the number of floors and constructions materials for bidding purposes, and specifications for removal and disposal of the buildings and associated structures.

1.2.7 Preparation of Cost Estimates

The demolition drawings and specifications will be used to prepare an opinion of probable costs for the complete removal and disposal of asbestos containing materials, all buildings and related structures.

1.2.8 Development and Production Bid Documents

Preliminary drawings and specifications will be provided to the Town of Westerly for review and approval. These documents will be revised as required followed by preparation of Contract Documents for the project including Demolition Drawings, Special Conditions, Town of Westerly Standard Conditions, Supplementary General Conditions, Technical Specifications, Contract Forms and Bond Forms. For the purpose of this proposal fifteen (15) copes of the final Contract Documents will be provided for bidding purposes.

1.2.9 Procurement Assistance/Construction Oversight

Cherenzia traditionally plays a valuable role in post-design services for engineering and demolition/remediation projects. This arrangement provides the client with the benefit of continuity of services through the bidding and construction phases. Cherenzia will provide the following services after completion and approval of the closure design.

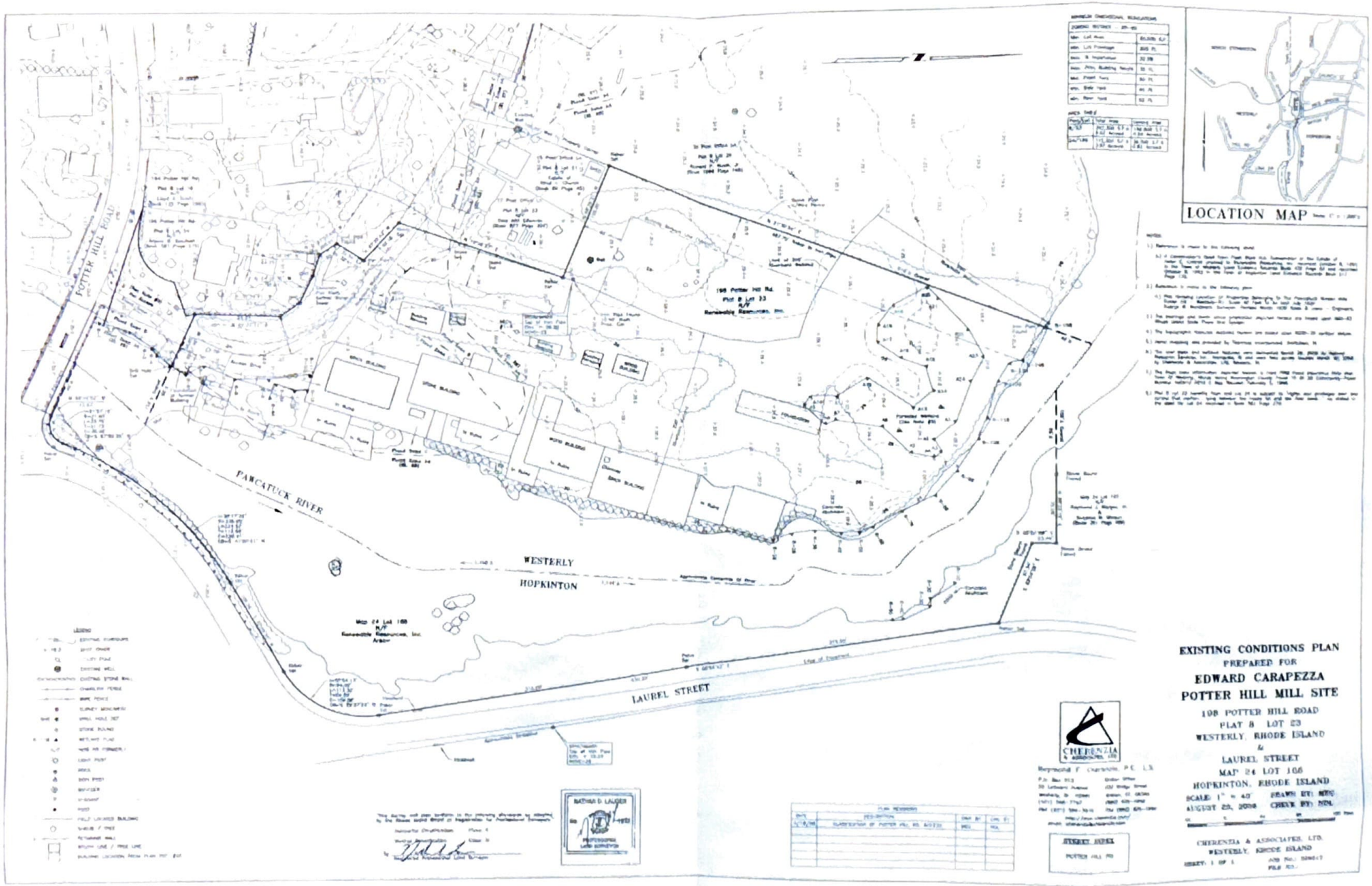
- Representatives of the Cherenzia Team will attend a pre-bid conference and pre-construction meeting. Minutes of these meetings will be developed by Cherenzia and forwarded to the Town of Westerly.

- During the procurement phase, the Cherenzia Team will answer bidder questions and requests for information (RFI) in writing to the Town of Westerly, prepare addenda, review bids, and make recommendations as to the acceptability of the lowest responsive

and responsible bidder. One addendum is assumed for this task, to be submitted electronically to each of the bidders.

- CA will provide inspection services during asbestos removal and demolition activities.

- CA will evaluate contractor-generated change orders for technical adequacy and fairness of cost, and will make appropriate recommendations to the Town of Westerly. For the purposes of this proposal, one such change order is assumed.
- Provision of administrative and technical construction contract oversight services including inspection services, processing of payments, resolution of claims, notices to the contractor, and contract closeout.


LOCATION MAP
EXISTING CONDITIONS PLAN
PREPARED FOR
EDWARD CARAPEZZA
POTTER HILL MILL SITE
198 POTTER HILL ROAD
PLAT 8 LOT 23
WESTERLY, RHODE ISLAND
&
LAUREL STREET
MAP 24 LOT 106
HOPKINTON, RHODE ISLAND
SCALE: 1" = 40'
AUGUST 25, 2008
CHERENZIA & ASSOCIATES, LTD.
WESTERLY, RHODE ISLAND
POTTER HILL RD
PAWCATUCK RIVER
WESTERLY
HOPKINTON
LAUREL STREET

Property Location 198 POTTER HILL RD
Vision ID 55 Account # 30000416 Map ID 8/ 23/ / / Bldg # 1 Bldg Name Sec # 1 of 1 Card # 1 of 1 State Use 400V Print Date 7/1/2024 10 33 31 AM

CURRENT OWNER

WESTERLY TOWN OF

45 BROAD ST

WESTERLY RI 02891

TOPO	UTILITIES	STRT / ROAD	LOCATION
1 Level	2 Public Water	1 Paved	3 Rural
	6 Septic		7 Waterfront

SUPPLEMENTAL DATA

Alt Prcl ID 008-023
FIRE DIST WFD
STATE CO 78
SEWER N
DEED TYP
GIS ID 8-23

DATE REC
OLD PLAT 74/354
Exempt Ty
Exempt Bo
MultiOwne 55
Assoc Pid#

CURRENT ASSESSMENT

Description	Code	Assessed	Assessed
EXM LAND	7800	174,600	174,600
		Total 174,600	174,600

1401

WESTERLY, RI

VISION

RECORD OF OWNERSHIP

RECORD OF OWNERSHIP	BK-VOL/PAGE		SALE DATE	Q/U	V/I	SALE PRICE	VC
WESTERLY TOWN OF	2022	14733	08-18-2022	U	V		
RENEWABLE RESOURCES INC	432	53	10-08-1992	U	I	50,000	1
COTTRELL HELEN E	74	354	08-15-1955	U	V	0	

PREVIOUS ASSESSMENTS (HISTORY)

Year	Code	Assessed	Year	Code	Assessed V	Year	Code	Assessed
2024	7800	174,600	2023	7800	174,600	2021	0700	174,600
	Total	174,600		Total	174,600		Total	174,600

EXEMPTIONS

Year	Code	Description	Amount
		Total	0 00

OTHER ASSESSMENTS

Code	Description	Book	Page	Year

This signature acknowledges a visit by a Data Collector or Assessor

APPRAISED VALUE SUMMARY

Appraised Bldg. Value (Card)	0
Appraised Xf (B) Value (Bldg)	0
Appraised Ob (B) Value (Bldg)	0
Appraised Land Value (Bldg)	174,600
Special Land Value	0
Total Appraised Parcel Value	174,600
Valuation Method	C
Total Appraised Parcel Value	174,600

ASSESSING NEIGHBORHOOD

Nbhd	Nbhd Name	B	Tracing	Batch
0035				

NOTES

FORMER PAWCATUCK WOOLEN MILL
BLDGS IN VPOOR COND VACANT & VANDALIZE
BLDGS HAVE NO VALUE LOCKED GATE
7/14/16 DEMOLITION
7/16 EXPLORATORY DEMO& CLEAN UP REMOVE
ROOF STRUCTURES FLOOR SECTIONS ATTACH &
DEBRIS SO ENGINEER& ARCHITECT CAN ASSESS
BLD 1,6,7 OF NEW MAP LAYOUT MAINTAIN
STRUCTURES SECURE & SAFE
PARTIAL BLDG STILL STANDING

BUILDING PERMIT RECORD

Permit Id	Issue Date	Type	Description	Amount	Insp Date	% Comp	Date Comp	Comments
24841	07-14-2016	CM	Commercial	60,000	12-31-2018	100	12-31-2018	EXPLORATORY DEMO & CL
24840	07-14-2016	CM	Commercial	10,000	12-31-2018	100	12-31-2018	DEMOLITION
17630	02-12-2008	CM	Commercial	500	03-19-2008	100	03-19-2008	INSTALL 2 SIGNS

VISIT / CHANGE HISTORY

Date	Id	Type	Is	Cd	Purpost/Result
02-08-2022	KR			11	Field Reviewed
12-31-2018	DS			11	Field Reviewed
11-06-2018	KN			11	Field Reviewed
12-28-2015	JW			11	Field Reviewed
01-12-2010	GM			11	Field Reviewed
03-19-2008	DA			11	Field Reviewed
01-08-2007	KC			11	Field Reviewed

LAND LINE VALUATION SECTION

B	Use Code	Description	Zone	Land Type	Land Units		Unit Price	Size Adj	Site Index	Cond.	Nbhd.	Nbhd. Adj	Notes	Location Adjustment	Adj Unit P	Land Value
1	903V	MUNICIPAL MD	R60		60,000	SF	2.43	1.00000	9	1.00	0035	0.950		1.0000	2.31	138,500
1	903V	MUNICIPAL MD	R60		3.170	AC	12,000	1.00000	9	1.00	0035	0.950		1.0000	11,400	36,100
		Total Card Land Units			60,000	SF	Parcel Total Land Area		4.55						Total Land Value	174,600

Property Location 198 POTTER HILL RD
Vision ID 55 Account # 30000416 Map ID 8/ 23/ / / Bldg # 1 Bldg Name
Sec # 1 of 1 Card # 1 of 1 State Use 400V
Print Date

CONSTRUCTION DETAIL

Element	Cd	Description
Style	94	Outbuildings
Model	00	Vacant
Grade		
Stories		
Occupancy		
Exterior Wall 1		
Exterior Wall 2		
Roof Structure		
Roof Cover		
Interior Wall 1		
Interior Wall 2		
Interior Flr 1		
Interior Flr 2		
Heat Fuel		
Heat Type		
AC Type		
Total Bedrooms		
Total Bthrms		
Total Half Baths		
Total Xtra Fixtrs		
Total Rooms		
Bath Style		
Kitchen Style		

CONSTRUCTION DETAIL (CONTINUED)

Element	Cd	Description

CONDO DATA

Parcel Id		C		Owne	0.0
		B		S	

Adjust Type	Code	Description	Factor%
Condo Flr			
Condo Unit			

COST / MARKET VALUATION

Building Value New	0
Year Built	0
Effective Year Built	0
Depreciation Code	
Remodel Rating	
Year Remodeled	
Depreciation %	
Functional Obsol	0
Economic Obsol	0
Trend Factor	1
Condition	
Condition %	
Percent Good	
RCNLD	0
Dep % Ovr	
Dep Ovr Comment	
Misc Imp Ovr	
Misc Imp Ovr Comment	
Cost to Cure Ovr	
Cost to Cure Ovr Comment	

No Sketch

OB - OUTBUILDING & YARD ITEMS(L) / XF - BUILDING EXTRA FEATURES(B)

Code	Description	L/B	Units	Unit Price	Yr Blt	Cond. Cd	% Gd	Grade	Grade Adj	Appr. Value

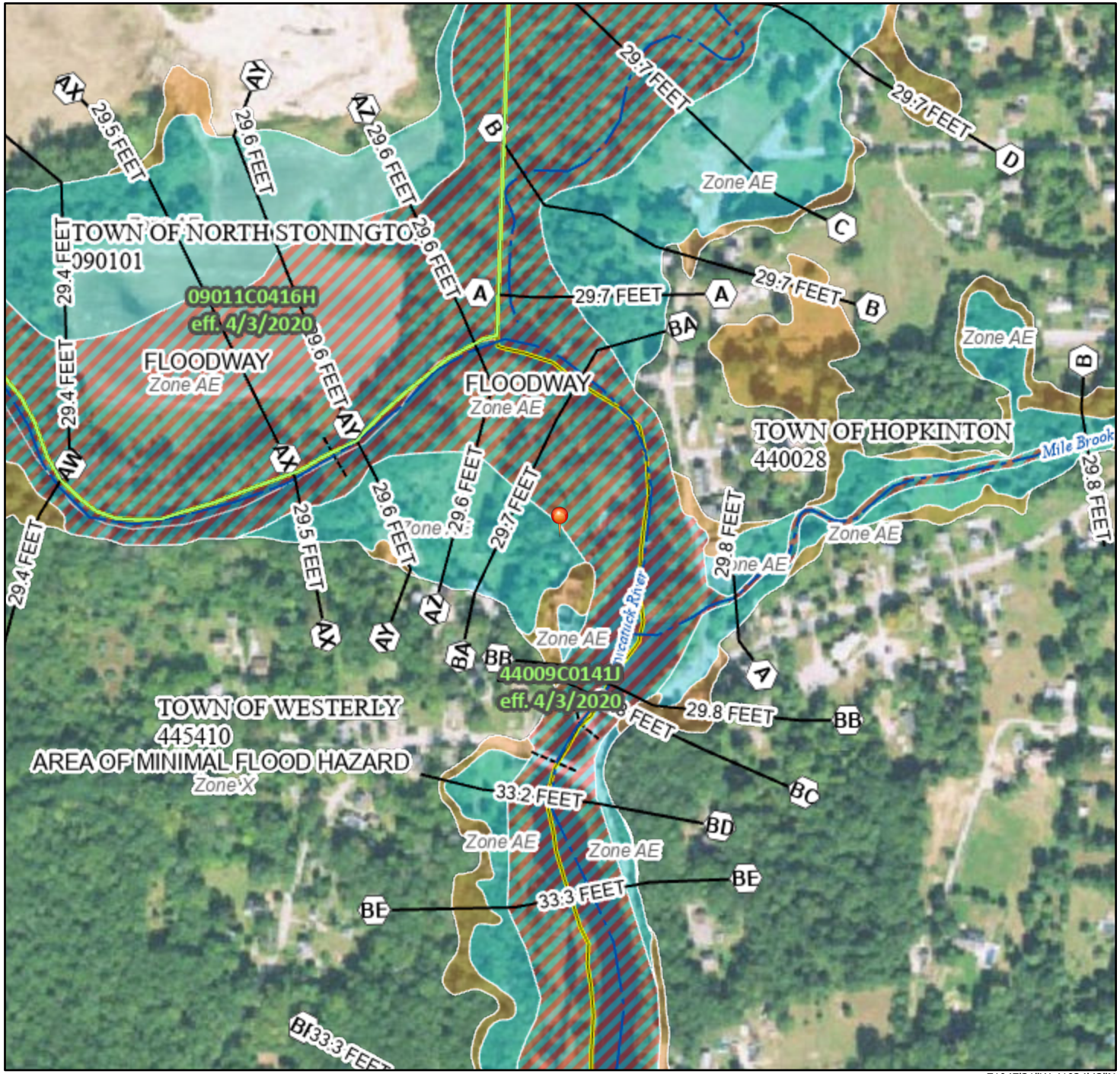
BUILDING SUB-AREA SUMMARY SECTION

Code	Description	Living Area	Floor Area	Eff Area	Unit Cost	Undeprec Value
	Ttl Gross Liv / Lease Area	0	0			0

National Flood Hazard Layer FIRMette

FEMA

71°48'8"W 41°25'9"N



0 250 500 1,000 1,500 2,000 Feet

1:6,000

71°47'31"W 41°24'42"N

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

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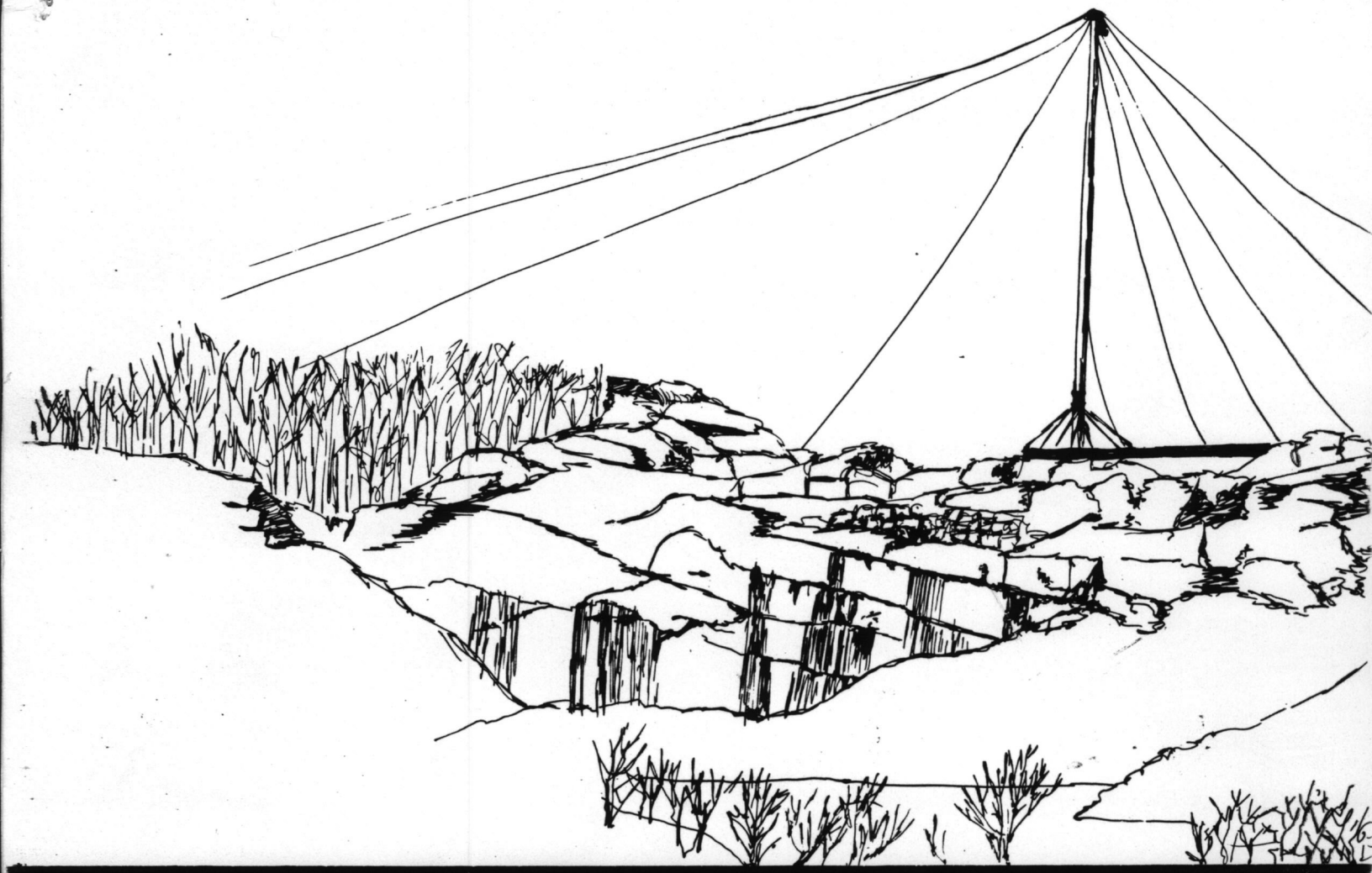
Historic and Architectural Resources of Westerly, Rhode Island: A Preliminary Report



Rhode Island Historical Preservation Commission

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

PRELIMINARY SURVEY REPORT

TOWN OF WESTERLY

This document is a copy of the original survey published in 1978.
It has not been corrected or updated.

Since the original publication:
>additional properties have been entered on the National Register;
>some financial incentives referred to in these pages are no longer available;
>some new financial incentives are available.

MARCH 1978

For up-to-date information, please contact:
RI Historical Preservation & Heritage Commission
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(401)222-2678 www.preservation.ri.gov info@preservation.ri.gov

The Rhode Island Historical Preservation & Heritage Commission is your state agency for historical preservation. The Commission identifies and protects historic buildings, districts, landscapes, structures, and archaeological sites throughout the State of Rhode Island.

RHODE ISLAND HISTORICAL PRESERVATION COMMISSION
150 BENEFIT STREET, PROVIDENCE, RHODE ISLAND 02903

PREFACE

The Rhode Island Historical Preservation Commission, established by the General Assembly in 1968, is charged with the responsibility of safeguarding Rhode Island's cultural heritage. In order to provide an overview of the physical record of this heritage, the Commission has initiated a "broadbrush" or preliminary planning survey of the rural and suburban towns of the state. The purpose of this initial inventory is to identify and record properties of historic and architectural significance in each town. Presently, archeological resources are treated through a separate survey effort being conducted by the Commission. The preliminary surveys provide a catalogue of nonrenewable cultural resources which is needed for a variety of planning purposes at the local, state and national levels. They identify sites, districts and structures eligible for nomination to the National Register of Historic Places and they become the basis for establishing historical preservation priorities based on problems and potentials discovered as part of the survey process.

The preliminary survey is accomplished by driving all public rights of way in a given town and noting on large-scale United States Geological Survey maps (or other maps that may be more appropriate) each building or site of particular architectural, visual, cultural or historic

significance. The map notations include use, condition and architectural style or period if known. Each property is photographed and recorded on a standard data sheet which includes a physical description and historical information. The significance of each property is determined in a preliminary fashion and properties are designated as being in one of three categories: properties already in or approved for nomination to the National Register of Historic Places; properties recommended at the staff level for nomination to the Register; and other significant properties, some of which, with further study and review, may be determined to be eligible for the Register. Properties of less significance are not included. Archeological sites are covered in separate, but coordinated, preliminary surveys and are mentioned only incidentally in these studies.

Previous studies are reviewed, and town histories, reports and other readily available information are researched to ensure that all appropriate historic sites and structures are included in the study. Local planners and historians are consulted wherever possible.

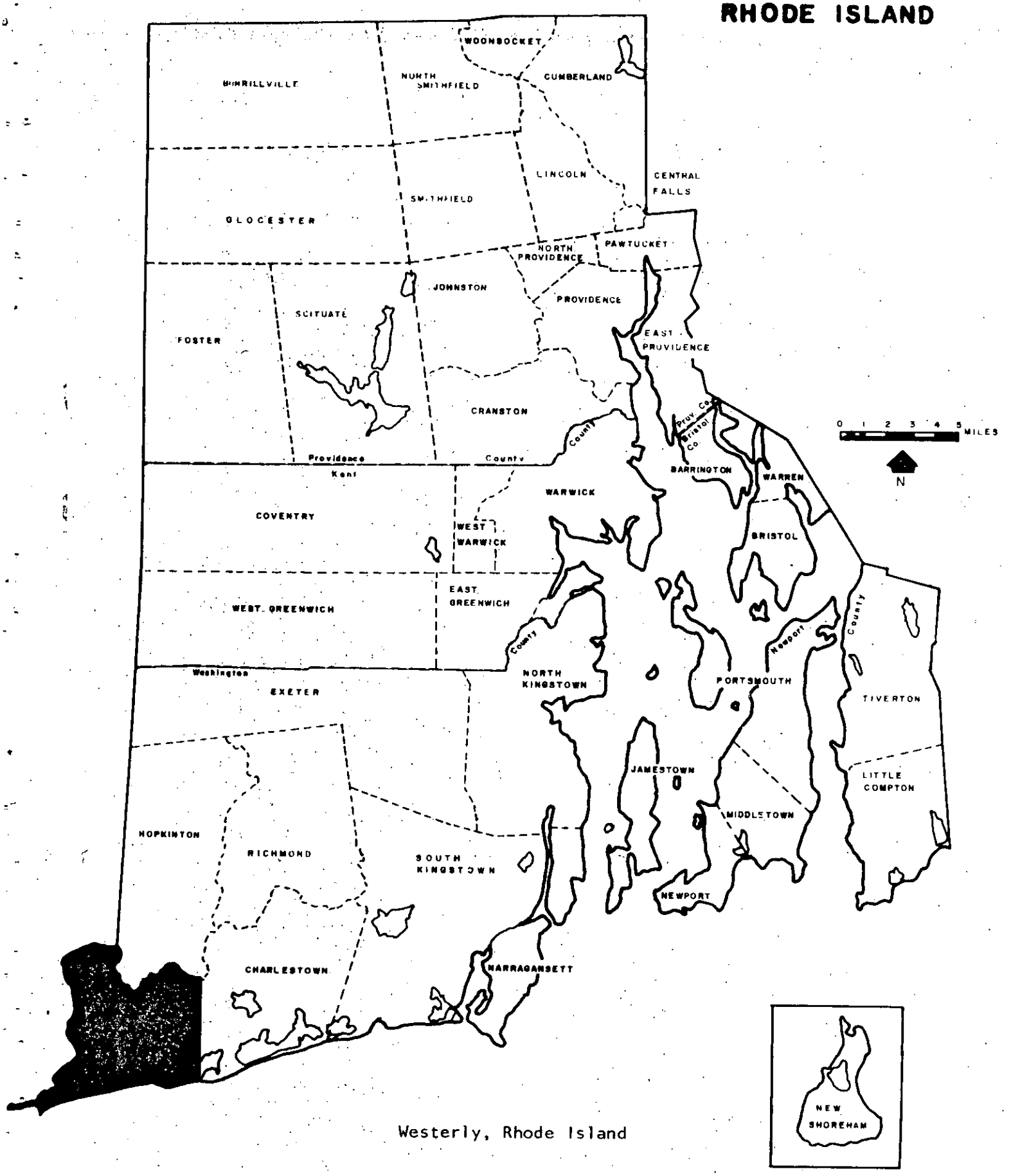
Upon completion of the survey, maps are developed and a brief report written. The result is a preliminary document--useful in the interim before a full-scale, intensive, cultural-resource survey of the community has been completed. The Rhode Island Historical Preservation Commission intends

to conduct such surveys as soon as funds and staffing are available.

INTRODUCTION

The following study covers the historical and architectural resources of the town of Westerly. It provides the basic information needed so that cultural resources can begin to be properly considered in making future planning decisions at all levels. The report includes a brief account of Westerly's developmental history together with a preliminary inventory of properties of historical and architectural importance in the town. The inventory numbers are keyed to a small-scale locational map at the end of the report. For more precise information on the location of properties, reference should be made to the large, preliminary cultural-resource survey map prepared by the state Historical Preservation Commission and drawn at a scale of one inch to one thousand feet.

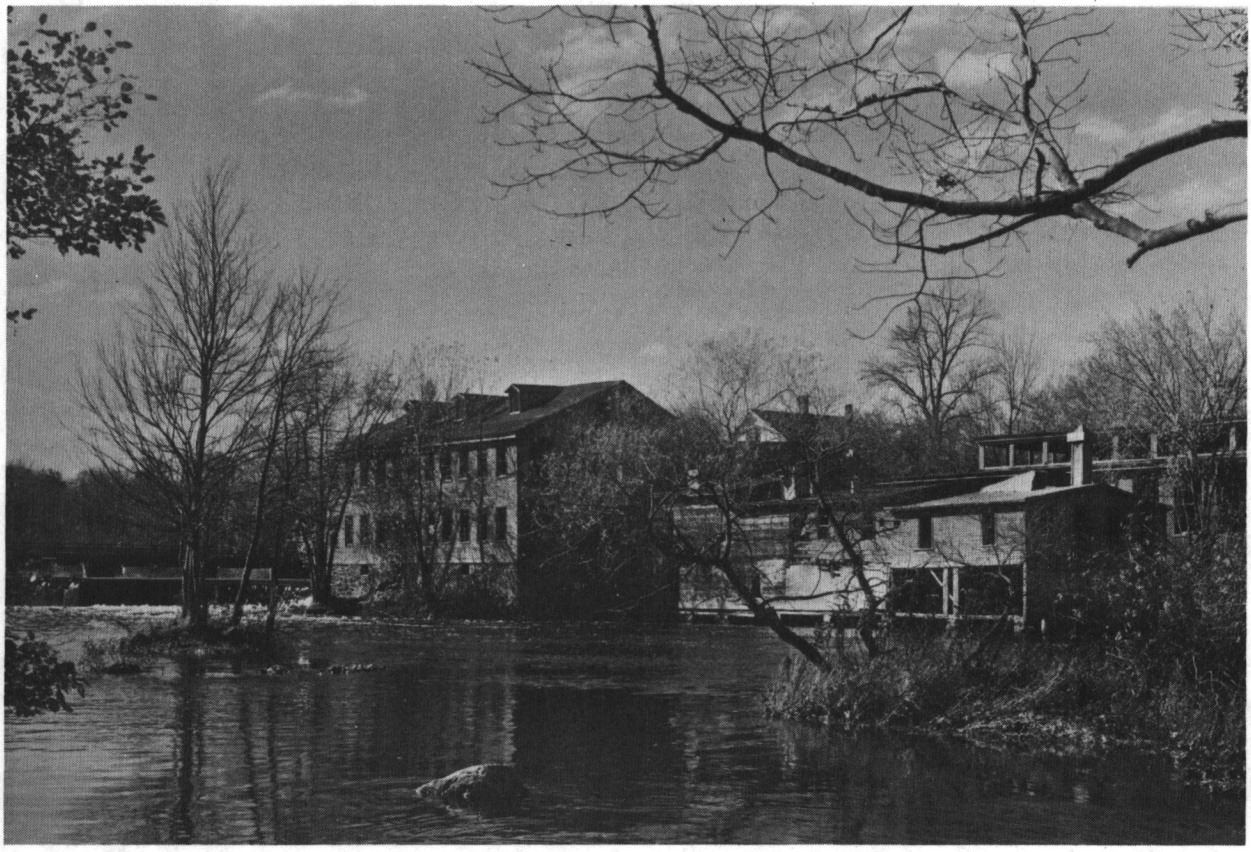
The Commission would like to thank all Westerly officials and residents who assisted in the conduct of the preliminary survey and in the publication of this report.



Westerly, Rhode Island



U.S. Post Office (1912); Wilcox Park Historic District, Westerly Village. (Map #9A)

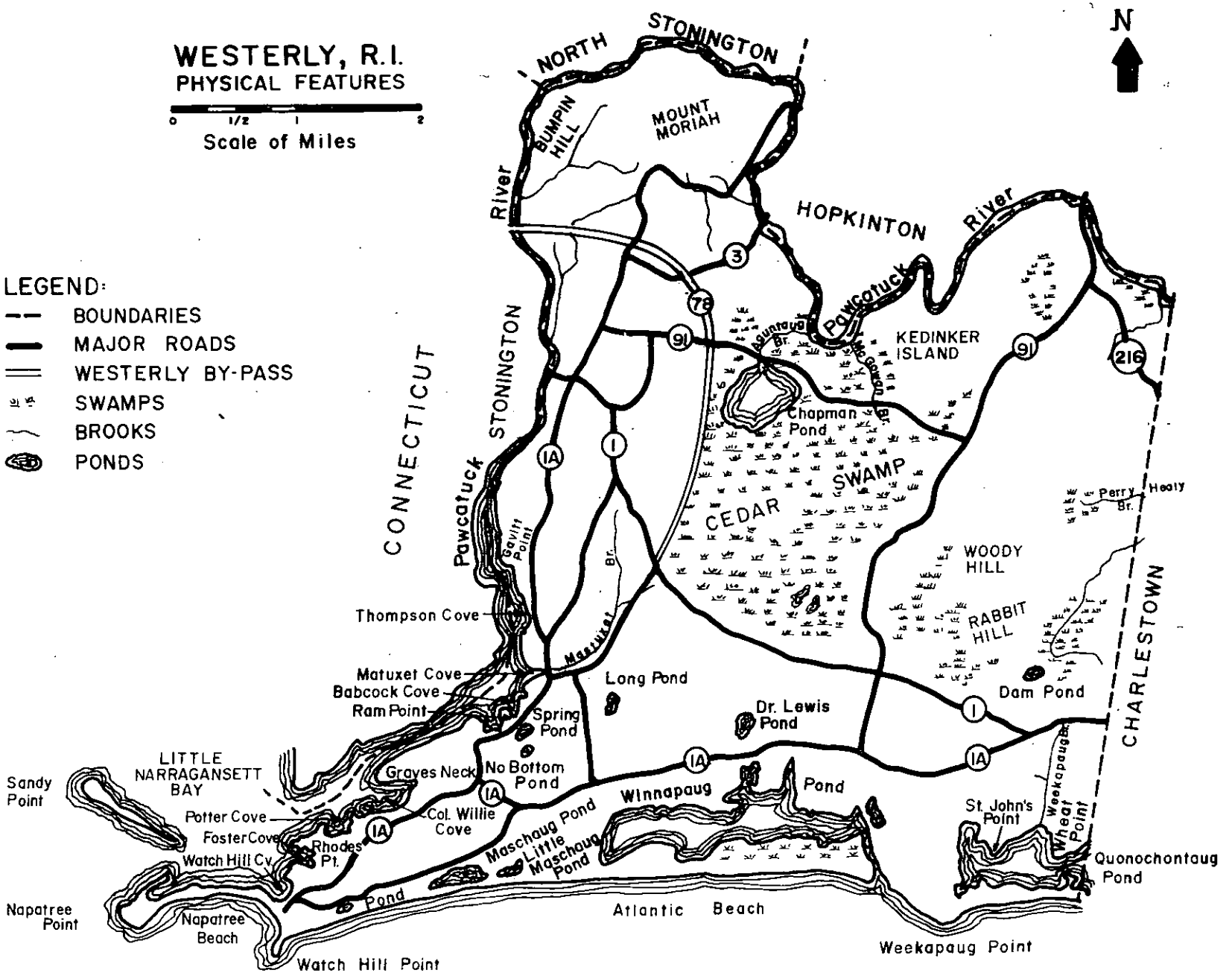


Potter Hill Mill Complex and Pawcatuck River; Potter Hill Historic District. The mill at the left was destroyed by fire in November 1977. (Map #4)

I. HISTORICAL AND ARCHITECTURAL DEVELOPMENT

Westerly, in Washington County, is a town of some thirty-three square miles in the southwestern corner of Rhode Island, about 42 miles southwest of Providence. Most of its boundaries are natural. The meandering Pawcatuck River, the major waterway of southern Rhode Island, separates Westerly from Hopkinton, Rhode Island, and North Stonington, Connecticut, to the north, and Stonington, Connecticut, to the west. The river follows a generally easterly course until it enters Stonington, where it makes an abrupt turn to the south. Below Westerly Village the Pawcatuck River widens considerably to become an estuary for several miles before entering Little Narragansett Bay. To the south, the town borders the Atlantic Ocean (Block Island Sound) for approximately eight miles between Napatree Point, the westernmost place in Rhode Island, and Charlestown. Westerly's eastern border with Charlestown is a straight, man-made line running five miles or so.

Westerly's major highways, U. S. 1, historic Post Road, and State Highway 3, Nooseneck Hill Road, funnel traffic to and from Westerly Village and nearby Connecticut. The main line of the Penn Central Railroad, which also passes through Westerly Village, provides passenger service.


WESTERLY, R.I.
PHYSICAL FEATURES
0 1/2 1 2
Scale of Miles
N
LEGEND:
BOUNDARIES
MAJOR ROADS
WESTERLY BY-PASS
SWAMPS
BROOKS
PONDS
NORTH STONINGTON
MOUNT MORIAH
BUMPIN HILL
River
HOPKINTON
River
CONNECTICUT
STONINGTON
Pawcatuck
Pawcatuck
KEDINKER ISLAND
Chapman Pond
CEDAR SWAMP
WOODY HILL
RABBIT HILL
Perry Br.
Healy
CHARLESTOWN
Dam Pond
Dr. Lewis Pond
Long Pond
Spring Pond
No Bottom Pond
Winnapaug Pond
Maschaug Pond
Little Maschaug Pond
Quonochontaug Pond
St. John's Point
Wheat Point
Weekapaug
Weekapaug Point
Atlantic Beach
Thompson Cove
Matuxet Cove
Babcock Cove
Ram Point
Gavitt Point
Matuxet
Br.
LITTLE NARRAGANSETT BAY
Sandy Point
Graves Neck
Potter Cove
Foster Cove
Watch Hill Cv.
Rhodes Pt.
Col. Willie Cove
Napatree Point
Napatree Beach
Watch Hill Point
Pond
BLOCK ISLAND SOUND
(Atlantic Ocean)

Interstate 95, passing north of the town, offers a direct, high-speed connection with New York City to the west and Providence and other New England points to the north. The Westerly By-Pass (Route 78), completed in 1976, is a modern highway which skirts Westerly Village and serves primarily to speed travelers from elsewhere to and from the town's shore areas. Near the end of the By-Pass and Post Road is the Westerly State Airport, a major link between Block Island and the mainland.

The town has several distinct physical zones, all shaped by the last continental glacier, which ceased its southward advance in Westerly. Route 1A, the Shore Road, follows a sharp topographic boundary; north of the road is an east-west trending belt, about one mile wide, known as the terminal moraine, characterized by a very irregular landscape with many hills and depressions, some water-filled. In the center of the town is a large, low-lying cedar swamp, most of it about thirty feet above sea level, containing Westerly's largest inland water body, Chapman Pond (also known as Burden's Pond). Woody Hill in the Woody Hill State Reservation in the east-central part of town rises to more than 200 feet; in the northwestern corner of Westerly, Mount Moriah, at 249 feet, is the town's highest elevation. Most of the interior is sparsely populated; the majority of Westerly's 17,000 permanent inhabitants live

in a relatively level valley of the Pawcatuck River, in the villages of Bradford, White Rock, Potter Hill, Avondale and Westerly Village, the latter being the largest urban center in southern Rhode Island.

South of Route 1A is the coastal plain, formed by sand and gravel washed out of the terminal moraine. The long barrier beach along the ocean terminates at the west end in a large sand spit and island, and behind the beach are sand dunes and a series of salt-water ponds paralleling the ocean. Quonochontaug Pond, at the east end (and mostly in Charlestown), covers more than 1,000 acres. Its dune field is one of the finest in Rhode Island. The Winnapaug Pond complex, with about 800 acres of water, contains several fine salt marshes. To the west are the smaller Maschaug ponds. Extensive marshes also occur along the lower Pawcatuck River, notably at Colonel Willie Cove. Overall, Westerly's scenic lowland is an outstanding coastal area. Although the permanent population is relatively small, the coastal plain is highly developed, predominantly with summer houses, most of which are at Watch Hill, Misquamicut, Weekapaug and Shelter Harbor. Summer residents and seasonal visitors more than double Westerly's year-round population.

The bounty afforded by Westerly's waters was first realized by Indian residents, who caught large quantities of fish, particularly shad, in the spring, with weirs,

scoops and seines. Misquamicut, the Indian name for the present town of Westerly, means red fish--a salmon. The Indians also farmed the land; one of their largest agricultural clearings was established near Chapman Pond.

Indians occupied the area for probably thousands of years. Exact dates are unknown since no Indian sites have yet been dated, but when Europeans came to America, the Narragansett Indian tribe was well established. The Narragansetts occupied the area until about 1632, when they were defeated in a fierce struggle with the Pequots, the most warlike tribe in New England. The Pequot domain extended along the coast from the Connecticut River to Weekapaug Brook and inland for twenty-five to thirty miles. It is said that they established a fort at Weekapaug. In 1637, an English military force, led by Captain James Mason, passed through Westerly and, near Mystic, Connecticut, defeated the Pequots, who later confederated with the Narragansetts. Pequots settled along Mastuxet Brook about 1654 and remained there until forced to cross the river into Connecticut when Westerly's first colonial settlers arrived around 1661. Today, the Indians who lived in Westerly for centuries are remembered only through a liberal sprinkling of place names over the land and through their artifacts which are found at a number of archeological sites.

The first European visitors on record arrived in Westerly in the early seventeenth century. In 1614, Adrian

Block landed at Pawcatuck Rock, on the Connecticut side of the Pawcatuck River, and made the first survey and map of the river. Soon after, Dutch traders were exchanging cloth and arms for furs from the Indians, with whom they had a temporary compact. The first English settler in the area was Thomas Stanton, who built a trading house near the Pawcatuck, on the Connecticut side, in 1649, and enjoyed a monopoly of trade at the mouth of the river for many years.

In 1660, a private company was organized in Newport to purchase and settle Misquamicut; in the same year, the sachem Sosoa, or Socho, deeded to Robert Stanton, William Vaughan and several other associates the area that approximately comprises today's town of Westerly. In 1661, house lots were laid out extending along the east side of the Pawcatuck River and permanent settlement began. In 1669, when the entire area had only about thirty white families, the town was incorporated; it then included today's Charlestown, Richmond and Hopkinton. Charlestown (including Richmond) was set off as an independent town in 1738, and in 1757 all of Westerly north of the Pawcatuck River became part of the new town of Hopkinton.

From the very beginning of settlement, the sea and the Pawcatuck River have played a major role in Westerly's development and growth. The first shipwright in the Westerly area, Joseph Wells, living "on the Pawcatuck River,"

built a forty-foot vessel at a shipyard near Pawcatuck Rock in 1681; by the late eighteenth century there were active shipyards along the lower Pawcatuck and vessels were being built further upstream at today's Potter Hill. Great profit was made from fishing at Shattuck's Weir and along the lower course of the Pawcatuck, and various sea fish were harvested.

But Westerly's long, exposed ocean front made it vulnerable to attacks from the sea. As early as 1690, a force of fifty-six men were stationed along the coast to meet the threats of attack by French pirates. In 1739-1740, during a war with Spain, a watch house was established at Watch Hill, and a breast works was built at Noyes Neck and at Watch Hill during the Revolutionary War. During the War of 1812 a regiment of Rhode Island militia was stationed near Watch Hill. At the turn of the twentieth century, Fort Mansfield was built at Nepatree Point as a coast artillery post, complete with a battery of eight-inch disappearing guns. Abandoned and dismantled after the First World War, concrete foundations still mark the site of the fort (11).*

The town also took an active part in other national and military affairs. In 1710, and again in 1745, Westerly

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* The numbers in parenthesis refer to the Inventory (Section III) and to the location map at the end of the report.

men were sent to Nova Scotia to fight. Westerly men were also furnished for all subsequent wars. The town's independent spirit was shown on February 2, 1774, when the freemen of Westerly published a Bill of Rights and announced the grievences caused by the actions of the British government. The document antedated by a year and a half the Declaration of Independence by the United States Congress and contains almost the exact wording. Before the Civil War, Charles Perry, an antislavery activist, sheltered slaves in nearby Charlestown, a station on the underground railroad, and entertained prominent antislavery spokesmen at his home in Westerly.

Because overland travel was primitive for a long time and travel by boat was relatively easy, the original town dock (19) near Thompson's Cove and later docks at Avondale and Westerly villages were important landings for people and supplies. Schooners and sloops made regular trips to New York and Providence from docks along the river in Westerly. Internal improvements and settlement developed slowly. Queen Anne's Road was laid out from Connecticut to Westerly in 1667, crossing the Pawcatuck at an Indian ford. In 1703, the road was extended through the Narragansett Country; shortly before that a road had been laid out to the north. By the mid-eighteenth century, a highway network crisscrossed the town, which includes

today's Post Road, Nooseneck Hill Road, Potter Hill Road, the Westerly-Bradford Road and Ross Hill Road. In 1712, the Pawcatuck was first spanned by a bridge, at the old ford. Later in the century, other dams and bridges were built along the river at various places. The interior of the town was settled by farmers, some of whom had large estates, including James Babcock, with 2000 acres, and Colonel Joseph Noyes, who owned 400 acres. Doctor Joshua Babcock, one of Westerly's leading citizens and the first native-born physician to practice in Westerly, built a house (37) about 1732-1734. This two-and-a-half-story gambrel house, 124 Granite Street, now on the National Register, was once used as the Westerly Post Office and was visited by Benjamin Franklin. Another gambrel-roofed house (58), originally built by a Maxon, but in the Cottrell family for the past seven generations, occupies a secluded site near Potter Hill. The Crandall Homestead (5), in the Pound Road Rural District, is a good example of the one-and-a-half-story, center-chimney farmhouse which was typical of the Rhode Island countryside. Two noteworthy early homes in Westerly village are the Captain Card House, c. 1750, (46) at 12 Margin Street, and the Carpenter Hickox House (44) at 196 Main Street (which was built before 1730).

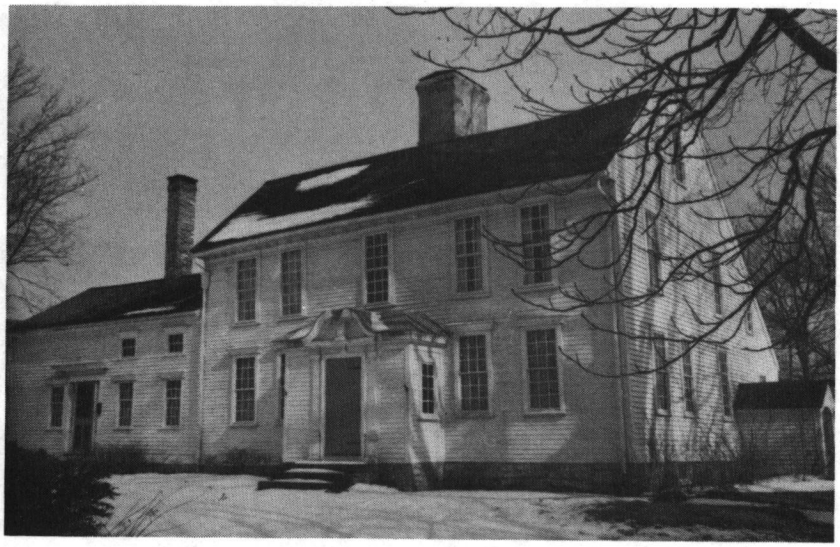
Churches were organized in Westerly at an early date. The Westerly area was a stronghold of Baptists and Sabbatarians.



Maxon-Cottrell House (c. 1750); off Potter Hill Road. (Map #58)



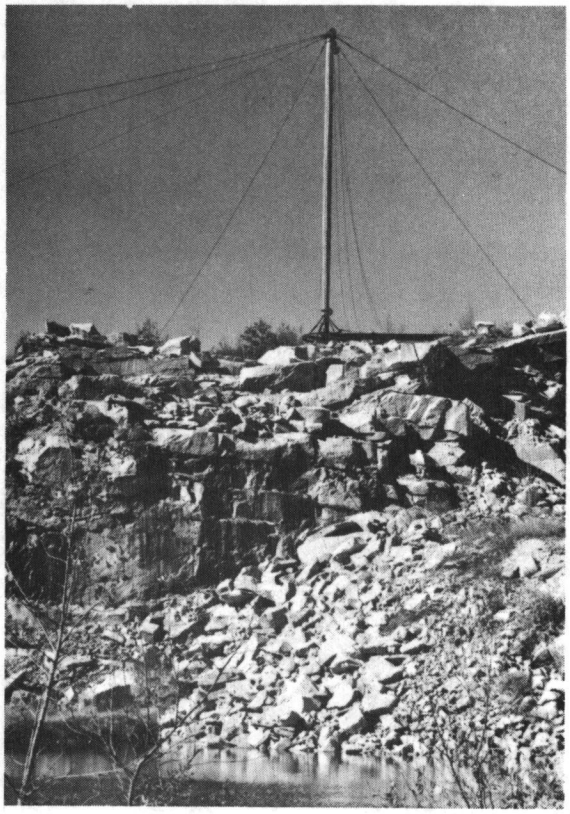
William Lewis-Captain Card House (c. 1750); 12 Margin Street, Westerly Village. (Map #46)



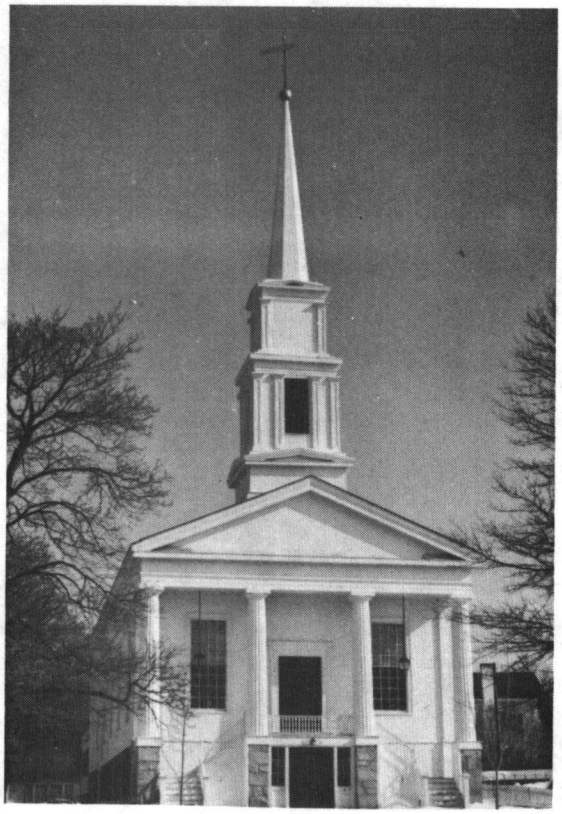
Babcock-Smith House (1732-1734); 124 Granite Street, Westerly Village. (Map #37).

A meetinghouse was built at Pawcatuck village soon after settlement started, and in 1680 a meetinghouse (no longer standing) was erected at Meeting House Bridge, just across the Pawcatuck River, in today's Hopkinton. Thousands of baptisms took place in the river between 1680 and 1855. In the mid-eighteenth century, several meetinghouses were established in the town, and a minister came as a missionary to the Indians, but the greatest period of religious activity occurred in the mid-nineteenth century when almost a dozen churches, including Congregational, Methodist, Episcopalian and Catholic were organized, and meetinghouses and church edifices erected. Good extant examples are the Avondale Chapel (1C), 1852, a Greek Revival church in Bradford (2C) and the Pawcatuck Seventh Day Baptist Church (9B), 1848, on Main Street in Westerly village.

The first school building (no longer standing) was erected in 1792 on Cooky Hill, in the village of Westerly, and was used for town meetings and devotional purposes as well as for education. In 1814, the Union Academy was built near the village center (it was later moved to Granite Street). By 1832, there were eleven public and eight private schools in town as education became more universal. The building that now serves as the home of the Westerly Grange Number Eighteen (1B) is a former Early Victorian schoolhouse (School Number Three), perhaps the



Mast and boom at former Dixon Granite Quarry; Old Hopkinton Road. (Map #50)



Pawcatuck Seventh Day Baptist Church (1847-1848); Main Street Historic District, Westerly Village. (Map #9B)

only surviving early schoolhouse in the town.

Until about 1800, agricultural interests were important, and the population which was largely spread out over the land, grew steadily. Manufacturing and commercial activities were small-scale, local enterprises. After 1800 there was a decline in population and the population remained constant until after 1840, when a surge of industrial growth occurred which triggered a large increase in population. In 1840, the population was 1912; by 1875 it had almost tripled, reaching a total of 5408.

Westerly village was destined to become an urban center because of its site at the point where the Post Road crossed the Pawcatuck River near the head of navigation. In 1750, Pawcatuck Bridge, as the village was known until the mid-nineteenth century, had only three houses, and in 1800 it had less than fifteen residences. In that year, however, a bank, the third in Rhode Island, started business here, and a gristmill was established. A stone factory was built in 1814 by the Pawcatuck Manufacturing Company. In 1819, a gazetteer listed fifty dwellings, eight stores, an "extensive Woolen Factory," two tanneries, two banks, two academies and a "Social Library" in the new active and flourishing village. The Pawcatuck River provided excellent fishing and fish and shellfish were caught in large quantities in the bay at the mouth of the river. Shipbuilding was actively carried on. Between

1800 and 1836, many ships were fitted for the Newfoundland and Labrador fisheries and the West Indian trade was popular and lucrative.

In 1832, the construction of the Stonington and Providence Railroad provided more efficient transportation for Westerly village. Several large textile mills were built in the village and in nearby Stillmanville. Calvert B. Cottrell, who started a machine business in the village in 1855 with Nathan Babcock, became a manufacturer of printing presses. He made numerous patented improvements and was the pioneer in the manufacture of the rotary press for magazine work, perfecting the process of color printing. Though founded in Westerly, Cottrell's plant later moved across the river into Pawcatuck, Connecticut. In the early twentieth century, the George C. Moore Company located a plant in Westerly which became the largest concern in the world specializing in the manufacture of elastic webbing for women's wear. This industrial growth was accompanied by the growth of commercial, religious, public and private institutions and buildings. Noteworthy architecturally are the Old Town Hall, 1874; the former Immaculate Conception Church, 1886; Christ Church, 1891-1905; the Westerly Public Library, 1894; the Westerly Armory, 1902; the Westerly Railroad Station, 1912; the Westerly Town Hall and Court House, 1912; the United States Post Office, 1913-1914;



"The Lottery;" Avondale Road, Avondale Historic District. (Map #1)



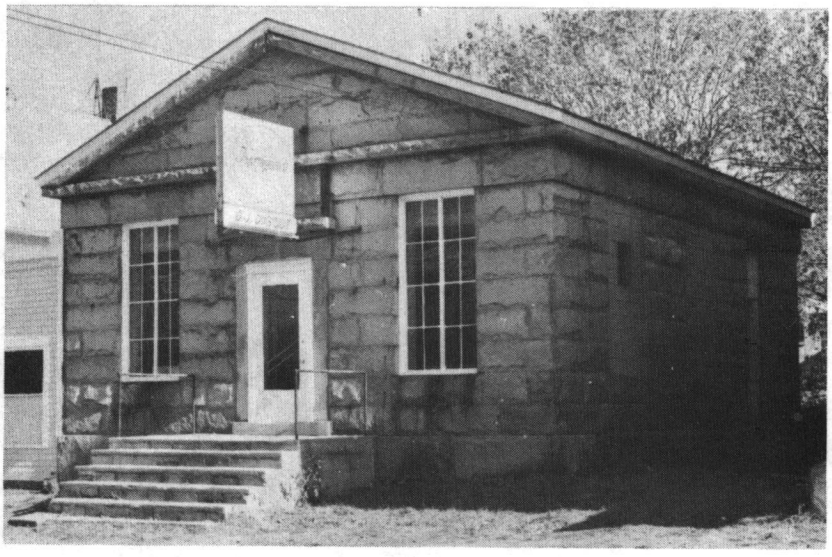
Westerly Grange Number Eighteen, formerly Schoolhouse Number Three; Avondale Road, Avondale Historic District. (Map #1)

and numerous private dwellings along Elm Street. Many of the village's finest buildings are included in the Wilcox Park National Register District (9A). The park, founded by Harriet Hoxie Wilcox in 1898, is the most attractive and best maintained park in southern Rhode Island. It and the library are operated by the Memorial and Library Association. Contiguous to the Wilcox Park Historic District is the Main Street Historic District (9B) which is centered on the Pawcatuck Seventh Day Baptist Church, 1848; the Elm Street Extension Historic District (9C), notable for its many fine Late Victorian and early twentieth-century residences; and the Central Business District (9D), with several noteworthy commercial structures.

Avondale (1), several miles south of Westerly village, started in an unusual manner. In 1749, Joseph Pendleton, owner of a tract of land along the lower Pawcatuck River, lost a vessel and an uninsured cargo of rum and molasses. To raise money, he ran a lottery, with the permission of the general assembly, selling his land which was divided into 124 house lots of one quarter acre each. Eventually, the place, called Lottery Village, was settled by farmers and fishermen. Its major growth took place in the latter half of the nineteenth century; a school (now a grange hall), a church and several dozen residences were built. As late as 1889 the village was known for its large number of sailors and shipmasters. In 1893, when a post office was established



Mill House (early 20th century); Bowling Lane, Bradford Historic District. (Map #2)



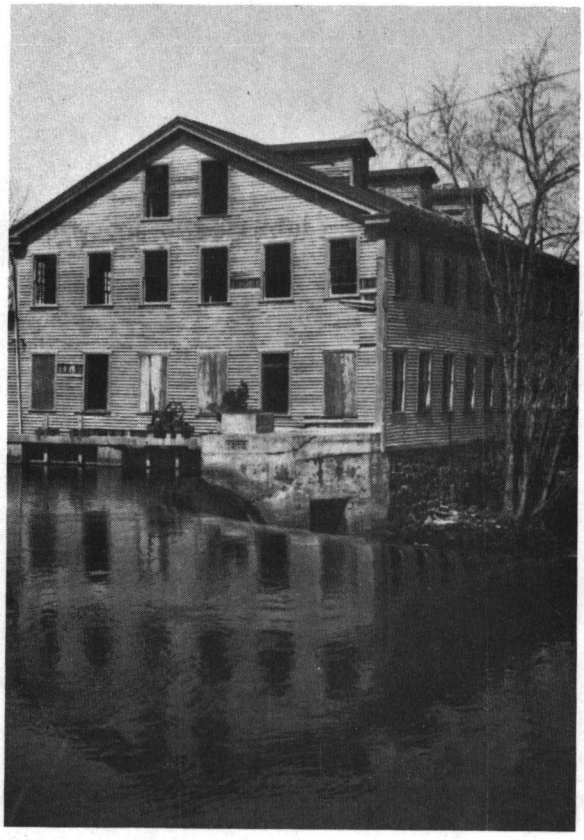
Former Bank (c. 1855); Main Street, Bradford Historic District. (Map #2)

here, the village received its present name. Avondale, which is recommended for the National Register, has remained relatively unchanged, retaining its character of a small nineteenth-century coastal settlement.

Bradford (2), in the northeastern part of town, along the Pawcatuck River, was an important fishing place for the Indians and early white settlers. Shattuck's (or Shaddock's) Weir Bridge, its original name, had its first settler in 1732. A bridge was put across the river before 1758 and later came small industries--a sawmill, a gristmill, a small factory for custom carding and cloth dressing and a woolen mill. John Aldrich Saunders, an important nineteenth-century shipbuilder, was born and built his first vessel here in 1809. In 1837, the Providence and Stonington Railroad came through Bradford, and it became known as the Hopkinton and Charlestown station. By 1846, when a wooden mill, stores and other buildings were added, the name was changed to Dorrville in honor of Thomas W. Dorr, who had recently worked for increased suffrage in Rhode Island. About 1855, the Hopkinton Bank built a fine one-story stone structure on Main Street. A stone mill was built in 1864, but manufacturing declined after the Civil War and the mill eventually became idle. The Niantic Dyeing Company bought the mill and the village was renamed Niantic. In 1911, about 800 acres of land, including the village, were purchased by the Bradford Dyers



Stone Mill (1847); Potter Hill Historic District. (Map #4)



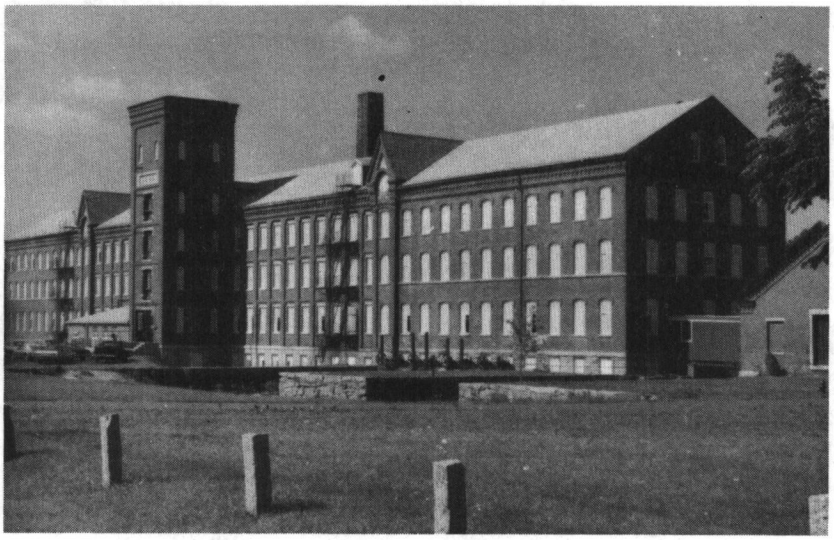
Wooden Mill (1847) and Pawcatuck River; Potter Hill Historic District
The mill was destroyed by fire in November 1977. (Map #4)

Association of England. They remodeled and renovated the stone mill and built new tenement houses of "model design." A new factory, covering more than 200,000 square feet, became one of the most extensive bleaching and dyeing plants in the country. The village, which became Bradford, today includes the stone mill, the c. 1912 factory, a row of "model mill houses" along Bowling Lane, a church, a school, a stone bank building and other residences. It is recommended for the National Register.

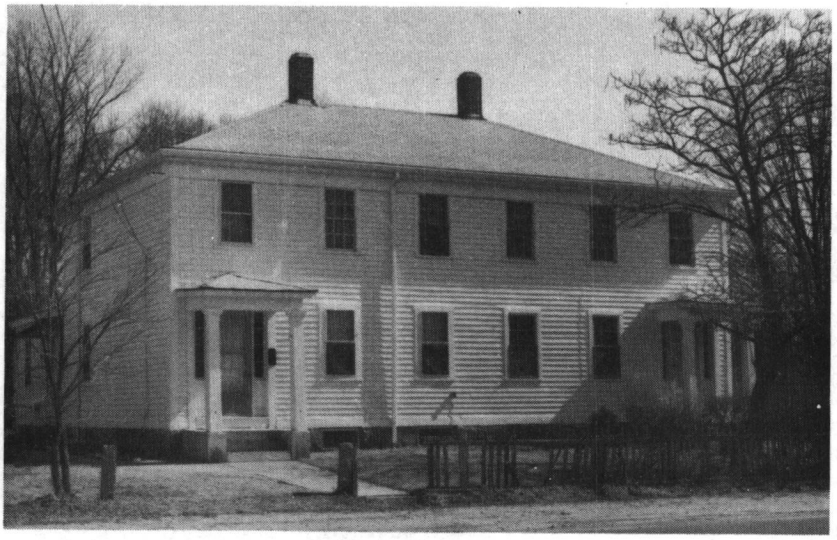
Potter Hill (4), along the Pawcatuck River in the northern part of town, also started as a small-scale manufacturing enterprise. A gristmill and a sawmill were established here soon after 1762. In 1775, when George Potter bought the site, there were a sawmill, gristmill, fulling mill, two dwellings and, soon after, a store. At Potters Bridge, as it was then called, Joseph Potter began the manufacture of cotton in part of an old mill in 1810 and in 1812 he started manufacturing cotton in a new factory. Joseph and Nathan Potter began building boats around 1810, most of small size, an industry which lasted for a short time. Edwin and Horace Babcock purchased the mills and water privilege at Potter Hill in 1844 and began manufacturing. In 1847, they built two mills, one of stone, one of wood. The mills, which subsequently were owned by the Campbell Mills Company and by the Swift River Woolen

Company, ceased manufacturing in the 1960s. The Potter Hill stone mill, among the finest architecturally in Rhode Island, still stands, but the two-and-a-half-story, frame mill building along the river was destroyed by fire in November, 1977. Potter Hill's nineteenth-century dwellings and store retain their basic integrity and visual appeal with no modern intrusions. The group is recommended for the National Register.

One of the first dams across the Pawcatuck River was built just below the present village of White Rock (10) about 1700. The first tan vats of Westerly were built here, and a gristmill operated at the time of the Revolutionary War, but the village did not develop until 1849, when a brick mill and twelve, identical, double mill houses were built by Rowse Babcock and Jesse L. Moss. Walks were laid out in front of the mill, and a grove of trees were planted in the mill grounds. A large schoolhouse was added by the proprietors in 1856. The neat and pleasant village was purchased in 1873 by the firm of B. B. and G. Knight, who enlarged the mill and built more dwellings, doubling the size of the village. The mill has continued in operation to the present, and most of the village exists today as it did in the nineteenth century, albeit with a loss of a sensitivity to the beauty of the grounds around the mill. For its completeness and outstanding architectural and scenic quality, White Rock



White Rock Mill (1849, 1877); Main Street, White Rock Historic District. (Map #10)

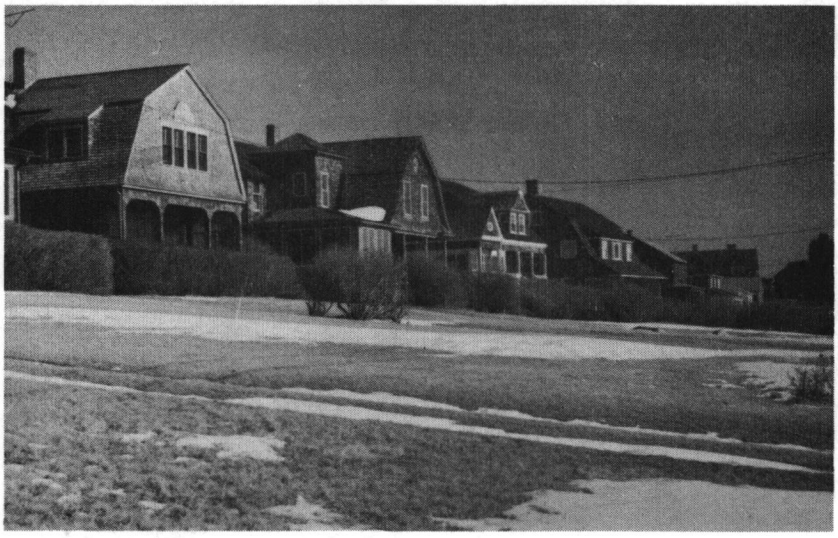


Double Mill House (c. 1849); Main Street, White Rock Historic District. (Map #10)

is recommended for the National Register.

Another important activity of the mid-nineteenth century was the quarrying of granite. A hotel (now gone), erected in Westerly in 1836, is said to be the first building constructed of Westerly granite. A quarry (65), started by Alexander Crumb and later owned and operated by the Sullivan Granite Company through much of the twentieth century, started operating near Bradford in 1834. It was the exclusive producer of a fine-grained blue-white granite, and quarrying was carried on until 1969. Although now idle, the quarries and the remains of some structures and industrial ruins make it the most important surviving quarry and it is recommended for the National Register.

The most important local quarry was that of the former Smith Granite Company. In 1845, Orlando Smith started a quarry (34) on a farm once owned by Dr. Joshua Babcock and the following year purchased the site. Smith found a fine-grained granite whose outstanding qualities made it an admirable material for monuments. Many local buildings, and monuments and buildings elsewhere--including the Connecticut state capitol, a bust of Franklin D. Roosevelt at Hyde Park, New York, and the founder's statue at Roger Williams Park in Providence--were made from granite from the Smith quarry. The Smith Granite Company, incorporated



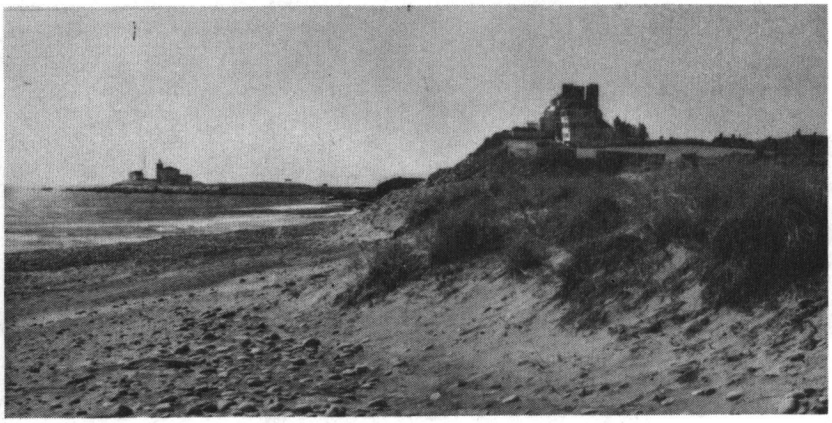
Summer Houses; Wawoloam Drive, Weekapaug. (Map #8)



Weekapaug Inn (c. 1955); Weekapaug. (Map #8)

in 1887, included a large number of houses, shops and sheds and a large granite store and an engine house and at one time employed 300 people. The Rhode Island Granite Works, later the New England Granite Works, adjoining the Smith Granite Company, provided the stone for the statue of a soldier at the Antietam Battlefield, which was cut from a single block weighing 60 tons; it also supplied the stone for the monument commemorating victory at Gettysburg. Several other quarries, providing stone for various uses, were established northeast of these quarries, the most notable of which was the old Dixon Granite Company quarry (50) on Cormorant Hill where a large mast and boom used to move massive blocks of granite still stand atop the summit of the hill, as a reminder of a formerly active Westerly industry. Today, the quarries are all idle, but examples of the material and workmanship employed in the granite industry can be seen in the River Bend Cemetery (16), which contains many fine monuments of Westerly granite, and in the Town Hall and Courthouse, the largest building in Westerly built of local stone.

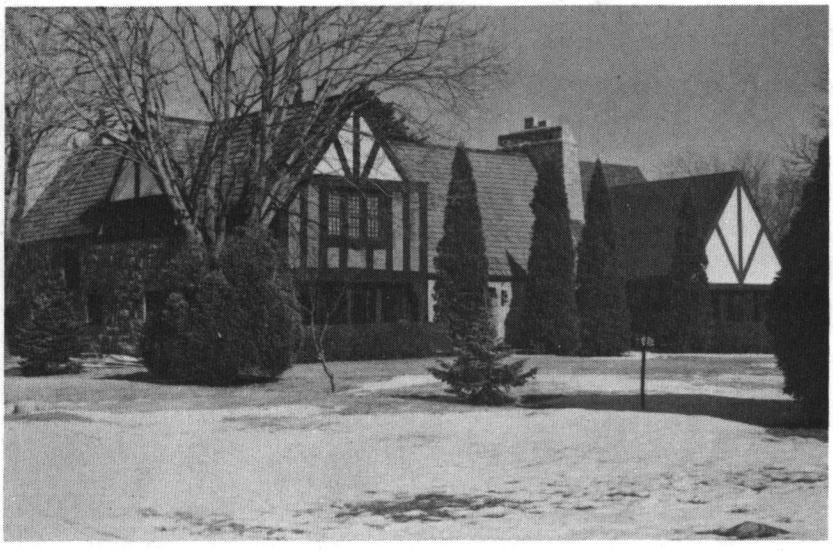
During the nineteenth century, while villages were being spawned along the Pawcatuck River to take advantage of navigable waters and water power, settlement of a completely different kind was taking place on the ocean front. From Indian times, Watch Hill (7) was used sporadically



Shoreline, Summer House and Watch Hill Lighthouse; Watch Hill Historic District. (Map #7)



Summer Houses; Watch Hill Historic District. (Map #7)



Summer House, Wagner Road, Shelter Harbor Historic District (Map #16)

as a place to keep a watch-out for enemies, but the first stimulus to its development as a community came as a result of numerous shipwrecks.

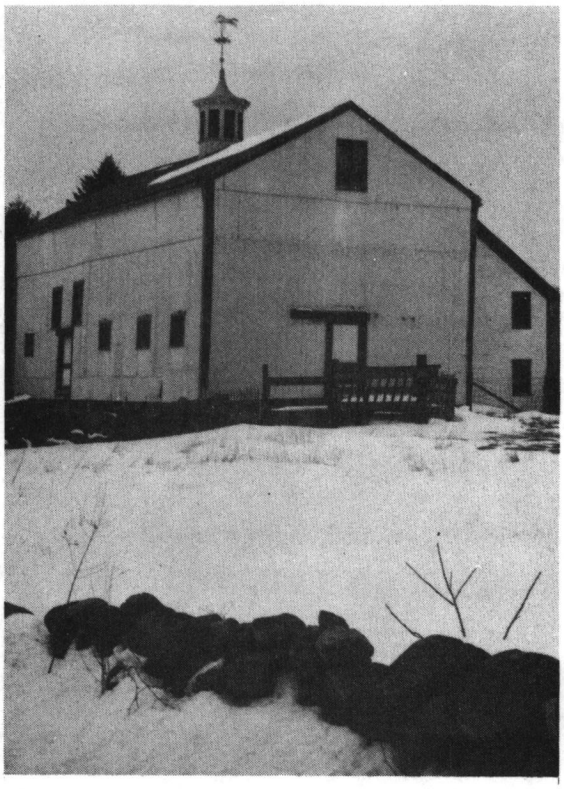
In 1806, a lighthouse (7A) was built at Watch Hill Point. The first lighthouse keeper, Jonathan Nash, also established the first place of entertainment about 1833, which became the Watch Hill House. By 1870 a bathing beach, with bathhouses, and several summer cottages were established, and Watch Hill's beach, one of the finest along the New England coast, attracted many people. In 1879, a traveling carnival left a flying horse carousel (7D) here; it is still among Watch Hill's attractions. Around 1883, a large Cincinnati syndicate began to sell house lots from a 160-acre tract they had purchased and the slopes of the hilly village were soon covered with "handsome and picturesque" summer homes of wealthy New Yorkers and Westerners, including a number of Cincinnati residents. These Late Victorian summer houses, many of great architectural quality, create the basic historic and visual fabric of Watch Hill in defining the area's function and image.

In the early twentieth century, the automobile caused the resort hotels to lose their importance and some were burned or demolished, but summer homes continued to be built. Today, the Ocean House (7E), a large Late Victorian structure, is the only large resort hotel left. A commercial district

(7F), developed along Bay Street and devoted largely to specialty shops, is a popular gathering place. Watch Hill enjoys a reputation as one of Rhode Island's most beautiful shore communities; with its variety of cultural resources, it is recommended for the National Register.

Weekapaug (8) was settled by the Reverend James Noyes, who bought 300 acres here in 1688 and built a homestead at Noyes Neck, as it was originally known. In 1859 its attraction as a summer resort was recognized when a house was rented for the season. Small summer cottages and a road were built in 1877, and in the next decade more pretentious summer homes were built near the ocean. A large hotel, the Weekapaug Inn, was built in 1899, the year the place was officially renamed Weekapaug, "at the end of the pond," a suitable name because of its site at the western end of Quonochontaug Pond. Many more houses were added in the twentieth century, including several outstanding homes erected in the last few years. Although the homes are not on the same scale or the grounds not as large and well landscaped as at Watch Hill, Weekapaug continues to be a fashionable and quiet summer colony and for its architectural quality is recommended for nomination to the National Register.

Westerly's newest summer communities were founded at the end of the nineteenth century. Around 1894, a group



Barn; Spring Brook Avenue. (Map #75)



House (c. 1970);Upland Road, Weekapaug Historic District. (Map #8)

of Westerly men bought land and built cottages along the ocean at Misquamicut (3), which was known as Pleasant View until 1928. In 1903, the Pleasant View House was built, and in the next eight years, a good road, a post office, a water system and electricity were provided. Many summer houses were added, most of them small, unpretentious structures more suited to people of ordinary means in contrast to the more elegant structures in neighboring Watch Hill and Weekapaug.

Today, Misquamicut is a compact community of summer cottages and is a significant historic district because of its role in the settlement of the town of Westerly.

The town's most easterly summer community, Shelter Harbor (6), was the last to be developed. This early twentieth-century resort, once known as Music Colony because many singers and artists had summer homes here, is an attractive area, with many fine early-to-middle twentieth-century summer homes on well landscaped lots. Most of the summer community has an attractive setting on a peninsula extending into Quonochontaug Pond. Near the entrance, at Post Road, is the Shelter Harbor Inn, a former Greek Revival residence which was converted to a public house.

Although the town's population has more than doubled in the twentieth century, the pattern of settlement is



House (18th century) and Farm: Spring Brook Avenue. (Map #75)



L. Sisson House; Dunns Corners-Bradford Road. (Map #29)



House (early 20th century); High Street, Westerly Village. (Map #41)

much the same as it was at the end of the nineteenth century. Most prople live in Westerly village, with small concentrations in the other villages. Of the nineteenth-century villages, Bradford, which was revitalized around 1912, is the most viable. White Rock has experienced little growth and Potter Hill, with its mills idle, is now just a quiet residential community. Avondale has changed little and today is a tranquil, picturesque community along the lower Pawcatuck, but the summer resort communities have grown in popularity since the last century; thousands of people visit them annually to take advantage of the beaches and cool summer breezes.

The population of the mostly wooded interior has remained sparse and several farms still present a picture of the earlier agricultural heritage, notably an open tract in the center of the cedar swamp along Pound Road (9) and a farm centered on a fine eighteenth-century house, with later outbuildings, on Spring Brook Road (75). Notable twentieth-century development in Westerly village includes the Westerly Hospital (85), 1925, with a two-and-a-half-story, neo-Georgian nursing home, built on Wells Street, and later, a state airport (12) and a relatively recent industrial park established southeast of the main village. An interesting structure is the 1910 water tower (34) on Ledward Avenue. It was one of the first concrete standpipes



Central Business District; Canal Street, Westerly Village. (Map #9D)



Westerly Railroad Station (1912); Westerly Village. (Map #66)

built in the United States and is capped by an unusual Guastavino dome roof of red glazed tile.

Today, Westerly retains several different types of historical environments. Along the Pawcatuck River are the town's major urban areas, dominated by the commercial center at Westerly village. Along the upper part of the river are the little-changed mill villages--Bradford, Potter Hill and White Rock. The small nineteenth-century maritime community of Avondale lies along the reaches of the lower river. Along the ocean coast are the summer resorts--Shelter Harbor, Weekapaug, Misquamicut and Watch Hill. Scattered about are Indian sites, fine houses, schools, factories, old burying grounds and other individual properties which reflect shifting economic trends, social structures, ideals and tastes.

The structures and sites catalogued in this report are Westerly's most apparent cultural resources and collectively reflect the broad range of the town's material history. The following inventory and accompanying map identify buildings, objects, structures, sites and districts considered by the Rhode Island Historical Preservation Commission to be of cultural significance to the town, state or nation and worthy of preservation. Future planning decisions affecting these properties should take their cultural importance into consideration.

III. PRELIMINARY INVENTORY OF CULTURAL RESOURCES

This list is an annotated key to the preliminary survey map of Westerly. The numbers refer to the map at the back of this report (e. g., 1--Avondale Historic District).* Material in the inventory is presented in three categories: historic districts and areas, which are listed first; individual properties, which are listed by streets in alphabetical and numerical order; and archeological sites. Properties on or approved for the National Register are indicated with two asterisks and properties recommended for consideration to the National Register are identified by one asterisk. All other properties listed here are significant; upon further investigation and review some of these may be deemed eligible for nomination to the National Register and may be nominated. A list of properties on, approved or recommended for the National Register of Historic Places is on the following page.

* A more detailed map, at a scale of 1" to 1000', which locates places and outlines districts more precisely, is on file at the Rhode Island Historical Preservation Commission and in the Westerly Town Hall; copies have also gone to the State Department of Transportation, the Statewide Planning Program and the Department of Community Affairs.

Dates and names which appear on parenthesis at the end of notations refer to their identification on nineteenth-century maps. In each case, the earliest map on which the structure or site appears, has been used. Dating of structures, or their historical-architectural period, is occasionally determined on the basis of plaques, written material, maps and knowledgable residents, but more often is based on style and construction. Unless otherwise noted, all structures are of wood-frame construction. Following is a list of the historical-period designations used in this report and the time span during which the style was most popular:

Colonial: From the time of settlement to 1800

Federal: 1775-1835

Greek Revival: 1825-1860

Early Victorian: 1840-1865

Late Victorian: 1865-1900

early 20th century: 1900-1940

mid-20th century: 1940-1975

late 20th century: 1975 to the present.

The following is a list of districts, structures and sites on or approved for the National Register (a more complete description appears in the inventory which follows):

- Wilcox Park Historic District, Westerly Village (9A)
- Main Street Historic District, Westerly Village (9B)
- Babcock-Smith House, 124 Granite Street (37)
- Former Immaculate Conception Church, High Street (38A)

The following is a list of districts, structures and sites which deserve consideration for entry to the National Register:

- Avondale Historic District (1)
- Bradford Historic District (2)
- Potter Hill Historic District (4)
- Watch Hill Historic District (7)
- Elm Street Extension Historic District, Westerly Village (9C)
- Central Business District, Westerly Village (9D)
- White Rock Historic District (10)
- Water Tower, Ledward Avenue (43)
- Maxon-Cottrell House, Potter Hill Road (58)
- Sullivan Granite Company Quarries (65)
- Westerly Railroad Station (66)
- Lewis Farm, Spring Brook Avenue (75)

This list of possible National Register properties should not be considered final and absolute. As new research is conducted, as the town changes physically and as perspectives on the community's history and what cultural properties are worth saving evolve, other potential candidates for the Register may be identified.

DISTRICTS

*1. Avondale Historic District: An intact, small-scale coastal village along the lower Pawcatuck River south of Westerly Village, comprised of about two dozen mid-19th-century dwellings, a church, grange hall and several boat yards. The village dates from 1749 when Joseph Pendleton divided his land into 124 house lots which were sold through a lottery, but most development occurred in the early and middle 19th century. Many of the early settlers, including the Pendleton and Hall families, were farmers and fisherman, but the village was also well known for its large number of sailors and shipmasters, many of whom engaged in whaling. Throughout most of the 19th century the place was known as Lottery Village, but in 1893, when the post office was established, it became Avondale. (1831-Lottery Village.)

A. Avondale Farm: An open area of fields and stone walls at the east end of the village centered on a mid-19th century, 3½-story, shingle and clapboard house and several outbuildings. (1855-shown on map; 1862-J. & P. Chapman.)

B. Westerly Grange Number Eighteen, formerly School Number Three: A 1-story mid-19th-century building with a simple entry in the gable end. This structure, at the entrance to Avondale, served as its schoolhouse throughout the second half of the 19th century and into the 20th century. (1855-School.)

C. Avondale Chapel (1852): A plain 1-story Greek Revival meetinghouse with entry in the gable end and a small square belfry at the front, on the roof ridge. The church was organized here as a branch of the First Baptist Church of Westerly in 1843, and in 1848 a meetinghouse was built. In 1851 it was destroyed by fire and the present house built. In 1855 it again became a branch church. (1862-Baptist Church.)

D. The Lottery: A 2½-story, Greek Revival house with entrances at the gable and flank sides. (1855-shown on map; 1862-Captain E. Nash.)

E. India Point, formerly Captain Palmer Hall House (1840): A 2½-story Greek Revival structure with several additions, including a polygonal tower in front. The house, built by Captain Hall, a whaling captain who put out of Stonington, Connecticut, occupies a small promontory--Indian Point--jutting out into the Pawcatuck River. (1862-Captain P. Hall.)

2. Bradford Historic District: A village in the northeastern part of Westerly along the Pawcatuck River and on the principal railroad corridor of the northeast, Bradford is comprised of several factories, a church, several businesses and numerous residences. It was originally known as Shattuck's Weir because of its importance to Indians and early European settlers as a fishing place. Permanent settlement began about 1732; a bridge and sawmill were built, followed by a gristmill and a small factory for cloth manufacture. Captain John Aldrich Saunders, who went on to a shipbuilding career in other parts of Rhode Island, was born here. He built his first vessel in Bradford in 1809. When the Providence and Stonington Railroad was built in 1837 the place was known as the Hopkinton and Charlestown Station, but the name was changed again in 1846 to Dorrville, for Thomas W. Dorr who fought for increased suffrage in the decade of the 1840s. Following the construction of a stone mill in 1864, manufacture was carried on intermittently and the village was renamed Niantic when the Niantic Dyeing Company bought the mill. Bradford received its final name shortly after 1911, when the Bradford Dyers Association of England bought the village and land along the river. An investment of one million dollars of British capital revitalized the village--the stone mill was renovated, a new factory was built, some old buildings torn down and a new tenement house of a "model design" erected. The large factory, covering more than 200,000 square feet, became one of the most extensive bleaching and dyeing plants in the United States. (1819-Shaddock Weir Bridge.)

   A. Mills: Along the river is the 2-story, 1864 stone mill, and the large 1-story, c. 1912, brick factory, with a saw-tooth roof with north-facing windows, of the Bradford Dyeing Association, Inc. (1862-Factory.)
   B. Bowling Lane Houses: A long, dead-end, side street extending from the center of the village, includes 1½-and 2½-story houses, ranging in period and style from the mid-19th century to the early 20th century. Most are double houses which were built during the revitalization period around 1912. At the end of the street is what was probably the mill agent's residence--a large 2½-story, early 20th-century Tudor style house, with half-timbering, set on a well landscaped lot. (1855-some houses are along the north side of the street.)

C. Church: A 1-story clapboard Greek Revival meetinghouse on Bowling Lane, with an enclosed entry at the street-facing gable end and a small belfry atop the ridge. (1870-Baptist Church.)

D. Former Bank (c. 1855): A 1-story, end-gable, Greek Revival structure, with exterior walls of large, dressed granite blocks. The entrance, up a short flight of steps from street level, is central in a 3-bay facade. There is a course of longer stone blocks at the cornice and a stone course at the gable end, both characteristic of the Greek Revival style. It was originally built for banking rooms for the Hopkinton Bank, but it was never occupied due to the financial reverses of 1857. Later, it was used as a stock room, as a storehouse for milk and farm products and as lodge rooms for a stonecutter's union. It is now an adjunct to a bar in the adjoining building. (1855-Bank.)

E. Bradford School (c. 1920, 1967): A 1-story, brick, Neoclassical, early-20th century school It was built with a hollow square in the center which was a courtyard used as the school children's playground.

F. The Bradford Club (early 19th century): A 2½-story structure with a large center chimney, an addition at the south side, a shed-roof overhang at the northwest corner and asymmetrical window placement. Located at the corner of Main Street and Bowling Lane, it is one of Bradford's oldest buildings; it is now used as a private club. (1855-?)

3. Misquamicut Historic District: A summer resort comprised largely of small, unpretentious summer cottages, largely early-to-middle 20th-century structures, in a densely populated area between the Shore Road (Route 1A) and Block Island Sound and at the west end of Winnapaug Pond. Until 1894, when a group of Westerly men bought land and built cottages along the ocean, it was used by hunters, fishermen, picnicers and swimmers. Pleasant View, as it was known, made slow progress until about 1903, when the Pleasant View House was established. In the next eight years came a good road, a post office, a water system and electricity, and the place grew considerably. In 1928 the name was changed to Misquamicut, the Indian name of Westerly. (1895-Pleasant View.)

*4. Potter Hill Historic District: Along the Pawcatuck River at the northern border of Westerly, extending into Hopkinton, it is the idle mill complex and houses which make up the formerly thriving village

of Potter Hill. The village started soon after 1762 when a gristmill was moved here from nearby Meeting House Bridge. A sawmill was later moved here. In 1775, when George Potter bought the place, which became known as Potters Bridge, there was a sawmill, a gristmill, a fulling mill and two dwellings; a store was opened later. Joseph Potter began the manufacture of cotton in 1810 in part of the old mill and in 1812 he started a cotton factory. Joseph and Nathan Potter built small boats here, for the Green Island fishery in the Gulf of St. Lawrence, which were floated to tidewater. Larger boats--sloops, schooners and a ship--were framed here, taken apart and rebuilt in Westerly. In 1844, Edwin and Horace Babcock purchased the mills and privileges at Potter Hill and began manufacturing. They built two mills, one of wood, one of stone, in 1847, which were subsequently owned by other manufacturers. Almost the entire growth of the village took place during the middle-to-late 19th century. Most of the residential development took place across the river, in Hopkinton. Today, Potter Hill is a quiet, picturesque residential community, with its large architecturally outstanding mill complex, former store and 19th-century dwellings essentially as they were in the last century. There are no modern intrusions. (1819-Potter Bridge Mills.)

A. Potter Hill Mills: A relatively large mill complex along the river, including the two 1847 structures. The wooden mill, a 2½-story building erected around 1835, which was at the western end of a curved dam, burned in November, 1977. A 1-story addition extends several hundred feet along the river. The 3-story red granite mill, with a 4-story truncated tower set at the rear, is a handsome Greek Revival building, built about 1840, with smooth ashlar granite walls. The mill complex, one of the finest in Rhode Island, has been idle for many years and is in poor condition. (1855-Babcock & Co.'s Factory.)

B. Houses: Several dwelling houses, mostly 1½- and 2½-story structures, of Greek Revival and mid-19th-century vintage, along Potter Hill Road and some short side streets. (1855-most are shown.)

C. Store: A 2½-story, clapboard, Greek Revival structure, end to road, along Potter Hill Road. (1870-first listing on maps as a store.)

D. Potter Hill Rocking Stone: A large globe-like glacial erractic atop a rocky bluff, recognized as a geological curiosity in the 19th century. (1855-Rocking Stone--40 tons)

5. Pound Road Rural District: An "island" of several dry acres in the midst of the extensive cedar swamp, with open fields and stone walls, centered on the Crandall Farm and a 1½-story 18th-century house with a stone center chimney and a central entry in a 5-bay facade. Elder John Crandall settled here and built a house about 1665, part of which may be incorporated in the present house. The cedar swamp was regularly cut each winter. It is presently a horse farm (Tennessee Walkers). (1855-shown on map; 1870-C. Crandall.) Nearby is a large wood-shingle barn with a cut granite foundation and a silo. (1895-Margaret Crandall.)

6. Shelter Harbor Historic District: Westerly's eastern-most and most recent summer resort community, Shelter Harbor consists of several dozen, fine, early-to-middle 20th-century summer houses, expressing several styles ranging from traditional forms, such as Shingle Style and English Tudor with appropriate details such as half-timbering at the gable ends, to a contemporary house based on cubical forms, expressing verticality and a relative stark simplicity. In the early 20th century, Shelter Harbor was referred to as Music Colony because many artists and singers had summer homes here. All the streets are named for prominent musicians. The shore resort entrance is marked by a stone structure along the Post Road; just beyond the entrance is the Shelter Harbor Inn, a 2½-story Greek Revival structure with two interior brick chimneys, a central entrance in a 5-bay facade and extensive additions at the sides and rear. (1855-O. Davis.)

*7. Watch Hill Historic District: This is an outstanding historic summer resort district, surpassed in Rhode Island only by Newport. Watch Hill, Westerly's first summer resort, occupies an excellent site along Block Island Sound on a hilly glacial moraine which extends into the sea at Watch Hill Point. Most of the houses are substantial and are well set off by the irregular and well-landscaped topography. In 1808, the first lighthouse was built at the point. About 1833, rooms were being rented by the keeper of the lighthouse. By 1870, with the establishment of summer cottages and a

bathing beach with bathhouses, Watch Hill was a budding summer resort. Large hotels were built, steamer connections were provided to Stonington and Westerly, where connections were made with the railroad, and house lots were sold, including a 160-acre tract owned by a Cincinnati syndicate. Many wealthy New York and Cincinnati residents built "handsome and picturesque" summer houses. In 1894, the Pawcatuck Valley Street Railway opened a trolley line between Westerly Village and Watch Hill, terminating at the carousel. It operated six months each year until it ceased operations in 1921. Eventually, the hotel business declined and most of Watch Hill's hotels were destroyed; some were replaced by cottages. Today, Watch Hill continues its century-old role as an exclusive summer resort, catering to numerous short-time visitors and more permanent summer residents. (1819-Watch Hill.) In addition to its numerous summer homes, mostly dating from the late nineteenth and early twentieth centuries in a variety of architectural styles, there are several other significant properties.

A. Watch Hill Lighthouse (1856) and U. S. Coast Guard Station (1907-1908): The first lighthouse, a wood shingle structure, was built about 1802. In 1806 it was acquired by the federal government and in 1856 the present, square, granite lighthouse was erected. The light, 61 feet above the water at Watch Hill Point, marks the northern side of the east entrance into Long Island Sound. A U. S. lifesaving station was established at the point in 1879 and served until 1938. In 1907-1908, the present station house was erected at the lighthouse. (1831-Watch Hill Light.)

B. Site of Watch Tower: The first signal station was probably built at this site, south of Bluff Avenue, during the French and Indian War, 1756-1763. A tower, manned during the Revolution, kept watch for British vessels. In the early 20th century, "Holiday House" was erected on the site.

C. Ninigret Statue (c. 1904): On Bay Street, near the commercial district and at Watch Hill Cove, is a bronze statue of the local Indian chief, Ninigret, who is represented kneeling and holding a fish in each hand. The statue, which rests on a large boulder, was modeled in Paris by Enid Yandell, an American sculptress, and cast by Alexis Rudies. The park in which it is located was designed by Marion Coffin.

*D. The Flying Horse Carousel (1879): A late 19th-century structure of wood, supported by cobblestones, supports a "flying horse" carousel which may be the oldest in America. The carousel, which was left behind by a traveling carnival in 1879, consists of twenty small wooden horses, each carved by hand from a single block of wood. They were made by Charles W. Dare Co. of New York around 1876. The carousel is so named because the horses "fly" outward as they circle around a small merry-go-round.

E. Ocean House: A large, 3-story, bracketed, Late Victorian, mansard-roof hotel, with a 2-story semicircular portico at the street side and a 5-story square tower. At the rear is a long, 4-story addition. The hotel, still popular today, is set on the highest point of a hill, with a view of the ocean. It is the fourth or fifth structure to occupy the site. (1895-Ocean House.)

F. Commercial District: A long, 2-story, Late Victorian-early 20th-century commercial block on Bay Street, in the village center, facing a park and a small harbor on Little Narragansett Bay. It consists primarily of specialty shops--an antique shop, a candy shop, an ice cream shop, clothing stores and a couturiere.

*8. Weekapaug Historic District: A summer resort along Block Island Sound at the west end of Quonochontaug Pond containing several dozen summer houses, a large hotel, a chapel and a store. Weekapaug began as a summer resort in 1859 when a house was rented for the season. In 1877, several summer cottages were built; in the 1880s larger summer houses were built near the ocean. The Weekapaug Inn, a large hotel, was built in 1899, when the place, known until then as Noyes Neck, was officially renamed Weekapaug. It means "at the end of the pond." In 1938, the Inn was destroyed and replaced soon after by the present inn. Weekapaug today is one of the state's finest summer resorts, with a pleasant site along the pond and ocean. Its late 19th- and early 20th-century houses (including some outstanding wood-shingle style structures plus an inn and chapel) are an important part of the architectural and historical heritage of Westerly. (1870-Mrs. Carpenter--two houses shown.)

9. Westerly Village Historic District: Westerly Village occupies a large area in the west-central part of town. Its long axis is north-south, paralleling the Pawcatuck River for three miles, and extending "inland" for about a mile. Its siting is strategic--being at the head of navigation, at a water-power site, on a main rail line and at the river crossing of what was the major central highway. Westerly Village is the largest urban center in southern Rhode Island and serves adjacent portions of New London County, Connecticut. The village has a well developed central business district near the Pawcatuck River Bridge and contains many commercial, religious, governmental and residential structures which are historically and architecturally noteworthy. Growth started at Pawcatuck Bridge, as it was first known, about 1800, when a bank and a gristmill were established. In 1814, a stone factory was built along the river, and between 1800 and 1836, shipbuilding was actively carried on. By 1819, there were fifty dwellings, eight stores, a woolen factory, two banks, two academies and a library. In 1832, the Stonington and Providence Railroad came through the village, and soon after several large textile mills were built here and in Stillmanville. Calvert B. Cottrell, who began the manufacture of printing presses in 1855, eventually developed a large and important industry in the village; in the early 20th century, the George C. Moore Company located a plant here which became the largest factory in the world specializing in the manufacture of elastic webbing for women's wear. The accompanying population growth increased the size of the village far beyond its original center at the bridge. (1819-Pawcatuck Bridge.) Near the center of the village are two National Register districts--Wilcox Park and Main Street.+

+Within Westerly Village, only four National Register districts and several noteworthy structures are included in this listing. Westerly village requires a more intensive survey, which, when complete, will include more areas, districts, structures and sites of architectural importance. The boundaries of the village, as shown on the maps, are preliminary, subject to change upon more detailed study.

**A. Wilcox Park Historic District[++]: The district is centered on the park and is bounded approximately by High, Broad, and Granite Streets and Grove Avenue. It also includes nearby structures and extends south along Elm Street to School Street. The park, the finest in southern Rhode Island, was founded by Harriet Hoxie Wilcox in 1898; she purchased the 18½-acre Rowse Babcock estate in the heart of the village and subsequently endowed a private foundation to develop and maintain it. Occupying a grassy depression, the park is crossed by winding paths and contains a variety of shrubs and trees and four commemorative monuments. This lovely park exemplifies the scenic planning concepts prevalent at the close of the 19th century. Abutting the park are the Westerly Public Library (1894) and the Post Office (1913-1914). The Town Hall and Courthouse (1912) is across Broad Street, and nearby, on Union Street, is the Former Town Hall (1874). Christ Church (1891-1905) occupies a conspicuous place at the corner of Broad and Elm streets. Elm Street contains several dozen outstanding structures, including the Former Christian Church, several Greek Revival dwellings built between 1830 and 1850, fine Late Victorian Second Empire Houses, and a Late Victorian-Gothic residence at the corner of School Street. At 15 Granite Street is an exceptionally fine Late Victorian shingle house, and at nearby 27 Granite Street is the former Union Academy built in 1814 and relocated here later. Along Grove Street, across from the park, is a row of houses which are good examples of pattern-book architecture of the late 19th and early 20th centuries.

**B. Main Street Historic District: This district, a short distance south of the village center, contains twenty structures--nineteen houses and a church. The Pawcatuck Seventh Day Baptist Church, built in 1847-1848, and restored in 1927, a handsome Greek Revival structure, is the visual focus of the district. Almost all of the houses were built between 1835 and 1885. They reflect Greek Revival,

[++]Places on the National Register are summarized here. For a more complete account of these places see the National Register file at the Rhode Island Historical Preservation Commission Office.

Italianate, Second Empire, Stick Style, Swiss Chalet and Queen Anne designs; several also served as the homes of prominent Westerly residents. The area is significant for its individual structures and collectively as material record of an important period in Westerly's history.

*C. Elm Street Extension Historic District: This is an extension of the Elm Street section of the Wilcox Park National Register Historic District which witnessed a later development. By 1870, only the section between School Street and Cross Street was developed, but a half century later, almost all of the present structures were built, most of them substantial. Characteristically, these Late Victorian and early 20th-century structures represent a variety of architectural styles, including Second Empire, Stick Style and Shingle Style. Noteworthy are the St. Pius X Rectory, a 2½-story structure, part of the former George Moore estate and an early 20th-century estate centered around a brick residence.

D. The Central Business District: Centered on High and Canal Streets, this is the principal commercial area of southwestern Rhode Island and adjacent Connecticut. The east side of High Street, between Broad and Canal Streets, is part of the Wilcox Park Historic District. The buildings along the west side of the street, all brick, are 1-, 2- and 3-story stores with a basically uniform facade except for the middle section. Noteworthy are the Brown Building, an early 20th-century commercial block with detailing in its brown brick and brownstone facade, and the Neoclassical early 20th-century Vars Drugs Building. Canal Street, between High Street and Railroad Street, is lined on both sides with Late Victorian and early 20th-century commercial structures. Among the noteworthy buildings are the Martin House (1888), now the Hotel Savoy, a 3½-story mansard roof, brick, public house with a small central tower; the Nardone Block (1926), a 3-story brick building with a round corner at the intersection of High and Canal Streets; and a yellow brick structure with an Art Deco facade.

*10. White Rock Historic District: A mill village along the Pawcatuck River in the northwestern part of Westerly, comprised of a large mill, several dozen mill houses, a former store and a former school. Although there was some small-scale industrial activity

here in the 18th century--tan vats and a gristmill--the village began its existence in 1849, when Rowse Babcock and Jesse L. Moss built the center section of the existing mill and twelve identical double mill houses which still stand opposite. A large schoolhouses was added by the proprietors in 1856. Attention was paid to aesthetics and planning; in 1869, White Rock, which consisted of the mill complex and school along the west side of the street and the long row of mill houses opposite, in a simple linear pattern, was described as the "pleasantest and neatest manufacturing village in New England." In 1873, the firm of B. B. & G. Knight purchased White Rock; enlarged the mill adding to it at both ends; built dwellings; the store and post office; and doubled the size of the village. With the mill, of outstanding architectural quality, which is still running today, attendant mill houses, former store and school, White Rock is a major and well-preserved legacy of the nineteenth century mill village era. In historic and architectural terms, White Rock is one of the three or four most important mill villages in Rhode Island. (1855-White Rock.)

A. White Rock Mill (1849, 1877): A 4-story brick structure with a 5-story projecting tower and additions at both ends. The mill has elaborately corbelled brickwork with contrasting granite lintels and sills. Although the mill has been altered--the decorated tower roof and a row of gable dormers were removed--it is still an outstanding building architecturally. Today, the Griswold Textile Print Company, owners since 1948, manufacture silkscreen prints here.

B. Mill Houses (1849): Two groups of essentially identical 2½-story double mill houses, with hip roofs, along the east side of the main street opposite the mill; one group of six is north of Spring Brook Road, the other group is south of the road. These houses each have two interior brick chimneys, two porticoed entrances, one at each end of the front, a 5-bay facade, a small ell at the rear, and are set on relatively large lots. Some still retain their wood picket fences anchored by granite posts. There are also about eight 2½-story gabled-roof mill houses, built later than the original group, nearby. (1855-shown on map.)

C. Former School Number Twelve (1856): A fine, 2-story brick structure with a central cupola, set apart from the other buildings. (1870-S. H.)

D. Former Store and Post Office: A 2½-story, Early Victorian structure with a mid-20th-century cinder-block addition at the west end. (1895-Store, P. O.)

E. Pawcatuck River Bridge (1906): Two separate iron-truss highway bridges on Bridge Street. The eastern portion, a Pratt pony, through-truss lower bridge, is a type built since 1844 and is typical, still built today. The western section, over the river, built on the Baltimore truss scheme, is of a type built between 1831 and the early 20th century. The bridge was originally built to support a trolley for the Norwich Traction Company and was owned by the company until it went bankrupt in the 1920s or 1930s. The bridge was closed for repair or replacement in September, 1976.

STRUCTURES AND SITES

11. Nepatree Point-Site of Fort Mansfield: Napatree Point, at the end of Napatree Beach, a sand bar extending one-and-a-half miles west of Watch Hill, is the westernmost point in Rhode Island. It was once a battleground for the Narragansett, Niantic, Montauk, and Pequot Indians. The point was originally an island formed by the last continental glaciation; later it was connected to the mainland. The long sandy barrier beach, with its beach grass vegetation, subject to erosion by storm, is one of the finest coastal areas of Rhode Island, a valuable scenic resource. In 1898, the United States government purchased the point and erected a fort and nearly fifty buildings. During the Spanish American War there were three batteries of eight-inch disappearing guns here, but by World War I the fort was considered obsolete. In 1927, the land and buildings were sold and the fort razed, but the tops of the heavy concrete walls, some stairways, and a circular opening used as a powder magazine are still visible.

AIRPORT ROAD

12. Westerly State Airport: An aviation facility about two miles southeast of Westerly Village center, established in the mid-1930s and centered on a 1- and 2-story, wood-frame, clapboard structure containing the glass-topped control tower. There are several hangers. The airport is used primarily by small, pleasure aircraft.

BEACH STREET

13. J. A. Thompson House: A 2½-story, Greek Revival structure, with two interior chimneys and a central entry in a 5-bay facade. At the rear are a fine wood shed and other outbuildings. (1855-J. A. Thompson.)

14. House: A 1½-story, Greek Revival house, gable end to the road, at 96 Beach Street. (1855-shown on map.)

15. Former School Number Fourteen: A 1-story, wood-shingled mid-19th-century schoolhouse, now the school administration building, with a large brick center chimney and a square belfry set back from the gable end, which faces the road. The section at the rear has a hip roof. (1870-S. H.)

16. River Bend Cemetery (1852): Laid out on an attractive site along the Pawcatuck River, this large cemetery contains many monuments and markers of Westerly granite, some dedicated to Westerly's most important citizens. The office of the cemetery company is a fine, 1-story, stone structure with a large stone chimney in the center of a hip roof. (1855-River Bend Cemetery.)

17. Thompson House: A 1½-story Greek Revival structure, end to road, with portico entry at the gable end, at 162 Beach Avenue. (1855-shown on map; 1862-E. Thompson.)

18. J. Knight House: A 2½-story, Early Victorian structure with a central entry in a 5-bay facade. (1855-J. Knight.)

19. Westerly Yacht Club and Site of Old Town Dock: The yacht club, a low, wood-shingle structure along the Pawcatuck River, stands near the site of the old town dock. The place was the head of navigation on the Pawcatuck River in the early years of settlement and served as the landing place for Charlestown, Richmond and Hopkinton at one time. Across the river is Pawcatuck Rock, visited by Adrian Block, the Dutch explorer in 1614.

BOOM BRIDGE ROAD

20. House: A 1½-story, early-to-middle 18th-century, wood-shingle, gambrel house, with two interior brick chimneys, shed dormers and a central entry in a 5-bay, south-facing facade. There are two wood-shingle outbuildings. The house is surrounded by fields, with stone walls, at the end of a long private drive. (1855-S. Maxon.)

21. House: A 1½-story, mid-18th-century house, with a small brick center-chimney and a central entry in a 5-bay, south-facing facade. The house is set back from the road and occupies a large, attractive site, with grass, trees and stone walls. There is also a wood-shingle barn. (1855-shown on map; 1870-T. Lamphere.)

CANAL STREET

22. J. Babcock House: A 2½-story, Early Victorian building, with entry at the gable end, a small brick chimney off the ridge and a later 1½-story

wing at the left rear. This structure was built on the site of an earlier house in a section of town known as Varietyville. (1855-J. Babcock.)

23. House: A 1½-story, Greek Revival house, at 238 Canal Street with entry at the gable end, which faces the road. (1870-Wm. Netherword.)

24. U. S. Post Office: A 1-story, brick, early 20th-century, store-front commercial structure with a glass front and recessed central entry, at Stillmanville.

25. House: A 1½-story, 18th-century structure with a small brick center chimney and a central entry in a 3-bay facade, in Stillmanville. (1855-?)

26. Stillmanville Mill: The brick mill (1848) is a 3-story brick factory with a low-pitched gable roof and round-head windows in the gable end. Located along the Pawcatuck River, it is surrounded by a complex of modern factory buildings. Just above the mill is a dam site and old mill race. (1831-Schofield Factory--on site.)

27. Railroad Bridge: Spanning the Pawcatuck River.

CHURCH STREET (ROSS HILL ROAD)

28. House (18th century): A 2½-story "half house," with a stone chimney at the left side and entry at the left side of a 3-bay facade. There are Greek Revival alterations as well as recent wings at each side of the house. It is situated at the east end of Bradford village. (1855-shown on map; 1862-S. F. Wells?; 1870-J. A. Douglass.)

DUNNS CORNERS-BRADFORD ROAD

29. L. Sisson House: A 2-story, Greek Revival structure, end to road, with entry in the gable end, a brick center chimney and a 1-story wing, with brick chimney, at the right side. There is a fine Late Victorian barn (1896) and wood shed, corn crib and other outbuildings on a neat lot. (1855-L. Sisson.)

30. Ever Breeze Farm: A 1½-story, Early Victorian house, a large mid-20th-century, Quonset style, aluminum-roofed barn, a stone corn crib and other outbuildings are part of this large working farm which specializes in Holstein cattle. (1855-R. R. Rathbun.)

EAST AVENUE

31. House: A 2½-story, early 20th-century residence in a large, well landscaped lot. A good example of a suburban estate of the period.

32. House: A 2½-story, Greek Revival house, at 69 East Avenue, it is set end to the road, with a portico entry at the left front, a small brick chimney and a 1½-story wing at the left rear. (1855-shown on map; 1862-Captain Barber?)

33. House: A 1½-story, Greek Revival house, at 150 East Avenue, set end to the road, with a portico entry at the right front, a small brick chimney and a large wing at each side, It is sited on a well landscaped lot, including a wood fence and stone walls. (1855-shown on map; 1870-S. Mitchel?)

GRANITE STREET

34. Site of the Smith Granite Quarry: A modern shopping center and filled-in area, now a field, east of Granite Street, mark the site of the oldest large-scale granite quarry in Westerly. At this spot, in 1845, Orlando Smith, a stone mason from Connecticut, discovered a fine-grained granite. The stone was dense and free from disintegrating minerals, unfading, impervious to weather, capable of taking a glossy polish and was practically indestructible. In 1846, Smith purchased the site, then the farm of Dr. Joshua Babcock, and began a business which grew to include a large granite store, a large number of houses, shops, sheds and engine houses which contained powerful engines for pumping and hoisting. The Smith Granite Company acquired a wide reputation for its granite and its stone was widely used, including the Rhode Island block in the Washington Monument, the Roger Williams Monument in Providence and the soldier at Antietam Battlefield. Most of the buildings here were destroyed in the 20th century, but two structures still stand on Granite Street, albeit heavily altered. (1855-Smith's Stone Quarry.)

35. Former Smith Granite Company Store (1884): A 1-story stone structure which was used as the company store for the granite company. It is now a gasoline station. (1895-Smith Granite Company.)

36. Former Smith Granite Company Stonecutting Shed (1883): A 1-story stone structure used as a stonecutting shed, now a commercial and professional block. (1895-Smith Granite Company.)

**37. Babcock-Smith House (1732-1734): A 2½-story gambrel-roofed colonial house, at 124 Granite Street, with a large, brick, center chimney and a closed, central entry in a 5-bay facade. There is a lean-to addition at the rear, giving the house a "salt box" profile, and a wing, with a tall chimney, at the left side. Dr. Joshua Babcock is said to have been the first native physician to practice in the town. Westerly's first post office was established in the house, which Benjamin Franklin visited on several occasions while serving as postmaster of the United States. The house, which was restored in the early 20th century by Norman M. Isham, occupies a neat corner lot along a busy highway, once the old Post Road, with commercial areas on both sides. (1855-O. Smith.)

HIGH STREET

**37A. Former Immaculate Conception Church (1886): A clapboard-sided "carpenter gothic" structure, this Roman Catholic Church, the first in Westerly, was completed in 1889 and served a mixed ethnic population, largely Irish and Italian. It is noted for its outstanding acoustics and shortly after it was sold in 1969 it became the home of the Westerly Center for the Arts. The structure is well preserved and in good condition.

38. Bridge (early 20th century): A deck truss bridge on High Street over the Penn Central Railroad tracks.

39. Signal Tower (early 20th century): A 2-story cement structure with a red tile, hip roof, along the railroad tracks.

40. House: A 2½-story Greek Revival structure with two interior chimneys and a central entry in the portico in a 3-bay facade. (1870-Mrs. J. Crandall.)

41. House: A 2-story stuccoed early-20th-century house with a tiled hip roof on a formally landscaped lot.

42. House: A 2½-story Late Victorian Queen Anne structure at 213 High Street with a 2-story porch in front and two brick chimneys.

LEDWARD AVENUE

*43. Water Tower (1910): A large, concrete-block structure with a small cupola, weather vane, and "Guastavino Dome" roof of dark red glazed tile. This water tower, one of the first concrete stand pipes built in the United States, is said to have been made of concrete partly for aesthetic reasons. Thomas McKenzie was the engineer and superintendent of the project; the Aberthaw Construction Company was the contractor.

MAIN STREET

44. Carpenter-Hickox House (pre-1730): This house located at 196 Main Street and also known as the Dr. Charles Hickox Home and the Lucy Carpenter House, is a 1½-story, gambrel-roofed Colonial structure with a large brick center-chimney and a central entry in a 5-bay facade. (1855-shown on map; 1870-E. E. Brown.)

MARGIN STREET

45. Charles Perry House: Located at 4 Margin Street, this is a 2½-story, Greek Revival structure with Colonial Revival changesand a complex plan. Entry is through an elaborate portico. A large copper beech at the side and a low stone wall in the front are part of the large well landscaped grounds. The Pawcatuck River is across the road. Charles Perry, a former owner, was an anti-slavery activist. He once entertained Frederick Douglass here and he also sheltered runaway slaves in a wooded area in Charlestown as part of the underground railway. (1855-C. Perry.)

46. William Lewis-Captain Card House (c. 1750): A 1½-story Colonial house, at 12 Margin Street, with a large, stone, off-center chimney and an off-center entry in a 5-bay facade. There is a wing, with a brick chimney, at the left side, rear. The house is on a large grassy, treed lot, with a view of the Pawcatuck River across the road. It was reportedly built by John Lewis, one of the early settlers in Westerly, and was purchased in 1868 by Captain William H. Card, owner of a small merchant vessel which sailed between Westerly and Block Island. In 1929-1930, the house was thoroughly restored under the direction of Norman M. Isham. (1855-D. F. Larking?)

MORIAH DRIVE

47. House: A 1½-story, early 19th-century structure with a small brick center chimney and a central entry in a 5-bay, south facing facade. (1855-shown on map; 1862-M. Barber?)

NOOSENECK HILL ROAD

48. Meeting House Bridge (1925): This single-span bridge across the Pawcatuck River was, at its time of construction, the latest development of a modified arch design similar to other structures of the same type built in the state. It was the first state highway bridge in Rhode Island to be constructed under the provisions of the Federal Highway Act of 1921. Shortly after construction, street railway service was discontinued and a street railway bridge, about fifty feet downstream, was removed. Just north of the highway bridge, in today's Hopkinton, stood the first meetinghouse (1680) built in southern Rhode Island. Upstream (to the east) was the "baptizing place," used from 1680 to 1855, said to have witnessed more baptisms than any other place in Rhode Island. During excavation of the Meeting House Bridge, a rough piece of granite bearing the date 1744 was uncovered and is presumed to be part of an old dam. It is the oldest marker yet found in connection with a state bridge construction and was built into the southwest retaining wall of the new bridge. (1855-Meeting House Bridge.)

OLD HOPKINTON ROAD

49. Chapman House: A 2½-story late 18th- early 19th-century structure with a brick center-chimney, a central entry in a 5-bay facade and a 1-story wing at the right side. (1855-C. Chapman.)

50. Former Dixon Granite Quarry (c. 1870): A large granite quarry at Cormorant Hill, where granite was first quarried by Jonathan and Ephraim Lamphere. It became the N. F. Dixon Company and its granite was used for stone posts, curb stones, sidewalks and flagging. A large mast, approximately one hundred feet high, and a boom still stand at the summit of the hill. (1870-Quarry.)

OLD POST ROAD

51. Rathbun House: A 1½-story early 19th-century house with two interior chimneys and a central entry in a 5-bay facade. (1855-shown on map; 1870-C. Rathbun.)

52. House: A 1½-story Greek Revival structure at 633 Old Post Road, set end to road, with entry in the gable end, a small brick chimney at the ridge and a wing at the left side rear. (1855-Quonochontaug Post Office?)

53. House: A 1½-story, 18th-century gambrel-roofed house with a large center chimney and a central entry in a 5-bay facade. There are several outbuildings. (1855-E. Gavitt.)

POST ROAD

54. Dunn's Corner Community Church (1903): A 1-story, hip-roof, early 20th-century structure built as a school when four district schools were consolidated. The school closed in 1932. It was used as a community house, a Sunday School and, beginning in 1950, as a church.

55. House: A 1½-story, early 19th-century house, with a small brick center chimney, central entry in a 3-bay facade and a 1-story wing flush with the front. (1855-shown on map; 1870-N. Chace Est.)

56. Site of Gavitt House and Whipping Post: A 3½-foot granite marker near the highway marks the site of the Gavitt House. In front of the house was a whipping post which was used for public punishments until 1830, at which time the house also served as a town meeting place and as an inn. (1855-S. Gavitt.)

57. Tum-A-Lum Farm: A 2½-story, Federal structure, with a small brick center chimney and a central entry in a 5-bay facade. It is a working dairy farm, with several outbuildings, including a wood-shingle barn and several metal silos, a small private drive, with field-stone walls. (1855-shown on map; 1862-T. B. Kenyon.)

POTTER HILL ROAD

*58. Maxon-Cottrell House (c. 1750): A 1½-story, gambrel-roofed, Colonial structure with a large stone chimney, a central entry in a 5-bay, south-facing facade and three gable dormers. An addition at the north end was done in 1950. The house, at the end of a long private drive, was originally built by a member of the Maxon family. It went to a Cottrell through marriage and has now been in the family for seven generations. (1855-?; 1895-Chas. Champlin.)

59. Saunders House: A 1½-story, gambrel-roofed late 18th- or early 19th-century structure with a small brick center chimney and a central entry in a 5-bay, south-facing facade; there are two gable dormers and a gable-roofed wing at each side. (1855-C. Saunders.)

60. Lanphear Farm: A 2½-story, Late Victorian or early 20th-century, cross-hip-roof structure with a small brick center chimney on a corner lot; there is a stone wall around it and a fine wood-shingle barn near the road. (1895-Reuben S. Lanphear.)

61. House and Farm: A 2½-story, Late Victorian cross-gable house, with a small brick chimney and several porches. There is a fine wood-shingle outbuilding complex at the rear, including a large barn and silos, and open fields around three sides of the house. (1895-Simon P. Nichols.)

POUND ROAD

62. Former Granite Quarry: Along both sides of the road are abandoned granite quarries. The one west of the road has a mast and boom anchored to the bedrock by several heavy wire ropes. (1870-G. W. Cottrell's Quarry--east of the road)

63. Alfred Chapman House, now Reilly Farm: A 1½-story, end-gable, mid-19th-century structure with two interior brick chimneys on a large lot east of Chapman Pond. The house was built by Alfred Chapman when his former house and corn flood were flooded when Chapman Pond was enlarged about 1870. (1870-A. Chapman.)

64. Farm Complex: A 2½-story, cross-gable early-19th-century structure with two brick chimneys and a wing at the west end. There are a wood shed and a barn and a large field to the rear. (1855-shown on map; 1870-Mrs. A. Chapman--with a saw mill just south of the house)

QUARRY ROAD

*65. Sullivan Granite Company Quarries (1834-1969): At the end of Quarry Road, occupying a large area extending into the town of Charlestown, are the sites of several 19th and 20th-century granite quarries. The oldest quarry reportedly started operating in 1834. In the

early 20th century, the John B. Sullivan Quarry, named for the first president of the company, opened, and several other local quarries were purchased and consolidated with the Sullivan Granite Company (organized October 1, 1921). The company was the exclusive producer of "extra fine grained blue-white" Westerly granite, which was used in memorials. Granite was last quarried here in 1969 by the Westerly Granite Company. Today, the area is idle and the quarries water filled, but the remains of Sullivan's stonecutting shed, powerhouse and crusher survive as impressive industrial ruins. The Sullivan Quarry is the most important surviving quarry in the state and continues to provide a sense of the extent and scale of Westerly quarrying. (1870-Quarry.)

RAILROAD AVENUE

*66. Westerly Railroad Station (1912): A 1-story, early 20th-century, more-or-less Mission Style low, red-tile structure with hip roof, stuccoed walls with brick quoins and an arcaded entry. There is a small but ornate clock tower in the center of the front and two, 1-story wings; the interior of the station, a single large waiting room, contains two, long, back-to-back benches and a ticket window with dark woodwork. On the opposite side of the tracks is a separate, small waiting room building of similar treatment. At the present time, Amtrack makes six stops westbound and nine stops eastbound at Westerly.

67. Westerly Armory (1902): A 2-story, red-brick, granite-trimmed, early 20th-century structure, with small octagonal towers at the corners and a square, projecting, central, 3-story tower with an arched entry. This building replaced an older armory which stood on Main Street until it was destroyed by fire in 1899.

SHORE ROAD

68. Ninigret Farm, formerly Woodbine Villa: A 2½-story, early 19th-century structure with a small brick chimney, central entry in a 5-bay facade and a veranda across the front. There are wings at the east and north sides. It occupies a large lot, including stone walls and a c. 1939 carriage house, extending south to Quonochontaug Pond. Indians may have used a hollowed-out rock near the house to grind grain. The land, bought by Ezekiel Gavitt, later went

to the Dunn family. Admiral Herbert O. Dunn, who served in World War I, used it as a summer residence and entertained Franklin D. Roosevelt here while Roosevelt was secretary of the Navy. (1855-on; 1870-E. M. Dunn.)

69. Site of Samuel Ward House: A granite monument with a large bronze plaque at the intersection with the Dunn's Corner-Weekapaug Road, erected in 1904 by Julia Ward Howe, marks the site of the former residence of Samuel Ward, who came here in 1745 from Newport. Samuel Ward was governor of Rhode Island and represented Rhode Island in the First Continental Congress in Philadelphia. The site is also the birthplace of Lieutenant Colonel Samuel Ward, who served in the American Revolution.

70. Langworthy House (1875):A 3-story, Late Victorian, mansard-roofed structure with two interior chimneys, three gable dormers at each side and a central entry in a 3-bay facade. There is a wood-shingle barn at the rear, near the site of the Samuel Ward House. (1895-Albert Langworthy.)

71. Sumner Chapman House, now Ocean Crest Farm (1790): A 2½-story structure with two interior brick chimneys and a central entry in a 5-bay facade. There is a picket fence set on a large granite block wall and a wood clapboard shed at the rear. (1855-S. Chapman.)

72. House: A 2½-story, early 19th-century structure, located at 215 Shore Road, with a stuccoed brick center chimney, central entry in an enclosed portico in a 5-bay facade and a wing at the left side. There is a wood picket fence on large granite blocks and a barn and other outbuildings on a neat lot. (1855-C. Chapman.)

73. House: A 2½-story, mid-19th-century dwelling with a small brick center chimney and entry at the left side of the gable end, which faces the road. There is a large wing at the left side. (1855-shown on map; 1862-Est. Barber?; 1870-B. R. Champlin.)

73A. Ocean Rise: A 2½-story, Greek Revival structure with a small central brick chimney, a central entry in a 5-bay facade and additions at the rear. (1855-B. P. Bently.)

74. Klotz House (1968): A contemporary vertical board house with an irregular plan and roof line set atop a hill on a large lot, surrounded by woods, with a view to the west. Designed by Charles Moore, one of the leading architects practicing today, formerly of Berkeley and Yale University and now at U. C. L. A., it was his first house built on the East Coast and won a New England architect's award in 1969.

SPRING BROOK AVENUE

*75. Lewis Farm: A 1½-story, 18th-century house, with a stuccoed center chimney, a central entry in a 5-bay facade, and wings at the rear, is the center of a small agricultural area east of White Rock village. There is a Late Victorian barn, with a cupola, and another, wood clapboard barn nearby. The farm complex is surrounded by fields with stone walls. (1870-P. Lewis.)

76. J. Frith House: A 1½-story, Late Victorian structure, end to the road, with a small brick center chimney, entry at the left side of the gable end, a 1-story bay window in front and a wing at the left rear. (1870-J. Frith.)

WATCH HILL ROAD

77. House: A 2½-story Greek Revival house with Late Victorian additions, gable end to the road, with a small brick chimney, entry in the right side of the gable end, 2-story tower at the left front corner, and a wing at the right rear. There is a barn nearby. (1855-shown on map; 1870-W. R. Chapman.)

78. Old Babcock Burying Ground: On the slope of a small hill just south of Mastuxet Brook is a burying ground, probably the oldest in town, containing the remains of John and Mary Babcock who were among the first settlers of Westerly.

79. House: A 2½-story, shingle, cross-gambrel, early 20th-century structure near the Pawcatuck River. It is on a private, rhododendron-and-laurel-lined drive on a large tract of land.

80. Metacomet: A 1½-story, cross-gambrel, early 20th-century summer residence with two large stone chimneys, at the end of a private drive on a small hill overlooking the Pawcatuck River.

WELLS AVENUE

81. House: A 2½-story, stuccoed, early 20th-century house, with two large brick chimneys with pilasters. The house, built to resemble an English manor, with formal landscaping, is set behind a low, brick wall across the street from the Westerly Hospital.

82. Westerly Hospital and The Sarah Alexander Champion Home for Nurses (1925): The hospital, incorporated in 1921, consists of several buildings, including the 2-story hospital building of brick with granite trim whose facade has been affected by an addition, and a 2½-story neo-Georgian nursing home, a stuccoed structure with brick detail. Both buildings were designed by the Kendall Taylor Company of Boston.

WEST STREET

83. Bridge (c. 1910): A through-truss bridge over the main line tracks of the Penn Central Railroad.

WESTERLY-BRADFORD ROAD

84. House: A 1½-story, late 18th- early 19th-century structure with a brick center chimney. (1855-?; 1870-O. P. Cottrell.)

85. House: A 1½-story, early 19th-century structure with a stone center chimney and a central entry in a 3-bay facade. (1855-J. Chapman.)

WHITE ROCK ROAD

86. Westerly Pumping Station (1897): A 1-story, brick, Late Victorian structure with a copper-trimmed slate roof and a cupola at the north side. This building replaced an earlier station which was closed in 1898. Frederick E. Shaw of Providence was the contractor.

87. House: A 2½-story Greek Revival house, located at 15 White Rock Road and set end to the road, with entry at the right side of the gable end, and a wing at the right side. This house is one of a row of

several relatively small houses in an area known as Varietyville in 1870. (1870-row of about eight houses and a store.)

WOODY HILL ROAD

88. House: A 1½-story, wood-shingle, Greek Revival structure with entry at the right side of the gable end, a small brick center chimney and a wing at the north end. It is set atop a slight hill with fields to the south. (1855-?; 1870-T. Sanders.)

89. House: A 2-story, Early Victorian, Second Empire house with two small brick chimneys, shed-roof dormers and a central entry in a 3-bay facade. There is a corn crib and a barn. The house was reportedly brought here from Newport in sections. There is an old granite quarry on the property which was used for monuments. (1870-J. D. Rathbun.)

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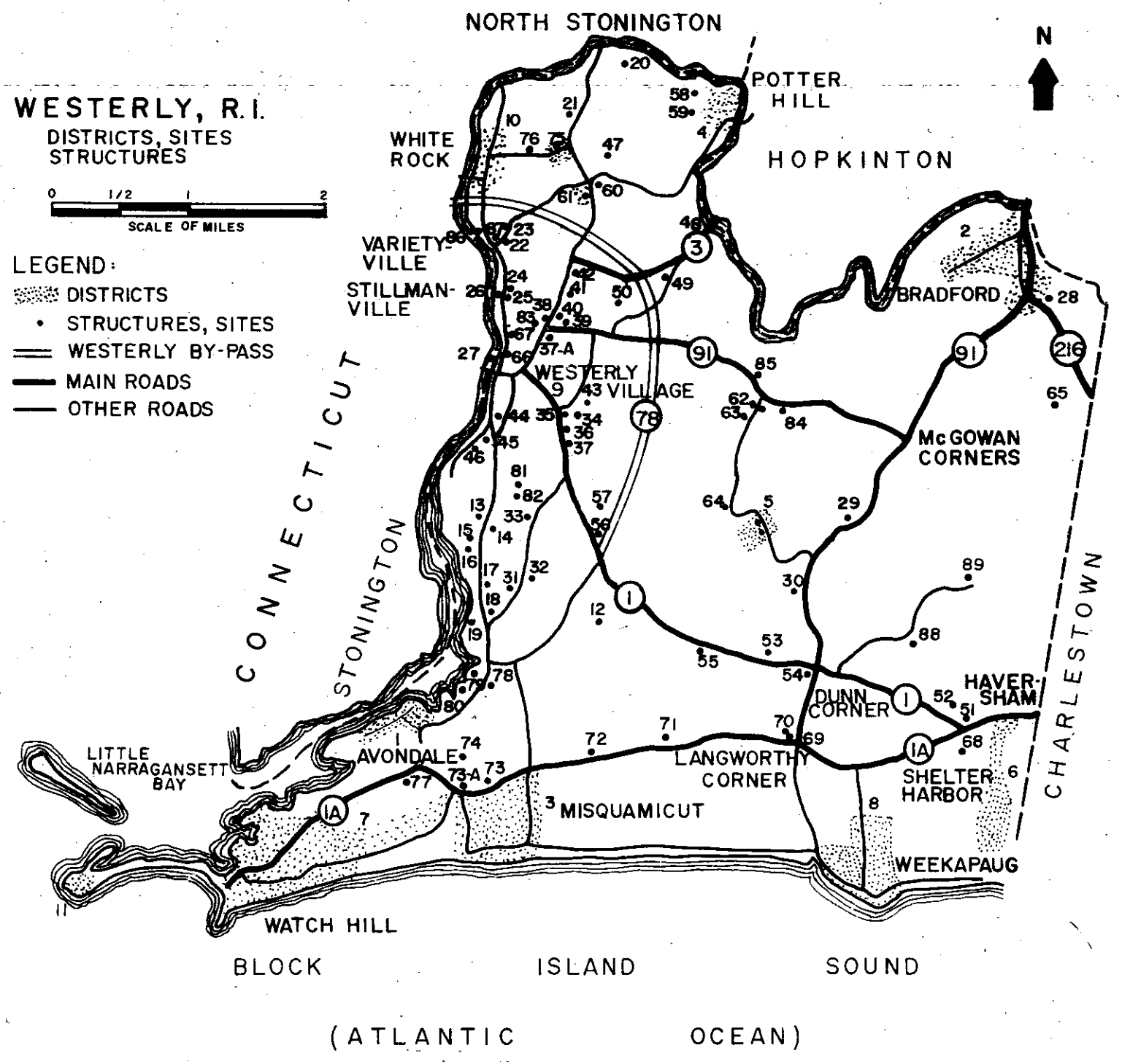
WESTERLY, R.I.
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WESTERLY BY-PASS
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OTHER ROADS
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NORTH STONINGTON
POTTER HILL
HOPKINTON
WHITE ROCK
VARIETY-VILLE
STILLMAN-VILLE
WESTERLY VILLAGE
BRADFORD
McGOWAN CORNERS
DUNN CORNER
HAVER-SHAM
LANGWORTHY CORNER
SHELTER HARBOR
AVONDALE
LITTLE NARRAGANSETT BAY
MISQUAMICUT
WEEKAPAUG
WATCH HILL
CONNECTICUT
STONINGTON
CHARLESTOWN
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(ATLANTIC OCEAN)

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Cover Illustration: Mast and boom at former Dixon Granit Quarry; Old Hopkinton Road. (Map #50)

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BLAZE FROM THE PAST- POTTER HILL MILL FIRE- NOVEMBER 7, 1977

By Asst. Chief Joseph Fusaro
November 4, 2021

As the sun began to rise over Westerly on a cool Monday November 7, 1977, people were going to be sleeping in as the nation was observing Veterans' Day. Around 6:20 am neighbors of the Potter Hill Mill hear what sounded like firecrackers going off. Getting out of bed to investigate Mrs. Nancy Buckstael saw a great wall of flames coming from the mill. A phone call was made to the Westerly Fire Station reporting the fire at the Potter Hill Mill. Resident firemen sounded the alarm for Box 4535, Potter Hill Rd at the mill. As the first engine was leaving the station the fire was also reported to the Ashaway Fire Department by a resident on the Hopkinton side of the river. Due to the proximity of the Ashaway Fire Station, their apparatus would be the first to arrive. A fire in this building would present several problems for firefighters. First, access to the site was provided by a single narrow driveway, next the east side of the buildings faced the Pawcatuck River, the buildings on the site had been in a state of disrepair for over 20 years, and finally there was only one fire hydrant to service this area. Thankfully the river being so close, it would provide the water necessary for extinguishing the fire.

First arriving fire equipment from the Ashaway Fire Department was confronted with a fully involved 2 ½ story wooden building fully involved in fire. Built in 1923, the building housed the mill offices, the finishing department and parts of the weave shop The first Ashaway pumper proceeded to the hydrant near the mill driveway and began soaking the house next to the building involved. This building would be spared because it sat high above the mill on a hill separated by the driveway and protected by a high stone wall. Westerly Engine 3 arrived and assisted the first Ashaway pumper. Ashaway's second engine began siphoning water from the river on the Hopkinton side near the fish ladder to supply hose lines playing them into the river side of the mill. Westerly Engine 2 arrived and was positioned on the Westerly side of the bridge where it too began to take water from the river. Engine 2 would supply three hose lines to a deluge set placed in the driveway as well as an additional 2 ½ hose line. Westerly Engine 1 setup opposite of the Ashaway pumper on the Hopkinton side of the bridge and supplies 5 2 ½ hose lines. These hose lines were used to knock down fire on the driveway side so they could advance the deluge set. Westerly Ladder 1 was stationed on Potter Hill Rd. Unable to get access to the site, its crew was used to assist in moving hose lines. The lines supplied by the Ashaway pumper proved ineffective until they were moved into the river. The fire was brought under control within a half hour but extinguishment and over all would take over four hours.

Damage to the front building was significant, it collapsed into a large pile of rubble. Since parts of the building sat over the river, firefighters were not allowed to enter. Completing extinguishment would prove difficult. Fortunately, of the 75 firefighters operating at the call no injuries were reported. Members of the Westerly and Ashaway Ambulance Corps were on standby on their respective sides of the river. Through the efforts of the firefighters no damage was done to the nearby home or the granite structures to the rear of the involved section. As the day progressed, Westerly firefighters would return to the site

three times to extinguish rekindles. A driving rain later in the evening would allow weary firemen to get some rest. The cause of the fire was deemed suspicious and was investigated by the Rhode Island State Fire Marshal’s office.



Box 4535-November 7, 1977-View from the Potter Hill Bridge prior to arrival.



Box 4535-November 7, 1977- Ashaway's Maxim Engine 44 operating at a draft from the Hopkinton side near the fish ladder.



Box 4535-November 7, 1977-Ashaway crews operating their hose lines in the Pawcatuck River.



Box 4535-November 7, 1977-Westerly's Engine 2, a 1957 Seagrave pumper, operating on the Westerly side of the bridge.





Box 4535-November 7, 1977-View looking down at the deluge set operating in the driveway of the mill.

Box 4535-November 7, 1977-Westerly firefighters inspecting the remains.

APPENDIX A

Phase I ESA

REPORT

Phase I Environmental Site Assessment –
148 Porter Hill Road
Waterbury, CT
Prepared for:
Pepperidge Reserve

PROJECT NO. 109824

REPORT

Phase I Environmental Site Assessment –
198 Potter Hill Road
Westerly, RI

Prepared for:

Renewable Resources

PROJECT NO. 1009825

PROJECT NO. 1009825

REPORT TO

Renewable Resources Inc.
C/O Dr. Edward Carapezza
900 North Strafford, Suite 2428
Arlington, VA 22203

ON

Phase I Environmental Site Assessment –
198 Potter Hill Road, Westerly, RI

March 14, 2006

Jacques Whitford
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Joseph T. Unsworth, P.E. Project Manager	Vincent L. Jacques, P.E. Senior Reviewer

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OTCA x7307
Dorsey
APPENDIX B
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PHASE I ENVIRONMENTAL SITE ASSESSMENT

1.0 EXECUTIVE SUMMARY

Jacques Whitford Company, Inc. (Jacques Whitford) has performed a Phase I Environmental Site Assessment (ESA) in accordance with the American Society of Testing and Materials (ASTM) Standard Practice Designation E 1527-00 on the property located at 198 Potter Hill Road in Westerly, RI, hereinafter referred to as the subject property. Based upon our assessment, the following paragraphs summarize noteworthy site information and environmental issues, if applicable.

Subject Property Information

LAND AREAS: According to records on file at the Westerly Tax Assessor's office, the subject property consists of one land parcel identified on Westerly Tax Assessor's Plat Map Plat Map 8, as Lot 23. The Lot 23 contains approximately 4.55 acres.

IMPROVEMENTS: The Westerly Tax Assessor records did not contain any information on the buildings on the subject property. However, Jacques Whitford observed nine buildings, some of which were interconnected. Many of the buildings were in various states of disrepair. The roofs of many buildings were collapsed into the building. Additionally, foundations of several former buildings were observed on the subject property. The main building is a three story building made of granite block that is approximately 115 feet by 60 feet. There are two one story additions on the east side of the main building, one is 30 feet by 20 feet and made of brick and the other is 85 feet by 20 feet and made of brick and wood. A 100 foot by 70 foot building is connected to the main building to the south and is one story and made of brick. The former boiler building is 75 feet by 54 feet, is located to the north of the main building, and is two stories and made of brick. Another one story brick building is located to the north of the former boiler building. This building is 95 feet by 64 feet. Two wooden buildings are located north of this building and are 90 feet by 40 feet and 32 feet by 10 feet, respectively. One separate building was observed to the west of the former boiler building. This building is made of wood, is two stories high and 100 feet by 30 feet.

UTILITIES: The subject property has been vacant for over 40 years and no utilities appear to be active at the subject property. Electricity and telephone service are available for the subject property. Municipal water is available in the area of the subject property. There were no records at the Westerly Water Department for the subject property. The subject property formerly relied on an onsite well for water, which was stored in a storage tank tower on the site. There are no municipal sewers in the area of the subject property. The field property card from the Westerly Tax Assessor indicates that the subject property utilizes a septic system, however, the current site owner indicated that he believed that all wastewater was formerly discharge directly to the adjacent Pawcatuck River. The subject property buildings are not currently heated. The boilers remaining in the former boiler building appear to have been fueled by coal.

CURRENT USAGE: The subject property is currently vacant and reportedly has been for over forty years.

HISTORICAL USAGE: Based on the historical research conducted by Jacques Whitford, it appears as though the subject property was first developed in the mid 1800s as a woolen mill. Available information indicates that the mill was a woolen mill until the mid 1900s. Several of the machines used in the woolen operations remain in the buildings.

Conclusions

Jacques Whitford has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527-00 on the property located at 198 Potter Hill Road in Westerly, Rhode Island. Any exceptions to, or deletions from, this practice is described in Sections 2.3 and 2.4 of this report. Jacques Whitford has discovered potential recognized environmental conditions and environmental business risks, which are summarized in the following bulleted paragraphs:

- Asbestos containing materials may exist in the buildings.
- Painted surfaces were observed to be in poor condition and may contain lead based paint.
- The subject property is not served by municipal sewers. Records available from The Town of Westerly indicate that the subject property utilizes a septic system. However according to the current property owner, all wastewater was believed to be directly discharged to the adjacent Pawcatuck River.
- Coal may have been used for fuel on the subject property.
- An area of dumping was observed in the north western part of the subject property. Miscellaneous debris was observed including several rusted 55 gallon drums. None of the drums contained any liquid and were rusted.
- Former buildings at the subject property appear to have been demolished on the subject property.
- Significant water damage was observed on ceiling and floors of the majority of the buildings.
- Electrical equipment is present in at least one building that potentially contains PCBs and/or mercury.

Based on the noted recognized environmental conditions, Jacques Whitford believes there is a **Low to Moderate** risk of potential liability associated with the subject property.

Based on the noted Findings and Opinions obtained and developed for this report, Jacques Whitford believes that further environmental investigation is warranted on the subject property. Based on the information obtained as part of the Phase I ESA and observations made during the investigation, the following are recommended:

- Completion of a Phase II ESA to assess the extent of impacts to soil and groundwater at the subject property. The Phase II ESA should include the completion of test pits in the area of the observed dumping and areas of potential coal storage. Also, unless it can be determined that a septic system did not exist at the subject property, soils borings should be completed and monitoring wells installed to assess impacts from the potential septic system.
- Prior to any demolition and/or renovations, an asbestos survey and pain chip sampling should be completed for all buildings on the subject property.
- A hazardous material disposal contractor should be hired to remove and dispose of all PCB and mercury containing materials (if any) in the buildings.
- All debris piles should be removed from the subject property and disposed of at appropriate disposal facilities.

- Since the buildings will required either demolition or extensive rehabilitations, Jacques Whitford does not recommend a mold survey at this time.

2.0 INTRODUCTION

Jacques Whitford Company, Inc. (Jacques Whitford) has performed a Phase I Environmental Site Assessment (ESA) on the property located at 198 Potter Hill Road in Westerly, Rhode Island, hereinafter referred to as the subject property.

Joseph T. Unsworth, P.E. and Robert Snyder, Jacques Whitford Project Manager and Engineer, respectively, performed the site inspection on Monday, February 27, 2006. Mr. Unsworth also performed records research, inquiries, and other tasks associated with this ESA and with the preparation of this report. Mr. Vincent L. Jacques, P.E., Jacques Whitford Senior Reviewer, has reviewed the stated summary of Findings and concurs with the stated Conclusions and Recommendations.

2.1 Purpose

As per Section 1.1 of the American Society of Testing and Materials (ASTM) Standard Practice Designation E 1527-00, the purpose of this assessment is to identify recognized environmental conditions, as defined in Section 3.3.31 of the same Standard Practice; that is "the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, ground water, or surface water of the property". This practice is intended to permit a user to satisfy one of the requirements to qualify for the innocent landowner defense to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA); that is, the practices that constitute "all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice" as defined in 42 USC § 9601(35)(B).

2.2 Detailed Scope of Services

Jacques Whitford has performed a Phase I ESA in accordance with the ASTM Standard Practice Designation E 1527-00 on the property located at 198 Potter Hill Road in Westerly, Rhode Island and further identified on Westerly Tax Assessor's Plat Map 8 as Lot 23. This report has been prepared for the exclusive use of Renewable Resources (Client), by the authority of Dr. Edward Carapezza.

Jacques Whitford obtained information to characterize the subject property and to compile a site-specific environmental assessment through the review of reasonably ascertainable public records, a surficial site inspection, and historical research of previous owners and operations of the subject property. Reasonably ascertainable information is defined by ASTM E 1527-00 as publicly available information obtainable from a source within reasonable time and cost constraints, which is also practically reviewable.

The intention of Jacques Whitford's review of reasonably ascertainable public records was to obtain and review records, which could identify recognized environmental conditions in connection with the subject property. Such public records includes records on file at the local Tax Assessor's office regarding the subject property's Plat Map, Block, and Lot location, land and property improvements and dimensions, current and historical utilization, as well as the Zoning designation(s) of the area in which the subject property is located. The legal description of the subject property, as well as information concerning previous land transfers and ownership, is also included in this report. Furthermore, public records concerning the subject property, as well as additional properties within

appropriate minimum search distances as defined in Section 7.2.1.1 of ASTM E 1527-00, are also reviewed for the preparation of this report. Said records include both Federal and State Environmental listings.

A component of the site assessment is Jacques Whitford's site visit and surficial inspection of the subject property and improvements, in an attempt to identify recognized environmental conditions on or in the immediate vicinity of the subject property. Joseph T. Unsworth, P.E. and Robert Snyder, of Jacques Whitford, conducted this visual reconnaissance of interior and exterior portions of the subject property on Monday, February 27, 2006. Observations of adjoining properties to the subject property were made from the subject property, as well as from easily accessible public rights-of-way. A Site Plan sketch was created based on the observations of the subject property's characteristics noted at the time of the conducted inspections.

2.3 Significant Assumptions

It is assumed that this investigation is being conducted to identify recognized environmental conditions concerning the subject property, and to permit the user to satisfy one of the requirements to qualify for the innocent landowner defense to CERCLA liability. This investigation may mention but does not fully address non-scope considerations such as, but not limited to, asbestos containing materials (ACM), radon, lead-based paint (LBP), lead in drinking water, mold, wetlands, regulatory compliance, cultural and historical resources, industrial hygiene, health and safety, ecological resources, endangered species, indoor air quality, and/or high voltage power lines, although, one or more may be mentioned in the report as a business environmental risk concern.

2.4 Limitations and Exceptions of Assessment

This report has been prepared for the exclusive use of the Client and should not be reproduced or disseminated without the written approval of Jacques Whitford and the Client. Jacques Whitford has retained a copy of this report. No additions or deletions are permitted without the express written consent of Jacques Whitford. Use of this report in whole or in part by parties other than the Client is prohibited.

Information obtained from public records review, the site inspection, and interviews were used to characterize the subject property. Although the services provided are extensive, findings and conclusions are limited to and by the information obtained. If information becomes available concerning the subject property that was not included in this report, it should be made available to Jacques Whitford so that the conclusions and/or recommendations can be re-examined and modified, if applicable. Further non-intrusive and intrusive investigations and assessment methods are available that could further characterize the subject property's building materials as well as the subsurface soil and groundwater conditions.

Due to the collapsed roofs and structurally unsafe floors, portions of some of the buildings could not be observed.

The Site Plan is a sketch of the subject property, which identifies observations of site characteristics of significance. These plans are not drawn to scale and should not be relied upon as an engineering plan.

Jacques Whitford's interviews are limited by the quality and completeness of answers provided to the proposed questions during the interview(s).

The extent of historical research performed by Jacques Whitford is limited to availability, cost, and timeliness of utilizing various resources such as aerial photographs, historical Sanborn Maps, Land Evidence Records (deeds pertaining to historical site ownership), and local directories, all of which

may indicate the historical utilization of the subject property. It should be noted that while the chain-of-ownership research and information provided should be accurate, it should in no way be construed as an actual Title search and should not be utilized or relied upon for any legal purposes. As indicated in the ASTM E 1527-00 Standard, the user should check or engage a title company or title professional to check reasonably ascertainable recorded land title records for environmental liens or activity and use limitations currently recorded against the subject property.

Events occurring on the subject property after February 27, 2006, the date of the inspection, are beyond the scope of this report. Jacques Whitford makes no expressed or implied representations or warranties regarding any changes in condition of the premises after this date.

No environmental site assessment can wholly eliminate uncertainty regarding the potential for recognized environmental conditions in connection with a property. Performance of this Phase I ESA is intended to reduce, but not eliminate uncertainty regarding the potential for recognized environmental conditions in connection with a property, and the ASTM E 1527-00 Standard recognizes reasonable limits of time and cost.

This report does not document compliance by present or past subject property owners (or tenants) with Federal, State, or Local laws and regulations, nor does it claim or imply that all environmental problems past, present or potential have been detected on or nearby the subject property. Although this cannot be considered an exhaustive or all encompassing study, this investigation was performed consistent with customary practice and standards. No warranty expressed or implied is made concerning the accuracy and completeness of the information and conclusions in this report.

2.5 Special Terms and Conditions

The following is a list of terminology that is used throughout this report and therefore should be defined.

Abutting:	Any property that is physically bounded by the subject property.
Actual Knowledge:	The knowledge actually possessed by an individual who is a real person, rather than an entity.
Adjacent:	Any property that is separated from the subject property by an easement or roadway.
Adjoining:	Any property that is considered to be abutting or adjacent to the subject property.
Asbestos Containing Material (ACM):	Any material or product that contains more than 1% asbestos.
Business Environmental Risk:	A risk which can have a material environmental or environmentally-driven impact on the business associated with the current or planned use of a parcel of commercial real estate, not necessarily limited to those environmental issues required to be investigated in the E 1527-00 practice.
Due Diligence:	The process of inquiring into the environmental characteristics of a parcel of commercial real estate or other conditions in connection with a property transaction.
Environmental Professional:	A person possessing sufficient training and experience necessary to conduct a subject property reconnaissance, interviews, and other activities in accordance with the E 1527-00 practice.
Hazardous Substance:	A substance defined as a hazardous substance pursuant to CERCLA

42 USC 9601 (14), as interpreted by USEPA regulations and the courts.

Historical Recognized Environmental Condition: Environmental conditions which in the past would have been considered a recognized environmental condition, but which may or may not be currently considered a recognized environmental condition.

Obvious: That which is plain or evident; a condition or fact that could not be ignored or overlooked by a reasonable observer while visually or physically observing the subject property.

Occupants: Those tenants, subtenants, or other persons or entities using the property or a portion of the subject property.

Owner: Generally the fee owner of record of the subject property.

Practically Reviewable: Information that is practically reviewable means that the information is provided by the source in a manner and in a form that, upon examination, yields information relevant to the subject property without the need for extraordinary analysis of irrelevant data.

Preparer: The person preparing the transaction screen questionnaire pursuant to Practice E 1528.

Reasonable Ascertainable: Information that is (1) publicly available, (2) obtainable from its source within reasonable time and cost constraints, and (3) practically reviewable.

Recognized Environmental Conditions: The presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property.

Subject Property: The real property that is the subject of this ESA.

User: The party seeking to use Practice E 1527 to perform an environmental site assessment of the subject property.

2.6 User Reliance

According to Section 6.5.2.1 of E 1527-00, "An environmental professional is not required to verify independently the information provided but may rely on information provided unless he or she has actual knowledge that certain information is incorrect based on other information obtained in the Phase I Environmental Site Assessment or otherwise actually known to the environmental professional." Jacques Whitford was not provided with any contradictory information from the Client regarding any information gathered during the investigation. As a result, Jacques Whitford has relied on the information gathered without independent verification and has complied this report with the assumptions, limitations, and exceptions noted in Sections 2.3 and 2.4 of this report.

3.0 SITE DESCRIPTION

In order to describe the subject property, records were reviewed and/or obtained from the various sources cited in Section 16.0, References.

Joseph T. Unsworth, P.E., of Jacques Whitford, completed an ASTM Environmental Transaction Screen Questionnaire for the subject property, which can be found in **Appendix D**. Photographs taken during the inspection are presented in **Appendix A**.

3.1 Location and Legal Description

According to records on file at the Westerly Tax Assessor's office, the subject property consists of one land parcel identified on Westerly Tax Assessor's Plat Map Plat Map 8, as Lot 23. Lot 23 contains approximately 4.55 acres (see **Figures 1 and 2**).

Legal descriptions for the various lots of the subject property were discovered on the most recent deeds issued for the subject property, found at the Westerly Clerk's office at the Westerly Town Hall, in Deed Book 432, beginning on Page 53. A copy of the deed can be found in **Appendix E** of this report.

The location of the subject property is depicted on **Figure 1**, which was developed from the *Ashaway, Rhode Island USGS Topographical Quadrangle Map*. **Figure 2** is a not-to-scale Site Plan depicting the entire subject property and adjoining properties to the subject property.

3.2 Site and Vicinity General Characteristics

Jacques Whitford conducted a site visit to visually and physically observe the subject property as well as any structure(s) present on the subject property, on Monday, February 27, 2006. Based on Town records and visual observations, the subject property consists of one parcel of land. Lot 23 is not bound by any roads. Access to the subject property is from Potter Hill Road via a driveway that runs across the southeastern part of Lot 24 and onto the southern part of the subject property. Properties abutting the subject property are residential and agricultural properties to the west, the Pawcatuck River to the east and north, and residential properties further east and north. Jacques Whitford attempted to observe the land and improvements of adjoining properties to the subject property, from the subject property and from accessible public rights-of-way. Based on these observations, it is apparent that the general area of the subject property is a moderately developed area in the north central portion of Westerly, with Hopkinton, RI abutting the subject property to the east, and North Stonington, CT abutting the subject property to the northwest. The subject property is located in a moderately developed area with predominately residential, agricultural, and some commercial properties. According to the most recent Westerly Zoning Map, Lots 23 is located in an area zoned "RR-60", defined as Rural Residential with a minimal lot size of 60,000 square feet.

3.3 Current Uses of the Subject Property

Lots 23 is currently vacant and reportedly has been for over forty years.

3.4 Descriptions of Structures, Roads, and Other Improvements

Descriptions of Structures on the Subject Property: The Westerly Tax Assessor records did not contain any information on the buildings on the subject property. However, Jacques Whitford observed nine buildings, some of which were interconnected. Many of the buildings were in various states of disrepair. The roofs of many buildings were collapsed into the building. Additionally, foundations of several former buildings were observed on the subject property. The main building is a three story building made of granite block that is approximately 115 feet by 60 feet. There are

two one story additions on the east side of the main building, one is 30 feet by 20 feet and made of brick and the other is 85 feet by 20 feet and made of brick and wood. A 100 foot by 70 foot building is connected to the main building to the south and is one story and made of brick. The former boiler building is 75 feet by 54 feet, is located to the north of the main building, and is two stories and made of brick. Another one story brick building is located to the north of the former boiler building. This building is 95 feet by 64 feet. Two wooden buildings are located north of this building and are 90 feet by 40 feet and 32 feet by 10 feet, respectively. One separate buildings was observed to the west of the former boiler building. This building is made of wood, is two stories high and 100 feet by 30 feet.

Descriptions of Roads: Lot 23 is not bound by any roads. Access to the subject property is from Potter Hill Road via a driveway that runs across the southeastern part of Lot 24 and onto the southern part of the subject property (see **Figure 2**). Potter Hill Road is a two-laned, two-directional road maintained by the Town of Westerly.

Utilities: The subject property has been vacant for over 40 years and no utilities appear to be active at the subject property. Electricity and telephone service are available for the subject property. Municipal water is available in the area of the subject property. There were no records at the Westerly Water Department for the subject property. The subject property formerly relied on an onsite well for water and was stored in a storage tank tower on the subject property. The storage tank tower is no longer present on the subject property. This water system reportedly was used for a fire suppression system. Valves and hydrant types equipment were observed near the buildings. There are no municipal sewers in the area of the subject property. The field property card from the Westerly Tax Assessor indicates that the subject property utilizes a septic system, however, the current site owner indicated that he believed that all wastewater was formerly discharge directly to the adjacent Pawcatuck River.

Heating System: The subject property buildings are not currently heated. The boilers remaining in the former boiler building appear to have been fueled by coal.

Sewage Disposal: The field property card from the Westerly Tax Assessor indicates that the subject property utilizes a septic system, however, the current site owner indicated that he believed that all wastewater was formerly discharge directly to the adjacent Pawcatuck River. There was no file available for the subject property at the Westerly Water/Sewer Department.

Source of Potable Water Supply: The subject property is connected to the public drinking water system. Drinking water is supplied to the subject property by The Westerly Water Department, which obtains their water from ten gravel wells located in six well fields that draw water from aquifers or groundwater reservoirs located in the Pawcatuck River Aquifer Region.

3.5 Current Uses of Adjoining Properties

Jacques Whitford attempted to observe the land and improvements of adjoining properties to the subject property from the subject property and from accessible public rights-of-way. Based on research and observations, it is apparent that the adjoining properties to the north, east, and west are residential, and agricultural. Properties to the south of the subject property include one residential lot beyond which is undeveloped land. The Pawcatuck River abuts the subject property to the east and north. Please refer to the appended **Table 2** for a listing of adjoining properties.

4.0 USER PROVIDED INFORMATION

4.1 Title Records

Jacques Whitford was not provided with any information from the Client regarding title and/or ownership records pertaining to the subject property. However, Jacques Whitford reviewed reasonably ascertainable land evidence records at the Westerly Clerk's Office located at Westerly Town Hall in Westerly, RI. Please refer to the appended **Table 1** for a partial listing of chain of ownership/title records.

4.2 Environmental Liens or Activity and Use Limitations

The Client did not provide Jacques Whitford with any information pertaining to any environmental liens, government notifications, or any activity and use limitations involving the subject property. While Standard E 1527-00 does not require the environmental professional to conduct a title search of recorded environmental liens or activity and use restrictions on the subject property, Jacques Whitford did review several, but not all, deeds for the subject property and did not note any environmental liens and/or activity or use limitations on the reviewed deeds that are currently recorded for the subject property.

4.3 Specialized Knowledge

According to Section 5.3 of Standard E 1527-00, if the user is aware of, or has any specialized knowledge or experience pertaining to recognized environmental conditions pertaining to the subject property, or the general area surrounding the subject property, they should make such information available to the environmental professional prior to the on-set of the site reconnaissance activities. The Client did not provide Jacques Whitford with any information pertaining to any specialized knowledge regarding recognized environmental conditions existing at the subject property.

4.4 Valuation Reduction for Environmental Issues

In accordance with Section 5.4 of Standard E 1527-00, if the Client or user has actual knowledge that the purchase price of the subject property is significantly less than the purchase price of comparable properties, the user and/or Client should try to identify an explanation for the lower price and to make written record of such explanation. The Client did not provide Jacques Whitford with any information pertaining to any purchase price or collateral value reduction.

4.5 Owner, Property Manager, and Occupant Information

Based on research conducted during this investigation, the current owner of Lot 23 is listed as Renewable Resources Inc., which reportedly acquired the subject property in 1992. At the time of Jacques Whitford's inspection, Lot 23 was vacant. Lot 23 has been vacant for over forty years and is not believed to have been "managed" during that time.

4.6 Reason for Performing Phase I ESA

According to information provided by the Client, this Phase I ESA is being conducted to assess if there are any environmental issues associated with the property that the owner will need to address as the property is developed.

4.7 Other Information

Jacques Whitford was not provided with any other additional information from the Client and/or the owner of the subject property.

5.0 RECORDS REVIEW

5.1 Standard Federal Environmental Record Sources

Using software produced and maintained by FirstSearch Technology Corporation (FirstSearch) of Norwood, MA, Jacques Whitford obtained an Environmental FirstSearch™ Report, Jacques Whitford obtained an FirstSearch™ Report, which searches various federal databases, which are presented in the following paragraphs. The FirstSearch™ Report can be found in **Appendix C** of this report.

5.1.1 NPL (National Priority List)

According to the database search results, the subject property is not listed on this database. Furthermore, no properties located within a 1.0-mile radius of the subject property are listed on this database.

5.1.2 CERCLIS (Comprehensive Environmental Response, Compensation, and Liability Information System – Active)

According to the database search results, the subject property is not listed on this database. Furthermore, no properties located within a 0.50-mile radius of the subject property are listed on this database.

5.1.3 CERCLIS-NFRAP (Comprehensive Environmental Response, Compensation, and Liability Information System – No Further Remedial Action Planned)

According to the database search results, the subject property is not listed on this database. Furthermore, no adjoining property to the subject property is listed on this database.

5.1.4 RCRA CORRACTS (Resource Conservation and Recovery Act - Corrective Action Report)

According to the database search results, the subject property is not listed on this database. Furthermore, no properties located within a 1.0-mile radius of the subject property are listed on this database.

5.1.5 RCRIS-TSD (Resource Conservation and Recovery Information System – Treatment, Storage, and Disposal Facilities)

According to the database search results, the subject property is not listed on this database. Furthermore, no properties located within a 0.50-mile radius of the subject property are listed on this database.

5.1.6 RCRIS – LQG and SQG (Resource Conservation and Recovery Information System – Large Quantity Generator and Small Quantity Generator)

According to the database search results, the subject property is not listed on this database. Furthermore, no adjoining property to the subject property is listed on this database.

5.1.7 ERNS (Emergency Response Notification System)

According to the database search results, the subject property is not identified on this database.

5.2 Standard State Environmental Record Sources

Using software produced and maintained by FirstSearch, Jacques Whitford obtained an Environmental FirstSearch™ Report, which searches various state databases, which are presented in the following paragraphs. The Environmental FirstSearch™ Report can be found in **Appendix C** of this report. Where deemed necessary, additional information was obtained from the RIDEM and is notated in the following sections.

5.2.1 SHWS (State Hazardous Waste Sites)

According to the database search results, the subject property is not listed on this database. Furthermore, no properties located within a 1-mile radius of the subject property are listed on this database.

5.2.3 SWF/LF (Solid Waste Facilities/Landfill Sites)

According to the database search results, the subject property is not listed on this database. Furthermore, no properties located within a 0.50-mile radius of the subject property are listed on this database.

5.2.4 LUST (Leaking Underground Storage Tank Facilities)

According to the database search results, the subject property is not listed on this database. Three properties located within a 0.50-mile radius of the subject property are listed on this database. Two of the sites are listed as "SRO- Soil Removal Only" and the other site is listed as inactive. All three sites are located at locations that are not considered upgradeint of the subject property and, therefore, would likely not impact the subject property.

5.2.5 UST (Registered Underground Storage Tank Facilities)

According to the database search results, the subject property is not listed on this database. Furthermore, no adjoining property to the subject property is listed on this database.

5.2.6 SPILLS (Oil & Hazardous Material Response Log/Spill Report)

According to the database search results, the subject property is not listed on this database.

5.3 Database Search Unmappable Properties

Unmappable properties are located in the general vicinity of the subject property. However, due to inaccurate or missing information provided to the database search contractor, from the appropriate governmental/state agency, these properties could not be definitively plotted. Jacques Whitford reviewed the list of unmappable properties in the FirstSearch™ Report, and was able to determine that the subject property was not identified on this unmappable list. Please refer to **Appendix C** to review the FirstSearch™ Report.

5.4 Previous Environmental Site Assessments

Jacques Whitford was not provided with, nor discovered, any previous environmental site assessments conducted at the subject property.

6.0 HISTORICAL USE INFOMRATION ON THE SUBJECT PROPERTY

Jacques Whitford researched historical usage of the subject property by reviewing records from the sources specified in Section 16, conducting interviews of people knowledgeable of the subject property, and conducting a site inspection of interior and exterior portions of the subject property. Pertinent information obtained from the review of these resources is presented in the paragraphs that follow:

6.1 Former Property Owners

Jacques Whitford was not provided with any information from the Client regarding title or ownership records pertaining to the subject property. However, Jacques Whitford reviewed reasonably ascertainable land evidence records at the Westerly Clerk's Office in Westerly Town Hall. Based on a review of these records, it is apparent that there have been many different deeds associated with the subject property. Records indicate that the current owner of Lot 23 is listed as Renewable Resources Inc., which reportedly acquired the subject property in 1992. Please refer to the appended **Table 1** for a listing of reported previous property owners and dates of acquirement, if available.

6.2 Historical Property Usage/Operations

Based on the historical research conducted by Jacques Whitford, it appears as though the subject property was first developed approximately in the mid 1800s as a woolen mill. Available information indicates that the subject property was used for the production wool textiles until approximately the early 1960s. The property appears to have been vacant since that time. Entities that have operated at the subject property include Swift River Woolen Company, Westerly Woolen Company, Potter Hill Woolen Company, and Pawcatuck Woolen Mills

6.3 Historical Use Information on the Adjoining Properties

In an attempt to discover the historical usage of adjoining properties, which may indicate the presence of adverse environmental conditions on, or in close proximity to, the subject property, Jacques Whitford expanded research and review of historical information sources to include suspect adjoining properties. Such tools include, but are not limited to Aerial Photographs, Cole/Polk City Directories, and personal knowledge provided through various conducted interviews.

In summary, it appears that the adjoining properties to the north and northwest have been used for residential uses since at least 1939. Other surrounding properties appear to have been used for agricultural uses until approximately 1962, when the land was allowed to revert to undeveloped woodlands or developed generally for residential uses.

7.0 PHYSICAL SETTING

The location of the subject property is depicted on **Figure 1,** which was developed from the *Ashaway, RI Quadrangle Map*. As can be seen, the average elevation of the subject property is approximately 30 feet above mean sea level. The area of the subject property has a topography that is hilly, with significant hills located to the southeast and southwest.

Jacques Whitford reviewed a United States Department of Agriculture Soil Conservation Service *Soil Survey for Rhode Island*. Based on a review of this survey, the northern portion of the subject property contains soils that are classified as "RU", defined as Rumney fine sandy loam. This nearly level, poorly drained soil is on flood plains. Slopes range from 0 to 3 percent but are dominantly less than 2 percent. Areas are long and narrow and range mostly from 5 to 30 acres. Typically, the surface layer is very dark grayish brown fine sandy loam about 5 inches thick. The subsoil is dark grayish brown, mottled fine sandy loam 17 inches thick. The substratum is gray and dark grayish brown sand to a depth of 60 inches or more. The permeability of this soil is moderately rapid in the surface layer and subsoil and rapid to very rapid in the substratum. Available water capacity is moderate, and runoff is slow. The soil has a seasonal high water table at a depth of about 6 inches from late fall through spring and is subject to frequent flooding. The soil is very strongly acid through slightly acid.

The southern portion of the subject property contains soils that are classified as "CeC", defined as Canton and Charlton fine sandy loams, very rocky, 3 to 15 percent slopes. These gently sloping to sloping, well drained soils are on side slopes and crests of glacial upland hills and ridges. Stones and boulders cover 2 to 10 percent of the surface, and rock outcrops cover up to 10 percent. Areas are irregular in shape and mostly range from 3 to 250 acres. The mapped acreage of this unit is approximately 50 percent Canton soils, 30 percent Charlton soils, and 20 percent other soils. The areas of this unit consist of either Canton soils or Charlton soils or both. The soils were mapped together because they have no major differences in use and management.

Typically, the Canton soils have a surface layer of very dark grayish brown fine sandy loam about 3 inches thick. The subsoil is dark yellowish brown, yellowish brown, and light olive brown fine sandy loam 19 inches thick. The substratum is olive gray gravelly loamy sand to a depth of 60 inches or more. Typically, the Charlton soils have a surface layer of very dark brown fine sandy loam about 2 inches thick. The subsoil is 25 inches thick. The upper 15 inches is dark yellowish brown fine sandy loam, and the lower 10 inches is yellowish brown gravelly sandy loam. The substratum is light brownish gray gravelly sandy loam to a depth of 60 inches or more.

Included with these soils in mapping are small areas of somewhat excessively drained Gloucester soils, well drained Paxton and Narragansett soils, and moderately well drained Sutton soils. Also included are small areas of soils that have slopes of more than 15 percent, small areas of soils where more than 10 percent of the surface is stony, and areas where bedrock is less than 40 inches from the surface.

The permeability of the Canton soils is moderately rapid in the surface layer and subsoil and rapid in the substratum. Available water capacity is moderate, and runoff is medium. This soil is extremely acid through strongly acid. The permeability of the Charlton soils is moderate to moderately rapid. Available water capacity is moderate, and runoff is medium. This soil is very strongly acid through medium acid.

Most areas of these soils are in woodland, and the soil is suited to trees. A small acreage is cleared and used for pasture. These soils are suitable for community development but are limited by stoniness, bedrock outcrops, and slope. Onsite sewage disposal systems need careful design and installation to prevent effluent from seeping to the surface. Stones and boulders need to be removed for landscaping. The use of straw bale sediment barriers, siltation basins, and temporary

diversions and quickly establishing plant cover help to control erosion during construction. Stones and rock outcrops make these soils unsuitable for cultivated crops and severely hinder the use of farming equipment.

According to the Bedrock Geologic Map of Rhode Island, Rhode Island Map Series No. 1, dated 1994, the area of the subject property lies within the rocks that are part of the Sterling Igneous Suite, and mapped as "Zsgg", which is defined as granite gneiss. This consists of pale-pink to gray medium-grained granite gneiss commonly with small porphyroclasts of microcline/orthoclase. Similar to alaskite gneiss, but with more than 3 % dark minerals. Compositions range from quartz monzonite to granite. Composed of sodic plagioclase quartz microline, biotite, opaque minerals; minor muscovite common; garnet more rare; accessory apatite and zircon; sphene present in some rocks; secondary chlorite. Typically is compositionally homogeneous, with strong foliation and locally well developed lineation defined by major minerals. Includes some rock mapped formerly as Ten Rod Granite Gneiss, Hope Valley Alaskite Gneiss, Potter Hill Granite Gneiss, and Scituate Granite Gneiss.

Review of the RIDEM Groundwater Zoning Map reveals that the subject property's area is located in a "GA" groundwater classification zone. This classification of groundwater is defined as "groundwater that may be suitable for public or private drinking water without treatment".

Review of the RIDEM's Groundwater Wellhead Protection Area Map reveals that the subject property is not located within a wellhead protection area. The closest wellhead protection area is located approximately 250 feet to the northeast of the subject property.

Based on visual observations, the depth to groundwater in the area of the subject property is estimated to be 10 to 15 feet below grade. Groundwater flow direction is expected to be towards the Pawcatuck River, although this can only be verified by conducting a subsurface investigation and associated hydrological survey.

The closest surface water body to the subject property is the Pawcatuck River that abuts the subject property to the east and north.

According to the FEMA Flood Insurance Map for Westerly, Rhode Island, Community Panel Number 4400240010B, dated January 2, 1981, most of the subject property is located in a Zone A flood zone, defined as areas located within the 100-year flood plain. The Zone A flood zone is associated with the Pawcatuck River.

8.0 SITE RECONNAISSANCE

The objective of the site reconnaissance was to identify recognized environmental conditions at, or in the immediate vicinity of, the subject property by means of a visual surficial inspection. Joseph T. Unsworth, P.E. and Robert Snyder conducted this visual reconnaissance of exterior portions of the subject property on Monday, February 27, 2006. Jacques Whitford's reconnaissance consisted of a systematic traverse of the subject property to provide a view of improvements, facilities, and grounds on the subject property. Photographs taken during the site inspection are presented in **Appendix 1**.

8.1 Methodology and Limiting Conditions

The methodology used to perform this ESA is consistent with those specified in the ASTM Designation: *E 1527-00, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process.* Information obtained and presented in this report from interviews conducted by Jacques Whitford of individuals listed in Section 8.0, is limited by the

quality, accuracy, and depth of responses give to Jacques Whitford. Furthermore, Jacques Whitford's visual and physical inspection of exterior characteristics of the subject property is limited, in some instances, by physical obstructions such as parked vehicles, leaves, snow, stored equipment, and other immovable objects. Other assumptions, limitations, and/or exclusions are documented in Sections 2.3 and 2.4.

8.2 General Site Setting

Based on Town records and visual observations, the subject property consists of one lot (see **Figures 1**). The area of the subject property has a topography that is hilly, with significant hills to the southeast and southwest. Lot 23 is not bound by any roads. Access to the subject property is from Potter Hill Road via a driveway that runs across the southeastern part of Lot 24 and onto the southern part of the subject property (see **Figure 2**). Potter Hill Road is a two-laned, two-directional roads maintained by the Town of Westerly. Jacques Whitford attempted to observe the land and improvements of adjoining properties to the subject property, from the subject property and from accessible public rights-of-way. Based on these observations, it is apparent that the general area of the subject property is a moderately developed area in the north central portion of Westerly, with Hopkinton, RI abutting the subject property to the east, and North Stonington, CT abutting the subject property to the northwest. The subject property is located in a moderately developed area with predominately residential, agricultural, and some commercial properties. According to the most recent Westerly Zoning Map, Lots 23 is located in an area zoned "RR-60", defined as Rural Residential with a minimal lot size of 60,000 square feet. **Figure 2** is a Site Plan sketch based on the observations made during the site visit.

8.3 Exterior Observations

Jacques Whitford conducted a visual and olfactory inspection of the exterior areas of the subject property by traversing the subject property in a grid-like pattern to cover the entire area of the subject property. The following paragraphs describe the observations made during the exterior inspection. It should be noted that because of the report format structure of this report, observations made in the following paragraphs actually might pertain to interior observations, which will be indicated, if applicable.

8.3.1 Aboveground Storage Tanks (ASTs)

One potential AST was observed in the in the northwest corner of the subject property. The potential AST appeared to be steel and rusted. The potential AST was located on the ground on the western property boundary. There were no liquids in the potential AST. There was no evidence of a release from the potential AST. A photograph of the potential AST is contained in **Appendix A**.

8.3.2 Underground Storage Tanks (USTs)

No evidence of USTs was observed on the subject property.

8.3.3 Indications of Solid Waste Disposal

Jacques Whitford did observe several areas of debris. Debris was located near the western side of the building near the foundations of former site buildings and other various areas. One pile of debris was observed in the northwest part of the subject property. The debris near the former foundations consisted primarily of wood and metal. Most of the debris pile was covered with soil. Observed debris included metal, wood, and steel drums. Refer to the pictures contained in

Appendix A for photographs of some of the debris observed. Also, an abandoned automobile was observed near the former boiler building.

8.3.4 Hazardous Substances in Connection with Identified Uses

The only containers observed on the exterior of the subject property by Jacques Whitford were the steel drums near the debris pile in the northwestern portion of the subject property. The unlabelled drums all were rusted and did not contain any liquids. Some drums were intact and some were not. No odors or other evidence of a release was observed from any of the drums. Approximately five automobile batteries were observed on the ground next to the building located west of the former boiler building. The batteries appeared to be intact with no evidence of a release observed.

8.3.5 Stressed Vegetation

Jacques Whitford did not observe any areas of stressed vegetation at the subject property.

8.3.6 Stained Soil or Pavement

No stained soil or pavement was observed on the subject property.

8.3.7 Pits, Ponds, or Lagoons

Jacques Whitford did not observe any pits, ponds, or lagoons associated with the subject property.

8.3.8 Odors

Jacques Whitford did not encounter any unusual odors during the site inspection of the subject property.

8.3.9 Pools of Liquid

Jacques Whitford did not visually observe any unidentified pools of the liquid on the subject property.

8.4 Interior Observations

Jacques Whitford conducted a visual and olfactory inspection of portions of the interior areas of the subject property. Several areas of the subject property could not be observed due to debris from collapsed roofs and/or unsafe floors due to deterioration and damage. The following paragraphs describe the observations made during the interior inspection. It should be noted that because of the report format structure of this report, observations made in the following paragraphs actually might pertain to exterior observations, which will be indicated, if applicable.

8.4.1 Unidentified Substance Containers

Jacques Whitford did not observe any unidentified substance containers during the inspection.

8.4.2 Discharge Features

The only discharge feature observed by Jacques Whitford was a pit in the floor of the building to the north of the former boiling building. Based on an observed hole in the side of the of the pit, this pit appears to discharge directly to the Pawcatuck River. No odors or staining were observed in the pit.

8.4.3 Polychlorinated Biphenyls (PCBs)

PCBs are a family of man-made chemicals that contain 209 individual compounds with varying toxicity. Commercial formulations of PCBs enter the environment as mixtures consisting of a variety of PCBs and impurities. Some commercial PCB mixtures are known in the United States by their industrial trade name, Aroclor. Due to their insulating and nonflammable properties, PCBs have been used widely as coolants and lubricants in transformers, capacitors, and other electrical equipment. PCBs have also been found in window caulking and other building applications. The manufacture of PCBs stopped in the United States in October 1977 because of evidence that PCBs accumulate in the environment and may cause health hazards for humans. Jacques Whitford did not observe any potential PCB containing equipment with the exception of the electrical panel associated with the elevator in the main building.

8.4.4 Asbestos Containing Materials (ACM)

Asbestos is the name for a group of naturally-occurring silicate minerals that can be separated into fibers. The fibers are strong, durable, and resistant to heat and fire. They are also long, thin, and flexible, so that they can even be woven into cloth. Due to these qualities, asbestos has been used in thousands of consumer, industrial, maritime, automotive, scientific, and building products. During the twentieth century, some 30 million tons of asbestos have been used in industrial sites, homes, schools, shipyards, and commercial buildings in the United States. Common ACMs included pipe-covering, insulating cement, insulating block, refractory and boiler insulation materials, transite board, fireproofing spray, joint compound, vinyl floor tile, ceiling tile, mastics (glue), roofing products, and duct insulation for HVAC applications. Inhalation of asbestos fibers can result in deleterious health effects.

For buildings constructed prior to 1980, the year ACM were banned, interested parties should assume that building materials such as vinyl floor tiling and mastics, acoustical ceiling tiles, roofing materials, cove-base molding, joint and window compounds, flexible fabric ductwork connectors, fire doors, electrical cable coverings, etc. contain asbestos unless proven by laboratory analysis or otherwise. Due to age of the buildings, it is possible that ACM exist in the buildings.

8.4.5 Lead-Based Paint (LBP)

Many houses, apartments, and other buildings built before 1978 have paint that contains lead (called lead-based paint). Lead from paint, chips, and dust can pose serious health hazards if not taken care of properly. Lead exposure is one of the most common preventable poisonings of childhood. It is estimated that one out of every six children in the United States, or a total of over three million children, have blood levels in the toxic range. Lead is a potent poison that can affect individuals at any age. Children with developing bodies are especially vulnerable because their rapidly developing nervous systems are particularly sensitive to the effects of lead.

Due to the age of the subject property buildings, it is possible that lead-based paint was utilized within the buildings. Jacques Whitford observed the majority of painted surfaces to be in very poor condition.

9.0 INTERVIEWS

9.1 Interview with Owner

Dr. Edward Caprapezza, current property owner, was present during Jacques Whitford's site reconnaissance. Comments considered noteworthy by Dr. Caprapezza have been included in the relevant sections of this report. In summary Dr. Carapezza stated that the site has been vacant since the 1960s, was serviced by an onsite well, and discharged all waste to the Pawcatuck River.

9.2 Interview with Manager of the Subject Property

The subject property is vacant and there was no manager of the subject property.

9.3 Interview with Occupants

The subject property is vacant and therefore, there are no occupants.

9.4 Interview with Local Government Officials

Interviews with local government officials included personnel of the Westerly Tax Assessor's Office, the Westerly Fire Department, and the Westerly Building Department. Comments considered noteworthy by these individuals have been included in the relevant sections of this report.

9.5 Interview with Others

No other individuals were interviewed during the course of this investigation.

10.0 FINDINGS

Based on Jacques Whitford's research and observations of the subject property and its surrounding area, Jacques Whitford has discovered potential recognized environmental conditions and/or environmental business risks, which are summarized in the following bulleted paragraphs:

- Asbestos containing materials may exist in the buildings.
- Painted surfaces were observed to be in poor condition and may contain lead based paint.
- The subject property is not served by municipal sewers. Records available from the Town of Westerly indicate that the subject property utilizes a septic system. However, according to the current property owner, all wastewater was believed to be discharged directly to the adjacent Pawcatuck River.
- Coal may have been used for fuel on the subject property.
- An area of dumping was observed in the north western part of the subject property. Miscellaneous debris was observed, including several rusted and unlabelled 55 gallon drums. None of the drums contained any liquid and were rusted.
- Former buildings at the subject property appear to have been demolished on the subject property.
- Significant water damage was observed on ceiling and floors of a majority of thethe buildings.

11.0 OPINION

Based on the noted recognized environmental conditions, Jacques Whitford believes there is a **Low** to **Moderate** risk of potential liability associated with the subject property. This opinion is based on observations and historic information indicate that the subject property has been used for industrial uses. An onsite septic system may have been used for the disposal of sanitary waste and process wastewater. Additionally, the there may be asbestos and lead based paint in the buildings. Other potential liabilities include PCB and/or mercury containing materials and mold growth resulting from the extensive water intrusion. Soils and groundwater at the subject property may have been impacted from improper disposal of hazardous materials and/or petroleum products, demolition of former structures, and the use and storage of coal.

12.0 CONCLUSIONS

Jacques Whitford has performed a Phase I ESA in conformance with the scope and limitations of ASTM Practice E 1527-00, on the property located and identified as Lot 23 on Westerly Tax Assessor's Plat Map 8. Any exceptions to, or deletions from, this practice is described in Sections 2.3 and 2.4 of this report. This assessment has revealed recognized environmental conditions in connection with the subject property, as listed in **Section 9, Findings**, of this report. Based on the noted recognized environmental conditions, Jacques Whitford has formulated the opinion stated in **Section 10.0, Opinion**, of this report.

Based on the noted Findings and Opinions obtained and developed for this report, Jacques Whitford believes that further environmental investigation is warranted on the subject property. Based on the information obtained as part of the Phase I ESA and observations made during the investigation, additional investigations are recommended. Specifically, the following are recommended:

- Completion of a Phase II ESA to assess the extent of impacts to soil and groundwater at the subject property. The Phase II ESA should include the completion of test pits in the area of the observed dumping and areas of potential coal storage. Also, unless it can be determined that a septic system did not exist at the subject property, soils borings should be completed and monitoring wells installed to assess impacts from the potential septic system.

- Prior to any demolition and/or renovations, an asbestos survey and pain chip sampling should be completed for all buildings on the subject property.

- A hazardous material disposal contractor should be hired to remove and dispose of all PCB and mercury containing materials (if any) in the buildings.

- All debris piles should be removed from the subject property and disposed of at appropriate disposal facilities.

- Since the buildings will required either demolition or extensive rehabilitations, Jacques Whitford does not recommend a mold survey at this time.

13.0 DEVIATIONS

All deletions, deviations, and/or additions from the Standard Practice E 1527-00 pertaining to this subject property and associated report, are described in Sections 2.2.3 and 2.2.4 of this report.

14.0 ADDITIONAL SERVICES

No other additional services were requested by the Client and are therefore not provided as part of this Phase I ESA report.

15.0 SIGNATURE(S) OF ENVIRONMENTAL PROFESSIONAL(S)

Joseph T. Unsworth
Project Manager — Date

Vincent L. Jacques, P.E.
Senior Reviewer — Date

16.0 QUALIFICATION(S) OF ENVIRONMENTAL PROFESSIONAL(S)

Please see resume(s) contained in **Appendix 6**.

17.0 REFERENCES

Interviews

Westerly Tax Assessor Personnel, February 27, 2006

Westerly Building Department Personnel, February 27, 2006

Westerly Fire Department Personnel, February 27, 2006

Dr. Edward Carapezza, February 27, 2006

Resources Consulted

Federal Environmental Databases/Source

National Priority List (NPL), EPA

Comprehensive Environmental Response, Compensation, and Liability Information System – Active (CERCLIS), EPA

Comprehensive Environmental Response, Compensation, and Liability Information System – No Further Remedial Action Planned (CERCLIS-NFRAP), EPA

Resource Conservation and Recovery Act - Corrective Action Report (RCRA CORRACTS), EPA

Resource Conservation and Recovery Information System – Treatment, Storage, and Disposal Facilities (RCRIS-TSD), EPA

Resource Conservation and Recovery Information System – Large Quantity Generator and Small Quantity Generator (RCRIS – LQG and SQG), EPA

Emergency Response Notification System (ERNS), EPA

State Environmental Databases/Source/Last EDR Contact Date

State Hazardous Waste Sites (SHWS), RIDEM

Solid Waste Facilities/Landfill Sites (SWF/LF), RIDEM

Leaking Underground Storage Tank Facilities (LUST), RIDEM

Registered Underground Storage Tank Facilities (UST), RIDEM

Oil & Hazardous Material Response Log/Spill Report (SPILLS), RIDEM

Agencies Consulted

Rhode Island Department of Environmental Management (RIDEM), Providence, Rhode Island

Westerly Library, Westerly, Rhode Island

Other Resources

Ashaway, Rhode Island Quadrangle Topographic Map developed by the United States Geologic Survey and retrieved from Topozone.com

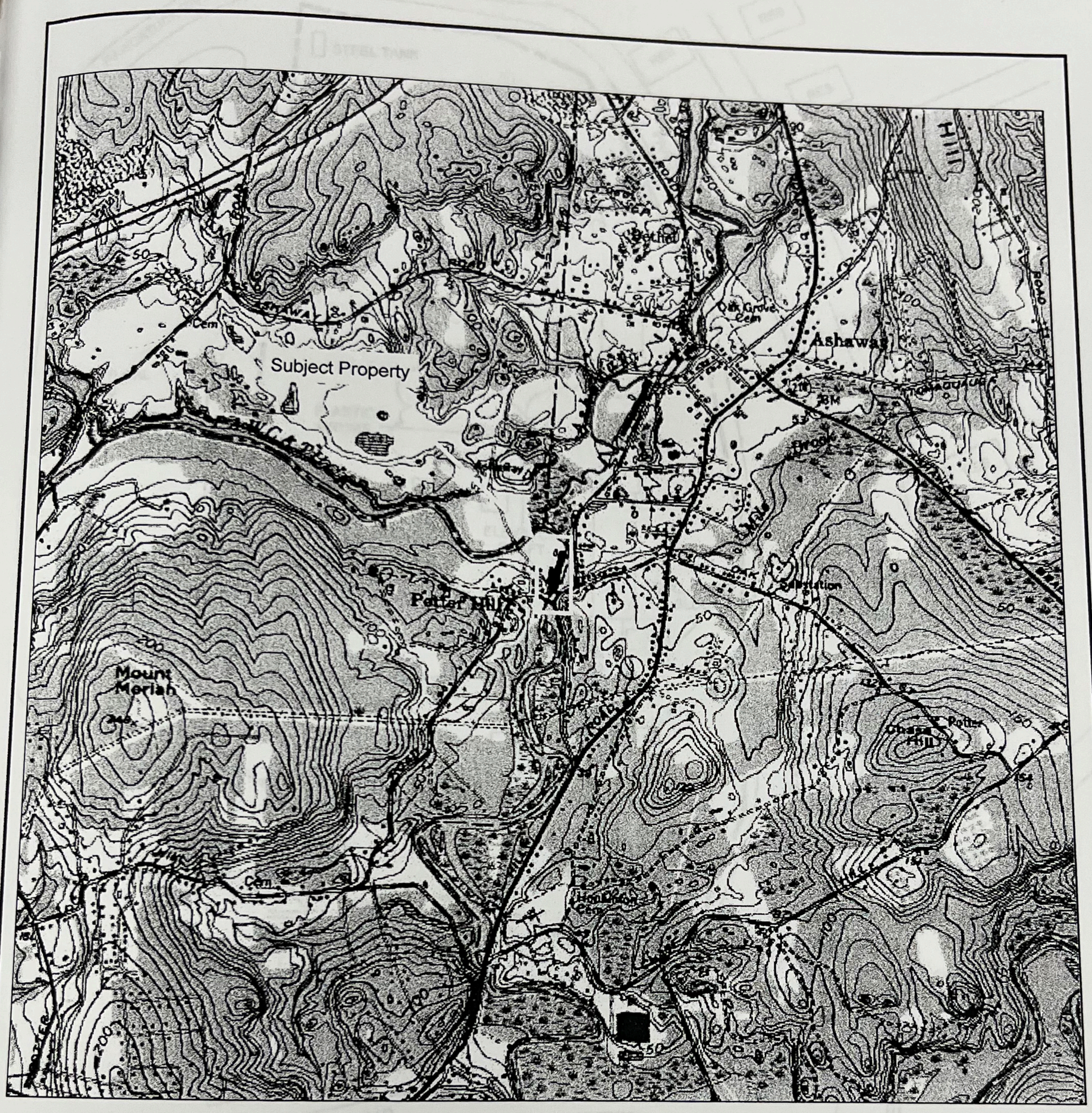
Soil Survey of Rhode Island developed by the United States Department of Agriculture Soil Conservation Service and the Rhode Island Agricultural Experiment Station, issued July 1981

Wellhead Protection Areas developed by the Rhode Island Department of Environmental Management, issued 1991

Groundwater Classification Areas developed by the Rhode Island Department of Environmental Management, issued 1991

Bedrock Geologic Map of Rhode Island, Rhode Island Map Series No. 1, compiled by O.D. Hermes, L.P. Gromet, D.P. Murray and Assisted by N.A. Hamidzada, issued 1994

Flood Insurance Rate Map (FIRM) developed by the Federal Emergency Management Agency and the Federal Insurance Administration, dated 1982



SOURCE: USGS TOPOGRAPHIC MAP 1984

Jacques Whitford Company, Inc.

JACQUES WHITFORD LOCATION: LINCOLN, RI	BASEMAP SOURCE: ASHAWAY QUAD	NORTH	DRAWING TITLE: SITE LOCATION MAP POTTER HILL ROAD WESTERLY, RI
DATE PREPARED: 2-14-06 / PREPARED BY: MJB	APPROXIMATE SCALE: 1:24,000		
PROJECT NAME/FILE NAME: MILL BLDG./LOCUS	PROJECT NUMBER/PHASE: 1009825.		PREPARED FOR: RENEWABLE RESOURCES FIGURE NO. 1

APPENDIX B

APPENDIX C

APPENDIX D

PAWCATUCK RIVER
STEEL TANK
DEBRIS PILE & DRUMS
AGRICULTURAL FIELD
ABANDONED AUTO
PLASTIC DRUMS
CAR BATTERIES (4)
ELEVATOR SHAFT
COLLAPSED BLDG
ASPHALT PAVEMENT
BLDG 2
FORMER BLDG. FOUNDATIONS
BEDROCK OUTCROP
WATER RACE-WAY
DAM
PAWCATUCK RIVER
RES
RES
RES
CLAY STREET
NORTH
RES
LAUREL STREET
RES
RES
RES
RES
RES
RES
RES
RES
MAXSON STREET
BEDROCK OUTCROP
POTTER HILL ROAD
FIELD
RIVER ROAD

Jacques Whitford Company, Inc.

JACQUES WHITFORD LOCATION: 24 ALBION ROAD, SUITE 220, LINCOLN, RI				
DATE PREPARED: 3-8-06	DESIGNED BY: JTU	DRAWN BY: WL	CHECKED BY: VLJ	REVIEWED BY: JTU
REVISION DATE:	REVISION NO:	DRAWN BY:	CHECKED BY:	REVIEWED BY:
PROJECT NAME/FILE NAME: 198 POTTER HILL	PROJECT NUMBER/PHASE: 1009825	SCALE: NTS		

DRAWING TITLE:

SITE PLAN

198 POTTER HILL ROAD
WESTERLY, RI

PREPARED FOR: Renewable Resources Inc.

FIGURE NO. 2

Table 1: Chain-of-Ownership Summary

Date	Owner	Book/Page
Plat Map 8, Lot 23		
10/08/1992	Renewable Resources	432/53
8/15/1955	Helen E. Cottrell	74/354
5/6/1930	Swift River Woolen Co.	53/443
3/12/1930	Fredrick T. Lawrence	53/190

Table 2: Adjoining Properties Summary

Plat/Lot	Current Owner	Observed Usage/Occupants
8/24	Allison B. Goodsell	residential
8/18	Lloyd & Ann Baker	residential
8/22	Dale Ann Edwards	residential

APPENDIX A
Photographs

APPENDIX B

APPENDIX C

APPENDIX D

APPENDIX A

Photographs

Photo 1
A view of the subject property building looking west from across the Pawcatuck River.

Photo 2
A view of the southwestern part of the subject property buildings.

Photo 3
A view of the western side of the main building.

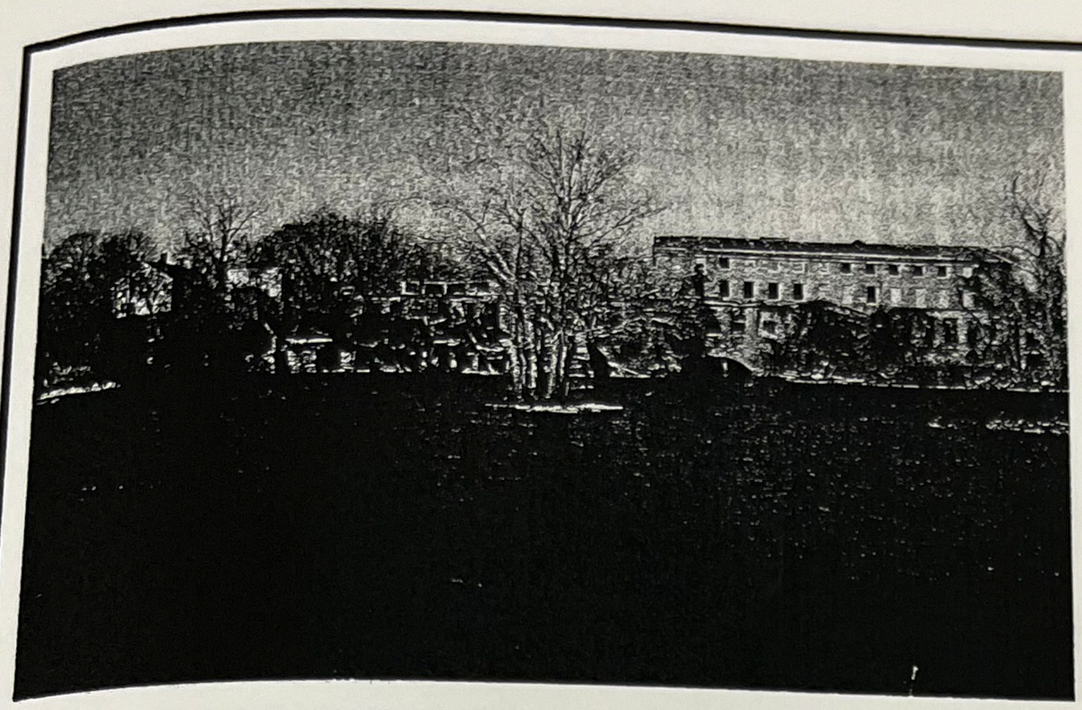


Photo 1
A view of the subject property building looking west from across the Pawcatuck River.

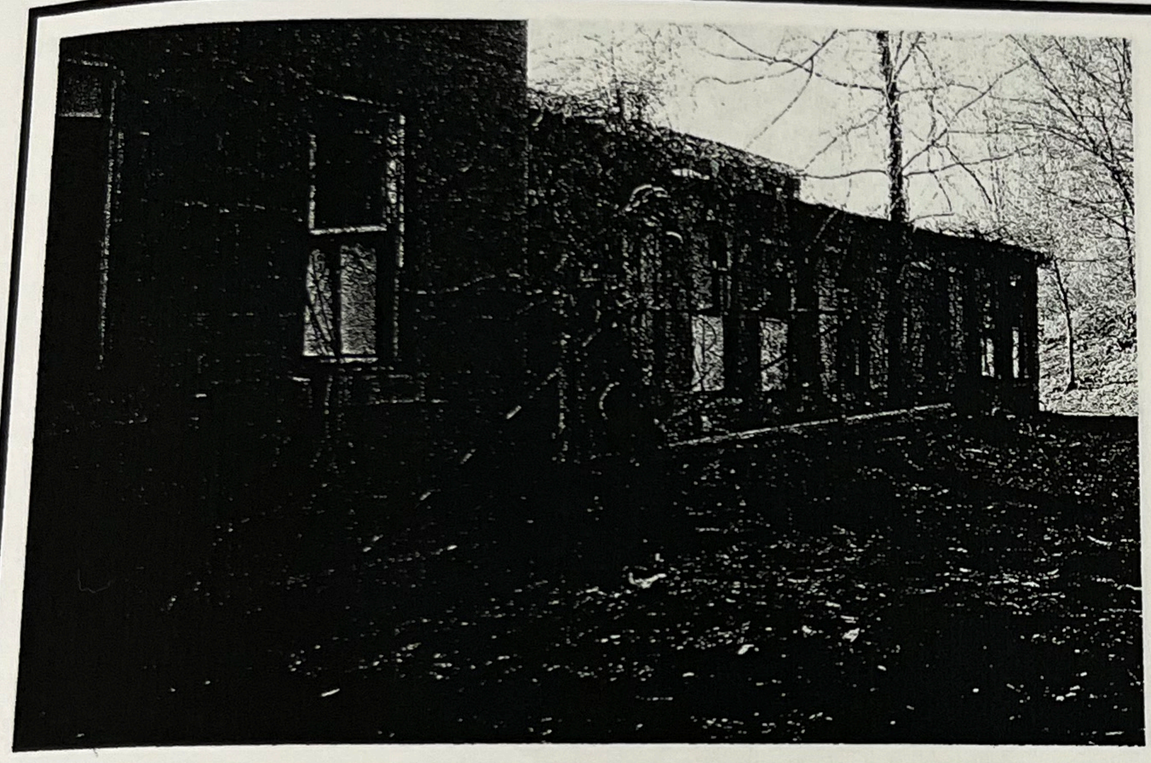


Photo 2
A view of the southwestern part of the subject property buildings.



Photo 3
A view of the western side of the main building.

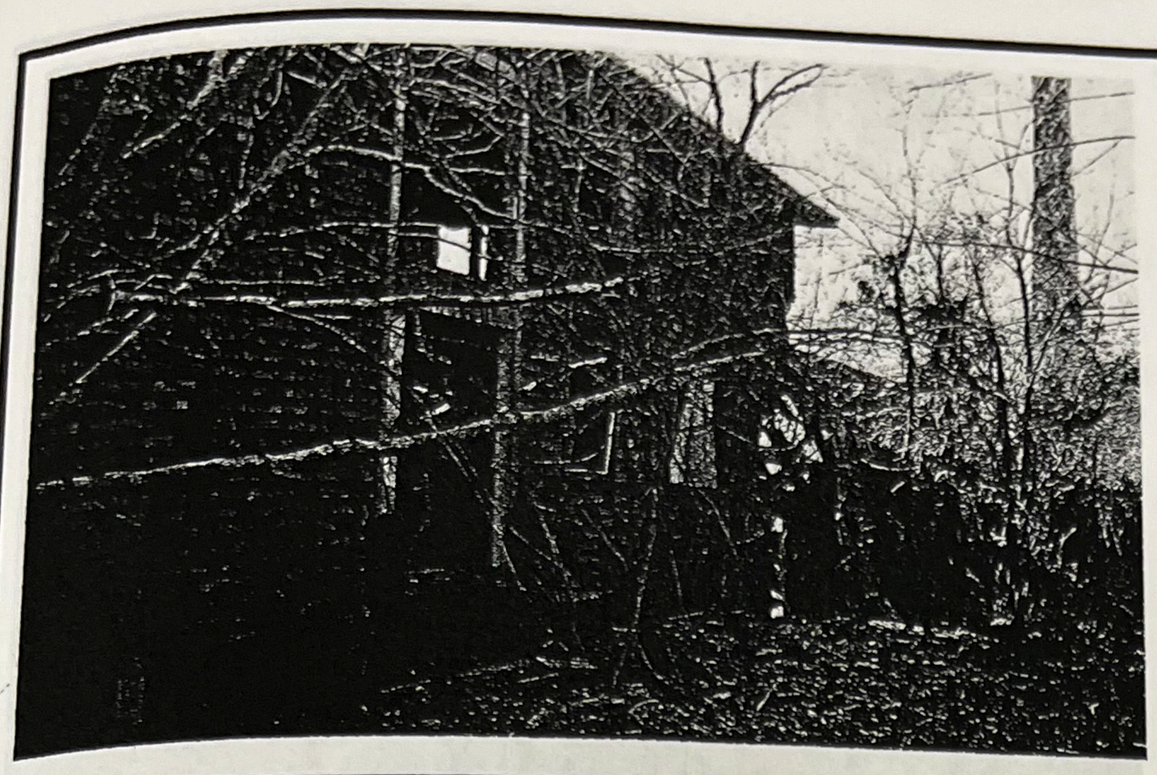


Photo 4
A view of the northwest part of the subject property buildings.



Photo 5
A view of the building located to the west of the former boiler building.

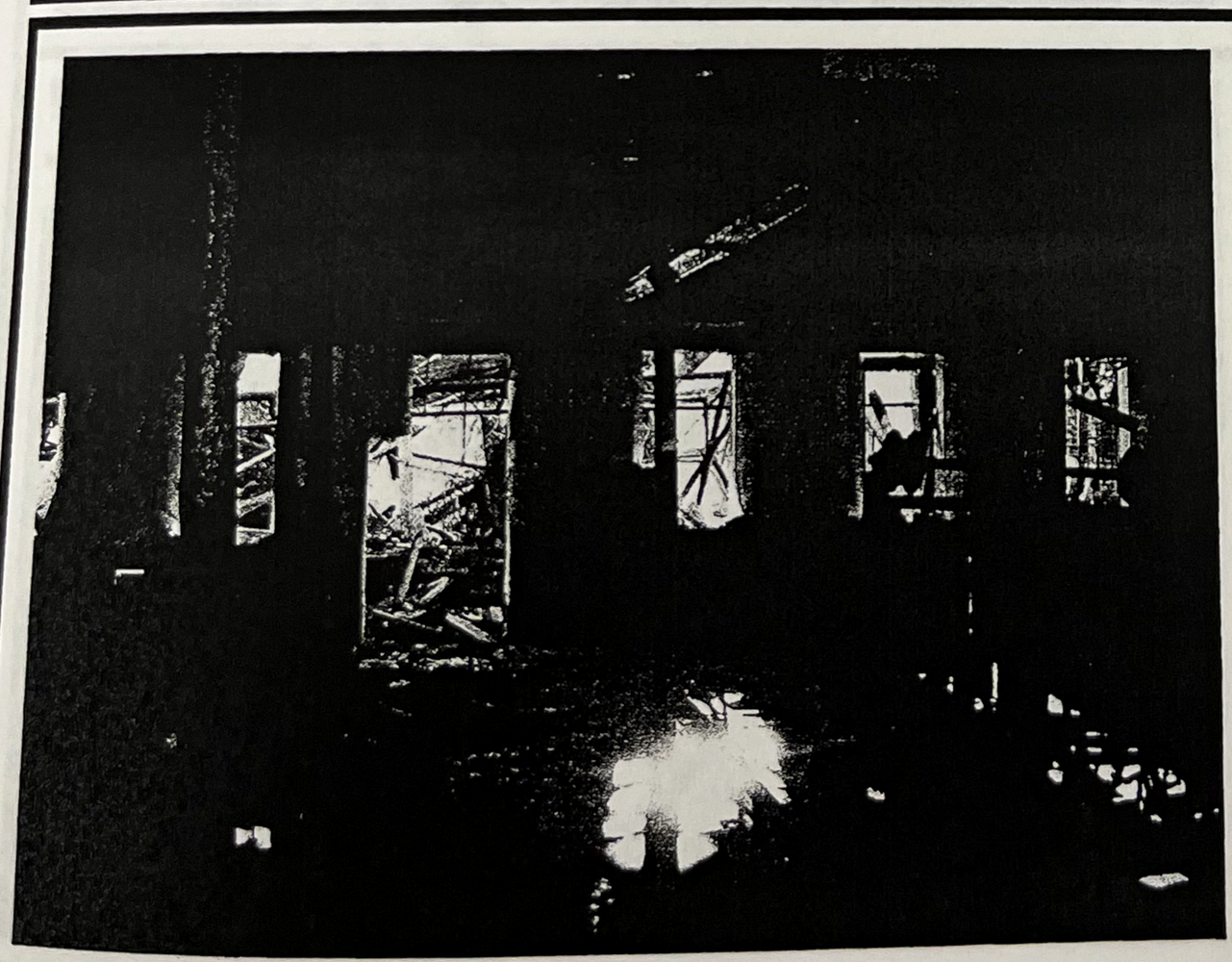


Photo 6
A view of first floor of main building.

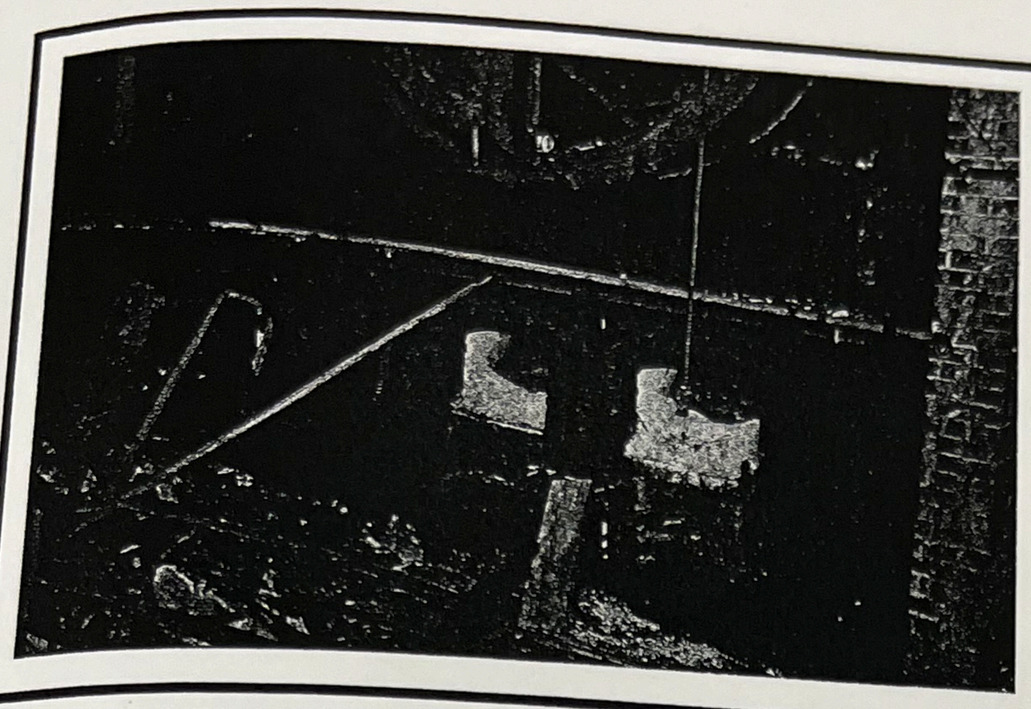


Photo 10
A view of boilers in former boiler building.



Photo 11
A view of the building north of the former boiler building.



Photo 12
A view of pit in floor of building north of the former boiler building.



Photo 13
A view of debris on top of foundation of former building, west of main building.



Photo 14
A view of the buried debris and drums in the northwest part of the subject property.

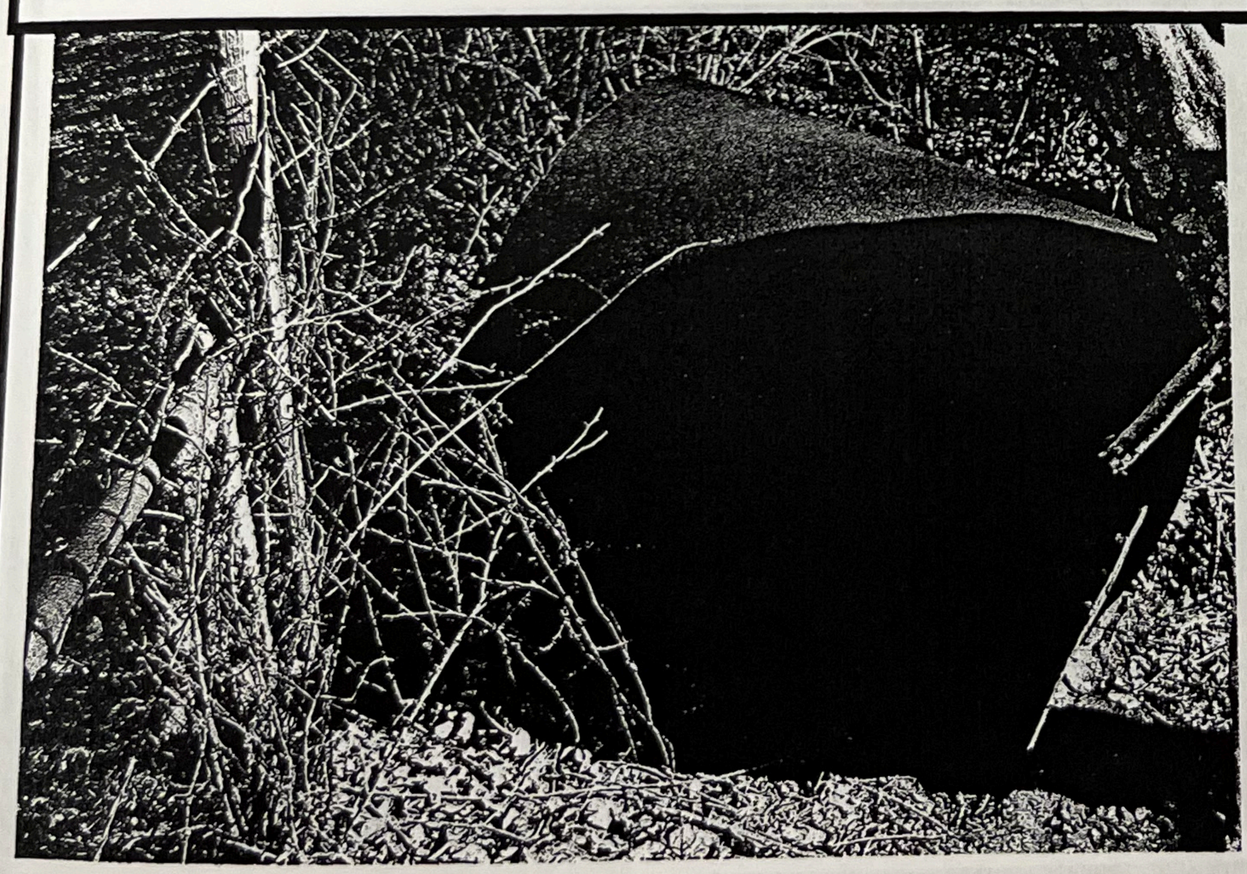


Photo 15
Potential tank located on the northwestern subject property boundary.

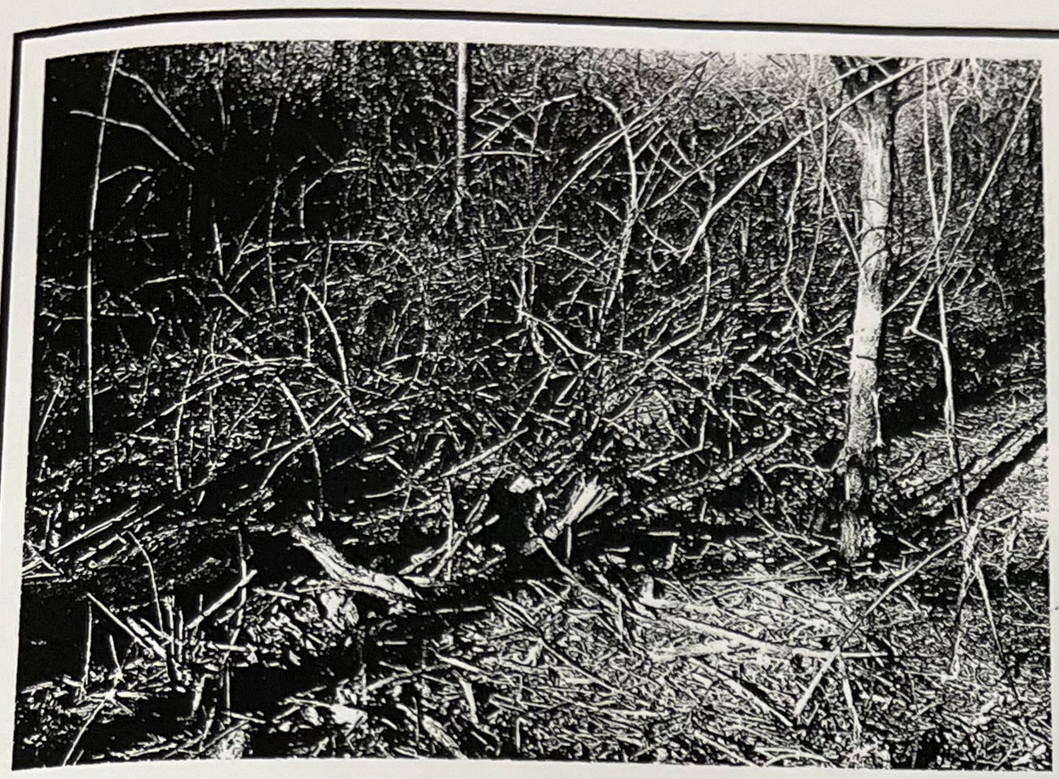


Photo 16
A view of cut plastic drums.



Photo 17
A view of automobile batteries adjacent to building located west of former boiler building.

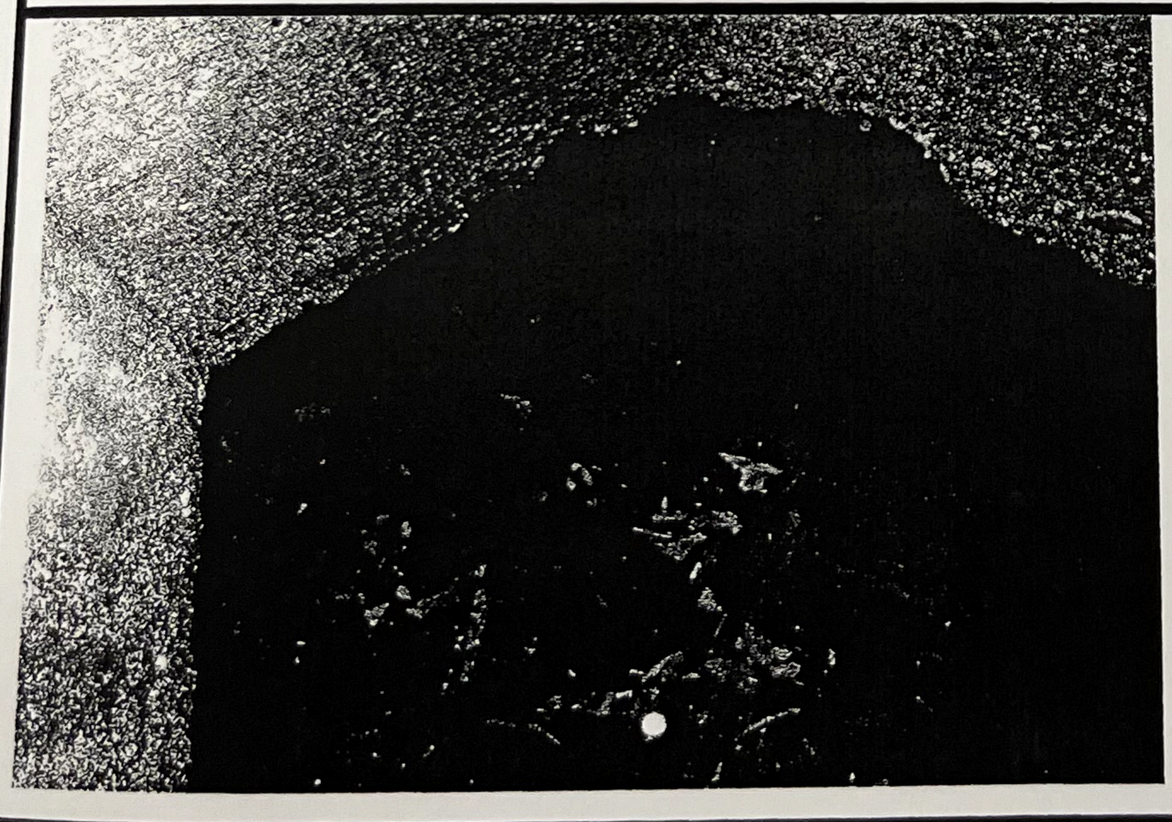


Photo 18
A view of valve in ground (typical).

EDR® Environmental Data Resources Inc

"Linking Technology with Tradition"®

Sanborn® Map Report

Ship To: Melissa Jacques-Bibeault
Jacques Whitford, Inc.
24 Albion Road
lincoln, RI 02865

Order Date: 2/13/2006 **Completion Date:** 2/15/2006
Inquiry #: 1612788.1s
P.O. #: na
Site Name: Potter Hill Road
Address: Potter Hill Road
City/State: Westerly, RI 02891
Cross Streets:

Customer Project:
1012696EDR 781-551-0470

This document reports that the largest and most complete collection of Sanborn fire insurance maps has been reviewed based on client supplied information, and fire insurance maps depicting the target property at the specified address were not identified.

NO COVERAGE

NOTE: The reseller MUST deliver this report in its entirety to its client.

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APPENDIX B

APPENDIX C

APPENDIX D



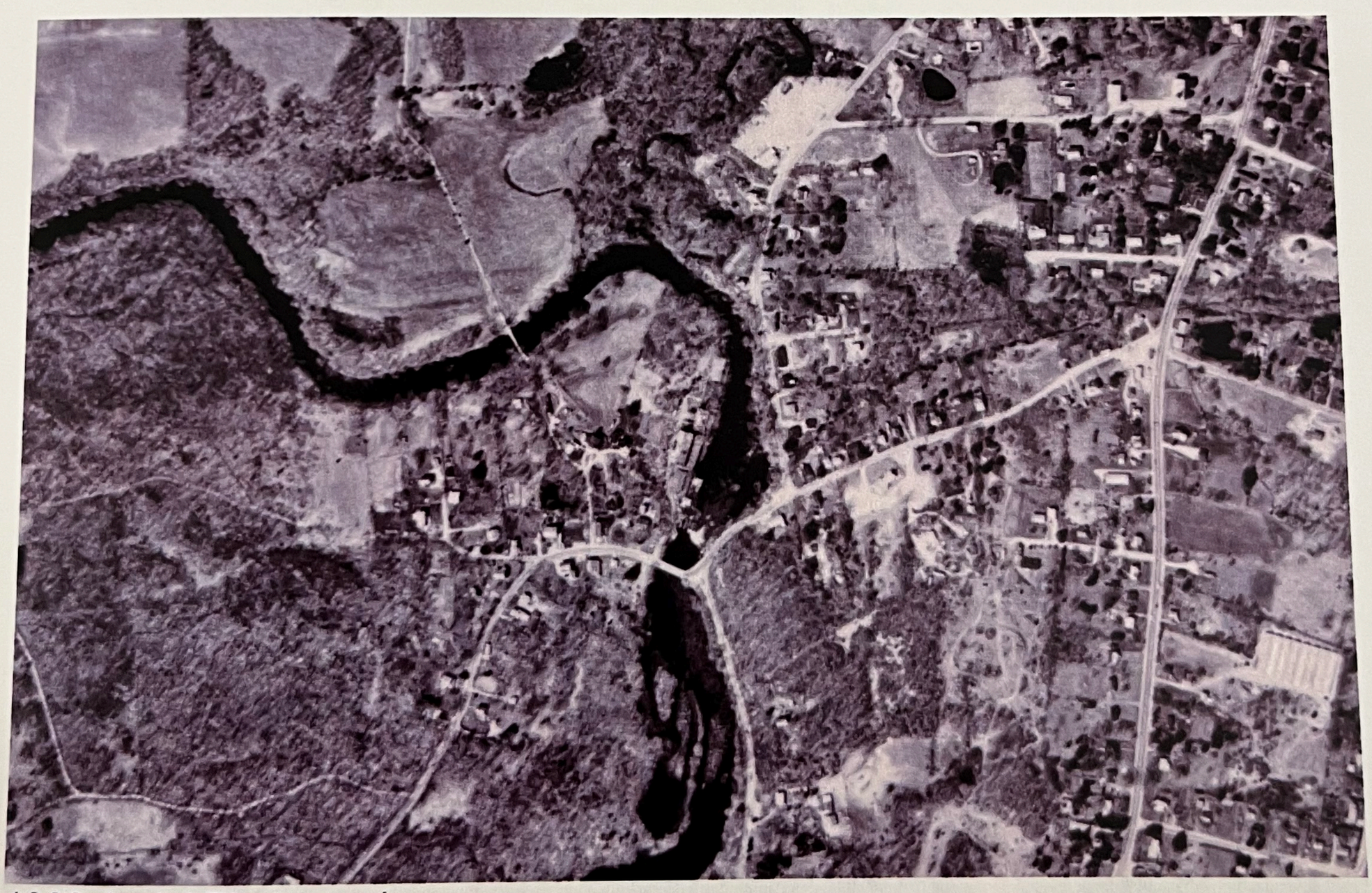
2003 Aerial Photograph



1997 Aerial Photograph



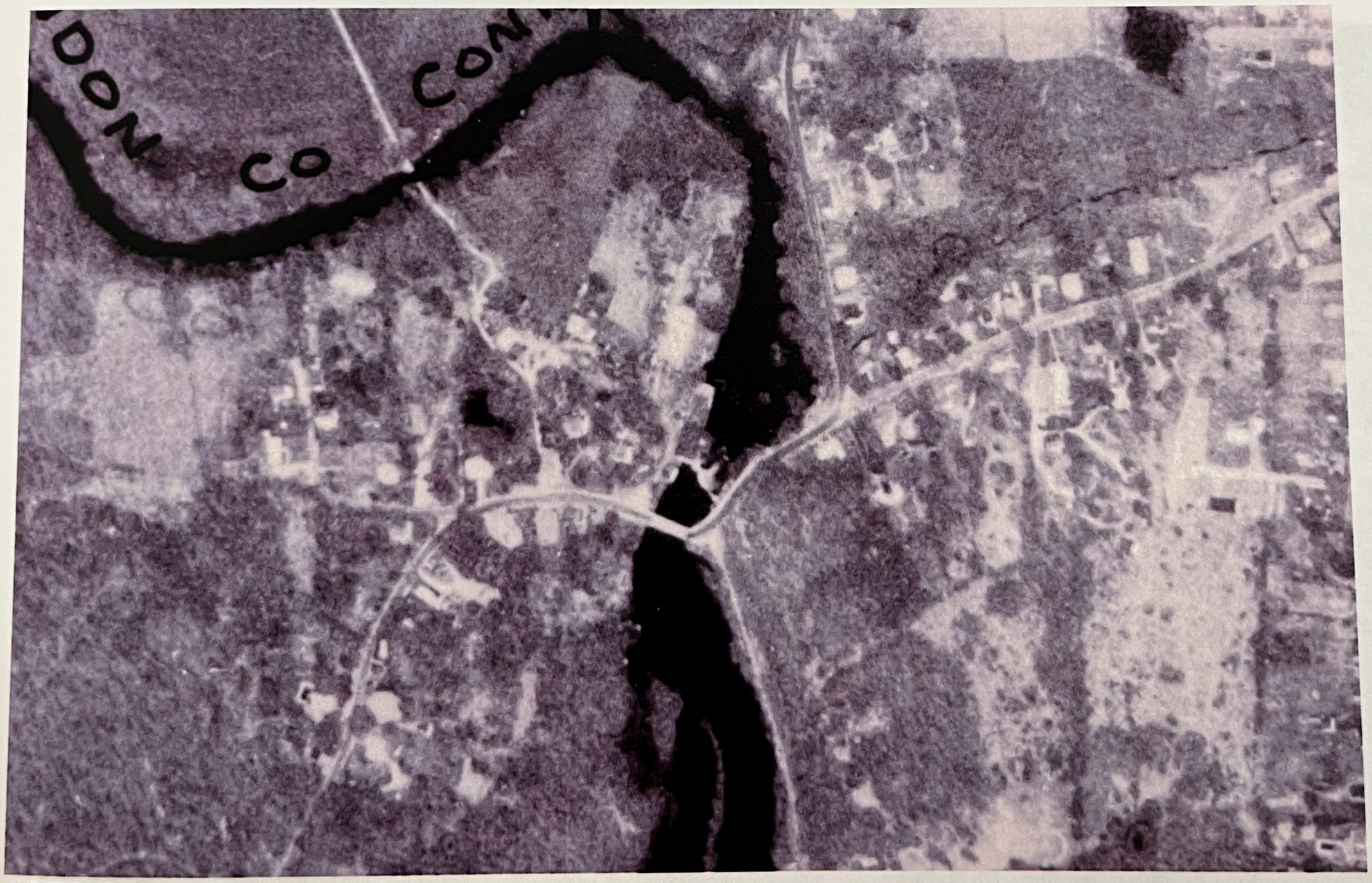
1992 Aerial Photograph



1988 Aerial Photograph



1981 Aerial Photograph



1976 Aerial Photograph



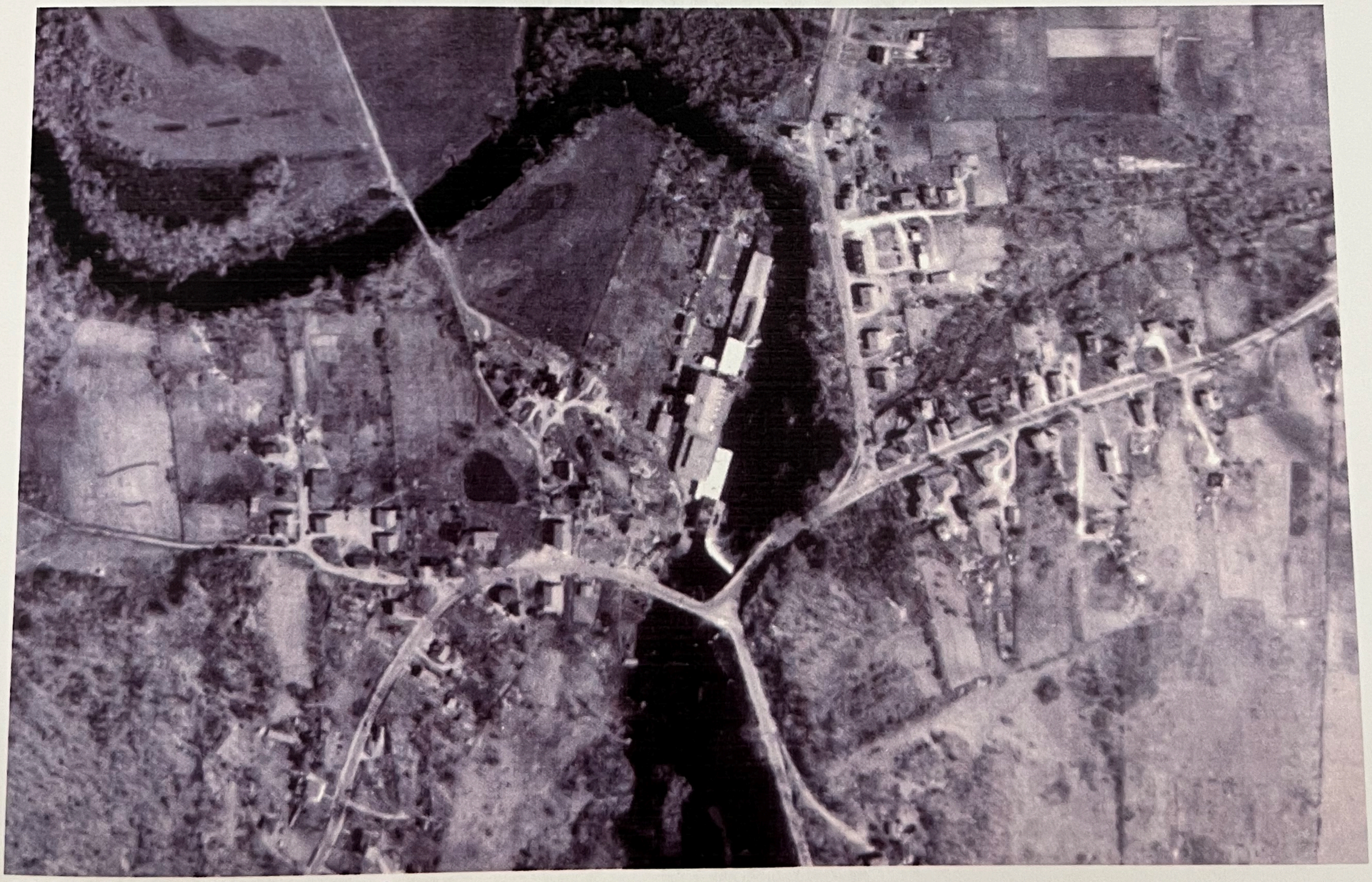
1972 Aerial Photograph



1962 Aerial Photograph



1951-52 Aerial Photograph



1939 Aerial Photograph

FirstSearch Technology Corporation

Environmental FirstSearch™ Report

TARGET PROPERTY:

POTTER HILL ROAD

WESTERLY RI 02891

Job Number: 1009825.

APPENDIX C

Regualatory Records Documentation

Jacques Whitford, Inc.

24 Albion Road, Suite 220

Lincoln, RI 02865

02-10-06

Tel: (781) 551-0470 Fax: (781) 551-0471

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FirstSearch Technology Corporation

Environmental FirstSearch™ Report

TARGET PROPERTY:

POTTER HILL ROAD

WESTERLY RI 02891

Job Number: 1009825.

PREPARED FOR:

Jacques Whitford, Inc.

24 Albion Road, Suite 220

Lincoln, RI 02865

02-10-06

Tel: (781) 551-0470

Fax: (781) 551-0471

Environmental FirstSearch is a registered trademark of FirstSearch Technology Corporation. All rights reserved.

Environmental FirstSearch
Search Summary Report

Target Site: POTTER HILL ROAD
WESTERLY RI 02891

FirstSearch Summary

Database	Sel	Updated	Radius	Site	1/8	1/4	1/2	1/2>	ZIP	TOTALS
NPL	Y	01-13-06	1.00	0	0	0	0	0	0	0
CERCLIS	Y	01-13-06	0.50	0	0	0	0	-	1	1
NFRAP	Y	08-01-05	0.25	0	0	0	-	-	0	0
RCRA TSD	Y	09-22-05	0.50	0	0	0	0	-	0	0
RCRA COR	Y	12-10-05	1.00	0	0	0	0	0	0	0
RCRA GEN	Y	12-10-05	0.25	0	0	0	-	-	2	2
ERNS	Y	12-31-05	0.25	0	0	1	-	-	5	6
FINDS	Y	09-12-05	0.25	0	0	0	-	-	36	36
State Sites	Y	10-04-05	1.00	0	0	0	0	0	4	4
Spills-1990	Y	01-04-01	0.25	0	0	1	-	-	92	93
SWL	Y	04-06-05	0.50	0	0	0	0	-	1	1
REG UST/AST	Y	11-28-05	0.25	0	0	0	-	-	10	10
Leaking UST	Y	10-04-05	0.50	0	0	0	3	-	7	10
- TOTALS -				0	0	2	3	0	158	163

Notice of Disclaimer

Due to the limitations, constraints, inaccuracies and incompleteness of government information and computer mapping data currently available to FirstSearch Technology Corp., certain conventions have been utilized in preparing the locations of all federal, state and local agency sites residing in FirstSearch Technology Corp.'s databases. All EPA NPL and state landfill sites are depicted by a rectangle approximating their location and size. The boundaries of the rectangles represent the eastern and western most longitudes; the northern and southern most latitudes. As such, the mapped areas may exceed the actual areas and do not represent the actual boundaries of these properties. All other sites are depicted by a point representing their approximate address location and make no attempt to represent the actual areas of the associated property. Actual boundaries and locations of individual properties can be found in the files residing at the agency responsible for such information.

Waiver of Liability

Although FirstSearch Technology Corp. uses its best efforts to research the actual location of each site, FirstSearch Technology Corp. does not and can not warrant the accuracy of these sites with regard to exact location and size. All authorized users of FirstSearch Technology Corp.'s services proceeding are signifying an understanding of FirstSearch Technology Corp.'s searching and mapping conventions, and agree to waive any and all liability claims associated with search and map results showing incomplete and or inaccurate site locations.

Environmental FirstSearch
Site Information Report

Request Date: 02-10-06
Requestor Name: Melissa Jacques-Bibeault
Standard: ASTM

Search Type: COORD
Job Number: 1009825.

TARGET ADDRESS: POTTER HILL ROAD
WESTERLY RI 02891

Demographics

Sites: 163 **Non-Geocoded:** 158 **Population:** NA
Radon: 0.7 - 7.7 PCI/L

Site Location

	Degrees (Decimal)	Degrees (Min/Sec)		UTMs
Longitude:	-71.797	-71:47:49	**Easting:**	266230.455
Latitude:	41.4147	41:24:53	**Northing:**	4588357.863
			Zone:	19

Comment

Comment:FORMER PAWCATUCK WOOLEN MILLS

Additional Requests/Services

Adjacent ZIP Codes: 1 Mile(s)

ZIP Code	City Name	ST	Dist/Dir	Sel
02804	ASHAWAY	RI	0.00 --	Y
06359	NORTH STONINGTON	CT	0.14 NW	Y

Services:

	Requested?	Date
Sanborns	Yes	02-10-06
Aerial Photographs	No	
Historical Topos	No	
City Directories	No	
Title Search	No	
Municipal Reports	No	
Online Topos	No	

Environmental FirstSearch
Sites Summary Report

TARGET SITE: POTTER HILL ROAD
WESTERLY RI 02891

JOB: 1009825.
FORMER PAWCATUCK WOOLEN MILLS

TOTAL: 163 **GEOCODED:** 5 **NON GEOCODED:** 158 **SELECTED:** 0

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	Page No.
1	ERNS	H30743/FIX FAC	70A LAUREL DR. ASHWAY RI 02804	0.17 NE	1
3	SPILLS	64 LAUREL ST 00-078	64 LAUREL ST HOPKINTON RI 02833	0.23 NE	1
4	LUST	KENYON S VARIETY 1402-LS/SRO - SOIL REMOVAL O	ROUTE 3 AND MAXON ST. HOPKINTON RI 02833	0.32 NE	2
5	LUST	IMPERIAL HOME D+COR 1414-LS/SRO - SOIL REMOVAL O	50 CHASE HILL ROAD HOPKINTON RI 02833	0.35 NE	2
2	LUST	HENDEL CHEVRON 1401-LS/I - INACTIVE	ROUTE 3 POLE 867 HOPKINTON RI 02832	0.36 SE	2

Environmental FirstSearch
Sites Summary Report

TARGET SITE: POTTER HILL ROAD
WESTERLY RI 02891

JOB: 1009825.
FORMER PAWCATUCK WOOLEN MILLS

TOTAL: 163 **GEOCODED:** 5 **NON GEOCODED:** 158 **SELECTED:** 0

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	Page No.
	CERCLIS	WESTERLY DRUMS RI0690390026/NOT PROPOSED	WESTERLY RI 02891	NON GC	N/A
	ERNS	UNKNOWN 224058/UNKNOWN (NRC)	PAWCATUCK RIVER WESTERLY RI 02891	NON GC	N/A
	ERNS	442632/UNKNOWN	BRADFORD FISHING AREA RTE 2 WESTERLY RI 02891	NON GC	N/A
	ERNS	UNKNOWN 424845/MARINE VESSEL (EPA R	NEAR THE CHARLESTOWN BEACH WESTERLY RI 02891	NON GC	N/A
	ERNS	UNKNOWN 153996/FIXED FACILITY	WHITE ROCK ROAD WESTERLY RI 02891	NON GC	N/A
	ERNS	D41256/UNKNOWN	WESTERLY RI 02891	NON GC	N/A
	FINDS	MICROSONICS INC CTD980669600	TECHNOLOGY PK NORTH STONINGT CT 06359	NON GC	N/A
	FINDS	WESTERLY DRUMS 110009321992/FRS	WESTERLY RI 02891	NON GC	N/A
	FINDS	WESTERLY HIGH SCHOOL 110017887795/FRS	23 WARD STREET WESTERLY RI 02891	NON GC	N/A
	FINDS	WESTERLY WATER DEPARTMENT 110012958781/FRS	68 WHITE ROCK RD WESTERLY RI 02891	NON GC	N/A
	FINDS	ASHAWAY ELEMENTARY 110011759098/FRS	12 HILLSIDE AVENUE ASHAWAY RI 02804	NON GC	N/A
	FINDS	ASHAWAY ELEMENTARY SCHOOL 110021651372/FRS	12A HILLSIDE AVENUE ASHAWAY RI 02804	NON GC	N/A
	FINDS	ASHAWAY LINE & TWINE MFG CO 110014362590/FRS	9 LAUREL ST HOPKINTON RI 02804	NON GC	N/A
	FINDS	C & A WALLCOVERINGS 110010364774/FRS	CHASE HILL ROAD ASHAWAY RI 02804	NON GC	N/A
	FINDS	WHEELER MIDDLE SCHOOL 110021679806/FRS	298 NORWICH/WESTERLY ROAD NORTH STONINGT CT 06359	NON GC	N/A
	FINDS	M H GARDEN PARK 110013188264/FRS	20 PROVIDENCE/NEW LONDON TU NORTH STONINGT CT 06359	NON GC	N/A
	FINDS	NORTH STONINGTON TRANSFER STATION 110015768267/FRS	215 WINTERHOG HILL RD NORTH STONINGT CT 06359	NON GC	N/A
	FINDS	NORTH STONINGTON BOARD OF EDUCATIO 110011780661/FRS	P.O. BOX 6001 NORTH STONINGT CT 06359	NON GC	N/A
	FINDS	WHEELER MIDDLE 110011760399/FRS	311 NORWICH/WESTERLY RD NORTH STONINGT CT 06359	NON GC	N/A
	FINDS	US COAST GUARD WESTERLY DRUMS SITE RI0690390026	LAT 41 22.5 N LONG 71 50.0 WESTERLY RI 02891	NON GC	N/A

Environmental FirstSearch
Sites Summary Report

TARGET SITE: POTTER HILL ROAD
WESTERLY RI 02891

JOB: 1009825.
FORMER PAWCATUCK WOOLEN MILLS

TOTAL: 163 **GEOCODED:** 5 **NON GEOCODED:** 158 **SELECTED:** 0

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	Page No.
	FINDS	WHEELER HIGH SCHOOL 110021637308/FRS	298 NORWICH/WESTERLY ROAD NORTH STONINGT CT 06359	NON GC	N/A
	FINDS	BETHEL VILLAGE WATER ASSOCIATION 110012958727/FRS	LYNN LANE HOPKINTON RI 02804	NON GC	N/A
	FINDS	SCWA, NORTH STONINGTON DIVISION (N 110013188255/FRS	ADDRESS NOT IN SDWIS NORTH STONINGT CT 06359	NON GC	N/A
	FINDS	NORTH STONINGTON DPW GARAGE 110015766571/FRS	11 WYASSUP RD NORTH STONINGT CT 06359	NON GC	N/A
	FINDS	NORTH STONINGTON ELEMENTARY 110011760406/FRS	311 NORWICH/WESTERLY RD NORTH STONINGT CT 06359	NON GC	N/A
	FINDS	SCWA, CEDAR RIDGE DIVISION 110013188246/FRS	ADDRESS NOT IN SDWIS NORTH STONINGT CT 06359	NON GC	N/A
	FINDS	HOMEBOUND 110021637344/FRS	297 NORWICH/WESTERLY ROAD NORTH STONINGT CT 06359	NON GC	N/A
	FINDS	GRISWOLD TEXTILE PRINT 110007176849/FRS	WHITE ROCK WESTERLY RI 02891	NON GC	N/A
	FINDS	TOWER STREET SCHOOL 110021688431/FRS	93 TOWER STREET WESTERLY RI 02891	NON GC	N/A
	FINDS	BRANCATOS WESTERLY SANITATION INC RID062304985	POTTER HILL RD WESTERLY RI 02891	NON GC	N/A
	FINDS	BRANCATOS WESTERLY SANITATION INC 110007824818/FRS	POTTER HILL RD WESTERLY RI 02891	NON GC	N/A
	FINDS	CONNECTOR TECHNOLOGY CORP RID981885866	AIRPORT RD WESTERLY RI 02891	NON GC	N/A
	FINDS	DUNN S CORNERS SCHOOL 110021688388/FRS	PLATEAU ROAD WESTERLY RI 02891	NON GC	N/A
	FINDS	CEDAR RIDGE WATER ASSOC 110022521617/FRS	7 POND STREET NORTH STONINGT CT 06359	NON GC	N/A
	FINDS	RITEWAY AUTO SERVICE INC 110007826166/FRS	BRADFORD RD WESTERLY RI 02891	NON GC	N/A
	FINDS	RITEWAY AUTO SVC INC RID981889488	BRADFORD RD WESTERLY RI 02891	NON GC	N/A
	FINDS	RITEWAY AUTO SVC INC RID982746737	BRADFORD RD WESTERLY RI 02891	NON GC	N/A
	FINDS	SPIKES GARAGE RID981898166	WILSON ST WESTERLY RI 02891	NON GC	N/A
	FINDS	SPIKES GARAGE 110007826282/FRS	WILSON ST WESTERLY RI 02891	NON GC	N/A
	FINDS	SPRINGBROOK ELEMENTARY SCHOOL 110021485454/FRS	39 SPRING BROOK ROAD WESTERLY RI 02891	NON GC	N/A

Environmental FirstSearch
Sites Summary Report

TARGET SITE: POTTER HILL ROAD
WESTERLY RI 02891

JOB: 1009825.
FORMER PAWCATUCK WOOLEN MILLS

TOTAL: 163 **GEOCODED:** 5 **NON GEOCODED:** 158 **SELECTED:** 0

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	Page No.
	FINDS	STATE STREET SCHOOL 110021485515/FRS	STATE STREET WESTERLY RI 02891	NON GC	N/A
	FINDS	CONNECTOR TECHNOLOGY CORP 110007826102/FRS	AIRPORT RD WESTERLY RI 02891	NON GC	N/A
	LUST	HENDEL S SUNOCO 3807-LS/I - INACTIVE	ROUTE 2 @ ROUTE 49 WESTERLY RI 02891	NON GC	N/A
	LUST	WESTERLY DOT 3835-LS/I - INACTIVE	COMMERCE ST WESTERLY RI 02891	NON GC	N/A
	LUST	FORMER SHELL FACILITY #136349 45717/1	NORTH STONINGT CT 06359	NON GC	N/A
	LUST	ARLINGTON ACRES 29172/4	151 STEPHENS DR. NORTH STONINGT CT 06359	NON GC	N/A
	LUST	ARLINGTON ACRES 2064/YES	151 STEPHENS DR NORTH STONINGT CT 06359	NON GC	N/A
	LUST	TEXACO STATION 3815-LS/I - INACTIVE	ROUTE 2/ IN CONNECTICUT WESTERLY RI 02891	NON GC	N/A
	LUST	WERI 3836-LS/SRO - SOIL REMOVAL O	ASHAWAY ROAD WESTERLY RI 02891	NON GC	N/A
	RCRAGN	SPIKES GARAGE RID981898166/SGN	WILSON ST WESTERLY RI 02891	NON GC	N/A
	RCRAGN	ASHAWAY LINE AND TWINE 9 LAUREL RIR000502815/LGN	9 LAUREL ST. HOPKINTON RI 02804	NON GC	N/A
	SPILLS	98-556	WESTERLY RI 02891	NON GC	N/A
	SPILLS	ROUTE 1 97-255	ROUTE 1 WESTERLY RI 02891	NON GC	N/A
	SPILLS	STATE BEACH 93-038	STATE BEACH WESTERLY RI 02891	NON GC	N/A
	SPILLS	TRANSFORMER 94-517	POLE 17 OLD HOPKINTON ROAD WESTERLY RI 02891	NON GC	N/A
	SPILLS	WHITE ROCKS ROAD 00-045	WHITE ROCKS ROAD WESTERLY RI 02891	NON GC	N/A
	SPILLS	12097	SHORE ROAD WESTERLY RI	NON GC	N/A
	SPILLS	10801	SHORE RD WESTERLY RI	NON GC	N/A
	SPILLS	98-326	WESTERLY RI 02891	NON GC	N/A
	SPILLS	RAILROAD AVE 97-227	RAILROAD AVE WESTERLY RI 02891	NON GC	N/A

Environmental FirstSearch
Sites Summary Report

TARGET SITE: POTTER HILL ROAD
WESTERLY RI 02891

JOB: 1009825.
FORMER PAWCATUCK WOOLEN MILLS

TOTAL: 163 **GEOCODED:** 5 **NON GEOCODED:** 158 **SELECTED:** 0

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	Page No.
	SPILLS	99-057	WESTERLY RI 02891	NON GC	N/A
	SPILLS	98-697	WESTERLY RI 02891	NON GC	N/A
	SPILLS	AIRPORT ROAD 98-223	AIRPORT ROAD WESTERLY RI 02891	NON GC	N/A
	SPILLS	12214	19 PARK ST WESTERLY RI	NON GC	N/A
	SPILLS	POTTERHILL RD 97-320	POTTERHILL RD WESTERLY RI 02891	NON GC	N/A
	SPILLS	ON BEACH @ MISQUAMICUTT 98-425	ON BEACH @ MISQUAMICUTT WESTERLY RI 02891	NON GC	N/A
	SPILLS	MISQUAMICUT BEACH PARKING 96-171	MISQUAMICUT BEACH PARKING WESTERLY RI 02891	NON GC	N/A
	SPILLS	MAIN ST 97-226	MAIN ST WESTERLY RI 02891	NON GC	N/A
	SPILLS	LUST 94-563	SHORE DRIVE WESTERLY RI 02891	NON GC	N/A
	SPILLS	JOHN STREET 97-380	JOHN STREET WESTERLY RI 02891	NON GC	N/A
	SPILLS	GRANITE ST 98-383	GRANITE ST WESTERLY RI 02891	NON GC	N/A
	SPILLS	END OF QUARRY RD 99-482	END OF QUARRY RD WESTERLY RI 02891	NON GC	N/A
	SPILLS	DUMPSTERS 94-415	MJ MURPHY WESTERLY RI 02891	NON GC	N/A
	SPILLS	CANAL STREET 99-652	CANAL STREET WESTERLY RI 02891	NON GC	N/A
	SPILLS	BOX 418 96-182	49 EAST MAIN ST WESTERLY RI 02891	NON GC	N/A
	SPILLS	2110 PLAINFIELD PIKE 98-334	2110 PLAINFIELD PIKE WESTERLY RI 02891	NON GC	N/A
	SPILLS	11270	MOUNTAIN AVE WESTERLY RI 02891	NON GC	N/A
	SPILLS	CANAL ST 96-526	CANAL ST WESTERLY RI 02891	NON GC	N/A
	SPILLS	9804292/CLOSED	CLARK FALLS NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	SAA 9807522/CLOSED	INTERSECTION RT2 OLD SAYBRO NORTH STONINGT CT 06359	NON GC	N/A

Environmental FirstSearch
Sites Summary Report

TARGET SITE: POTTER HILL ROAD
WESTERLY RI 02891

JOB: 1009825.
FORMER PAWCATUCK WOOLEN MILLS

TOTAL: 163 **GEOCODED:** 5 **NON GEOCODED:** 158 **SELECTED:** 0

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	Page No.
	SPILLS	9705507/CLOSED	WAMPHASSUC CROSSING NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	9605938/CLOSED	WINTECHUG HILL ROAD NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	955650/CLOSED	RT 2 NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	942824/CLOSED	PATRICIA AVE/ANDERSON POND NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	9701646/CLOSED	391 RT 2 IN FRONT OF HOLLY NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	200501447/CLOSED	RTE 2 NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	9702102/CLOSED	823 TENDLETON ROAD NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	200408030/CLOSED	ROUTE 2 NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	11958	HIGH ST WESTERLY RI 02891	NON GC	N/A
	SPILLS	95921/CLOSED	YAWBUX VALLEY RD NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	12853	PIERCE ST WESTERLY RI 02891	NON GC	N/A
	SPILLS	WHITES SEPTIC SERVICE 9802851/CLOSED	ROUTE # 2 NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	UNKNOWN 200108624/CLOSED	ASSEKONK SWAMP NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	UNKNOWN 9802386/CLOSED	LONG POND, OFF ROUTE 184 NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	9605754/CLOSED	RT 617 ACCESS ROAD TO ROTAR NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	200003628/CLOSED	RT 2 NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	945259/CLOSED	I-95 N/B OVERPASS/GREEN FAL NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	944655/CLOSED	PENELTON RD NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	944243/CLOSED	RT 2/RANDALL NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	943479/CLOSED	ACCESS RD/RT 2/RT 49 NORTH STONINGT CT 06359	NON GC	N/A

Environmental FirstSearch
Sites Summary Report

TARGET SITE: POTTER HILL ROAD
WESTERLY RI 02891

JOB: 1009825.
FORMER PAWCATUCK WOOLEN MILLS

TOTAL: 163 **GEOCODED:** 5 **NON GEOCODED:** 158 **SELECTED:** 0

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	Page No.
	SPILLS	946087/CLOSED	RT 2 ROCKY ST NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	915275/CLOSED	RT 2 NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	9705439/CLOSED	WAMPHASSUC CROSSING NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	9906353/CLOSED	COLE PIT ROAD/RT 202 NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	923620/CLOSED	LAKESIDE DR NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	200004985/CLOSED	ROUTE 2 KLANTERN HILL ROAD/ NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	200006804/CLOSED	TRUCK STOP OFF OF I - 95 NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	957191/CLOSED	PENDLETON HILL RD NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	200200659/CLOSED	MECHANIC ST & CLARK ST NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	200401695/CLOSED	RT2 AND MAIN NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	200405047/CLOSED	MYSTIC ROAD NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	9606389/CLOSED	I-84 BETWEEN STILLMAN AND R NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	99-145	WESTERLY RI 02891	NON GC	N/A
	SPILLS	98-189	WESTERLY RI 02891	NON GC	N/A
	SPILLS	98-682	WESTERLY RI 02891	NON GC	N/A
	SPILLS	99-035	WESTERLY RI 02891	NON GC	N/A
	SPILLS	SAA 200005414/CLOSED	DENNISON HILL ROAD NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	99-094	WESTERLY RI 02891	NON GC	N/A
	SPILLS	9604727/CLOSED	CLARK FALLS ROAD POLE # 558 NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	97-300	WESTERLY RI 02891	NON GC	N/A

Environmental FirstSearch
Sites Summary Report

TARGET SITE: POTTER HILL ROAD
WESTERLY RI 02891

JOB: 1009825.
FORMER PAWCATUCK WOOLEN MILLS

TOTAL: 163 **GEOCODED:** 5 **NON GEOCODED:** 158 **SELECTED:** 0

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	Page No.
	SPILLS	99-140	WESTERLY RI 02891	NON GC	N/A
	SPILLS	99-080	WESTERLY RI 02891	NON GC	N/A
	SPILLS	99-221	WESTERLY RI 02891	NON GC	N/A
	SPILLS	99-597	WESTERLY RI 02891	NON GC	N/A
	SPILLS	00-053	WESTERLY RI 02891	NON GC	N/A
	SPILLS	11007	FRANKLIN ST WESTERLY RI 02891	NON GC	N/A
	SPILLS	11271	MOUNTAIN AVE WESTERLY RI 02891	NON GC	N/A
	SPILLS	11152	OAK ST WESTERLY RI 02891	NON GC	N/A
	SPILLS	99-129	WESTERLY RI 02891	NON GC	N/A
	SPILLS	NORTHEAST UTILITIES 914379/CLOSED	FOWLER RD NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	NORTHEAST UTILITIES 954574/CLOSED	NORTH ANGUILLA NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	99-128	WESTERLY RI 02891	NON GC	N/A
	SPILLS	NORTHEAST UTILITIES 94984/CLOSED	RT 2 NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	96-395	WESTERLY RI 02891	NON GC	N/A
	SPILLS	NORTHEAST UTILITIES 914383/CLOSED	REUTMANN RD NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	NORTHEAST UTILITIES 914380/CLOSED	REUTMANN RD NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	RT 216 99-500	RT 216 ASHAWAY RI 02804	NON GC	N/A
	SPILLS	NORTHEAST UTILITIES 951257/CLOSED	RUETEMANN RD NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	12632	JUNCTION OF RTE 1 AND R WESTERLY RI	NON GC	N/A
	SPILLS	AS ABOVE 9704754/CLOSED	PATRICIA AVE. POLE # 1230 NORTH STONINGT CT 06359	NON GC	N/A

Environmental FirstSearch
Sites Summary Report

TARGET SITE: POTTER HILL ROAD
WESTERLY RI 02891

JOB: 1009825.
FORMER PAWCATUCK WOOLEN MILLS

TOTAL: 163 **GEOCODED:** 5 **NON GEOCODED:** 158 **SELECTED:** 0

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	Page No.
	SPILLS	JTL TRUCKING 200403819/CLOSED	ROUTE 95 NORTH OF EXIT 92 NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	NORTHEAST UTILITIES 924238/CLOSED	LANTERN HILL RD NORTH STONINGT CT 06359	NON GC	N/A
	SPILLS	12480	JUNCTION OF RTE 1 AND R WESTERLY RI	NON GC	N/A
	STATE	WINNAPAUG WATER STORAGE TANK WINA-HWM/ACTIVE	WINNAPAUG ROAD WESTERLY RI	NON GC	N/A
	STATE	NARR ELECTRIC-WESTERLY MGP NECI-HWM/ACTIVE	INDUSTRIAL DRIVE WESTERLY RI 02891	NON GC	N/A
	STATE	BRAINARD ASSOCIATES 2530/SUSPECTED	ROUTE 184 NORTH STONINGT CT 06359	NON GC	N/A
	STATE	BOWLING LANE PLAYGROUND BLPG-HWM/ACTIVE	BOWLING LANE (PLAT 23, LOT WESTERLY RI	NON GC	N/A
	SWL	WESTERLY SANITARY LANDFILL RISW-2/INACTIVE	OAK STREET WESTERLY RI 02891	NON GC	N/A
	UST	TOWN OF WESTERLY - VACANT LOT 19182	310-312 ATLANTIC AVE WESTERLY RI	NON GC	N/A
	UST	WHITE & COMPANY 16767	AIRPORT RD WESTERLY RI 02891	NON GC	N/A
	UST	WERI RADIO 18562	MARGIN ST WESTERLY RI 02891	NON GC	N/A
	UST	WERI RADIO 18563	ASHAWAY RD WESTERLY RI 02891	NON GC	N/A
	UST	TECHNOLOGY INVESTORS COMPANY 15744	AIRPORT RD WESTERLY RI 02891	NON GC	N/A
	UST	OLD CANAL SEWER PUMPING STATION 03387	CANAL ST WESTERLY RI 02891	NON GC	N/A
	UST	NEW CANAL SEWER PUMPING STATION 03384	CANAL ST WESTERLY RI 02891	NON GC	N/A
	UST	CITGO STATION/FRANKLIN PLAZA 00885	FRANKLIN ST WESTERLY RI 02891	NON GC	N/A
	UST	BEACH STREET SEWER PUMPING STATION 03383	BEACH ST WESTERLY RI 02891	NON GC	N/A
	UST	BRADFORD ROAD SEWER PUMPING STATIO 03382	WESTERLY BRADFORD RD WESTERLY RI 02891	NON GC	N/A

Environmental FirstSearch
Site Detail Report

TARGET SITE: POTTER HILL ROAD
WESTERLY RI 02891

JOB: 1009825.
FORMER PAWCATUCK WOOLEN MILLS

EMERGENCY RESPONSE NOTIFICATION SITE

SEARCH ID: 1 **DIST/DIR:** 0.17 NE **MAP ID:** 1

NAME:
ADDRESS: 70A LAUREL DR.
ASHWAY RI 02804

CONTACT: DRISCOLL JIM

REV: 12-13-93
ID1: H30743
ID2:
STATUS: FIX FAC
PHONE:

CERCLIS (Y/N):

MAT: PAINTING CHEMICALS, THINNERS ETC **QUANT:** 1.00 UNKNOWN

LOCATION: 70A LAUREL DR.
CITY: ASHAWAY RI **REPORTED:** 19930406

SOURCE: FIX FAC **MEDIUM:** WATER
DUMPING PAINT THINNER INTO WOODS

CAUSE: DUMPING
PAINTING AND STORING CHEMICALS WITHOUT PERMIT

ACT: NONE
BY:

STATE SPILLS SITE

SEARCH ID: 2 **DIST/DIR:** 0.23 NE **MAP ID:** 3

NAME: 64 LAUREL ST
ADDRESS: 64 LAUREL ST
HOPKINTON RI 02833

CONTACT:

REV: 4/10/00
ID1: 00-078
ID2:
STATUS:
PHONE:

SPILL DATE: 02-16-00 **SPILL NOTIFIER:**
STAFF:

MATERIAL SPILLED: WASTE OIL/AUTO PRODS
SPILL AMOUNT REPORTED:
INCIDENT: ABANDONED **SOURCE OF SPILL:** CONTAINERS

LUST?: **SOIL CONTAMINATED?:**
PCB LEVEL:

Environmental FirstSearch
Site Detail Report

TARGET SITE: POTTER HILL ROAD
WESTERLY RI 02891

JOB: 1009825.
FORMER PAWCATUCK WOOLEN MILLS

LEAKING UNDERGROUND STORAGE TANKS

SEARCH ID: 5 **DIST/DIR:** 0.32 NE **MAP ID:** 4

NAME: KENYON S VARIETY
ADDRESS: ROUTE 3 AND MAXON ST.
HOPKINTON RI

CONTACT:

REV: 10/4/05
ID1: 1402-LS
ID2:
STATUS: SRO - SOIL REMOVAL ONLY
PHONE:

PROJECT DATE: 6/7/1988

LEAKING UNDERGROUND STORAGE TANKS

SEARCH ID: 4 **DIST/DIR:** 0.35 NE **MAP ID:** 5

NAME: IMPERIAL HOME D+COR
ADDRESS: 50 CHASE HILL ROAD
HOPKINTON RI

CONTACT:

REV: 10/4/05
ID1: 1414-LS
ID2:
STATUS: SRO - SOIL REMOVAL ONLY
PHONE:

PROJECT DATE: 7/19/1999

LEAKING UNDERGROUND STORAGE TANKS

SEARCH ID: 3 **DIST/DIR:** 0.36 SE **MAP ID:** 2

NAME: HENDEL CHEVRON
ADDRESS: ROUTE 3 POLE 867
HOPKINTON RI

CONTACT:

REV: 10/4/05
ID1: 1401-LS
ID2:
STATUS: I - INACTIVE
PHONE:

PROJECT DATE: 8/30/1986

Environmental FirstSearch
Street Name Report for Streets within .25 Mile(s) of Target Property

TARGET SITE: POTTER HILL ROAD
WESTERLY RI 02891

JOB: 1009825.
FORMER PAWCATUCK WOOLEN MILLS

Street Name	Dist/Dir	Street Name	Dist/Dir
Christian Hill Rd	0.13 SW		
Church St	0.24 NE		
Clay St	0.09 NE		
Laurel St	0.04 NE		
Maxson St	0.05 SE		
Pequot Ln	0.22 SE		
Post Office Ln	0.10 SW		
Potter Hill Rd	0.03 SE		
River Rd	0.08 SE		

APPENDIX B

Environmental FirstSearch Database Descriptions

NPL: ***EPA*** NATIONAL PRIORITY LIST - Database of confirmed, proposed or deleted Superfund sites.

CERCLIS: ***EPA*** COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY INFORMATION SYSTEM - Database of current and potential Superfund sites currently or previously under investigation.

NFRAP: ***EPA*** COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY INFORMATION SYSTEM ARCHIVED SITES - database of Archive designated CERCLA sites that, to the best of EPA's knowledge, assessment has been completed and has determined no further steps will be taken to list this site on the National Priorities List (NPL). This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

RCRA TSD: ***EPA*** RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM TREATMENT, STORAGE, and DISPOSAL FACILITIES. - Database of facilities licensed to store, treat and dispose of hazardous waste materials.

RCRA COR: ***EPA*** RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM SITES - Database of RCRA facilities with reported violations and subject to corrective actions.

RCRA GEN: ***EPA*** RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM SITES - Database of facilities that generate or transport hazardous waste or meet other RCRA requirements.LGN - Large Quantity GeneratorsSGN - Small Quantity GeneratorsVGN – Conditionally Exempt Generator.Included are RAATS (RCRA Administrative Action Tracking System) and CMEL (Compliance Monitoring & Enforcement List) facilities.

ERNS: ***EPA/NRC*** EMERGENCY RESPONSE NOTIFICATION SYSTEM - Database of emergency response actions. Data since January 2001 has been received from the National Response System database as the EPA no longer maintains this data.

FINDS: ***EPA*** FACILITY INDEX SYSTEM(FINDS)/FACILITY REGISTRY SYSTEM(FRS) - The index of identification numbers associated with a property or facility which the EPA has investigated or has been made aware of in conjunction with various regulatory programs. Each record indicates the EPA office that may have files on the site or facility. A Facility Registry System site has an FRS in the status field.

STATE SITES: ***CT DEP*** CONTAMINATED AND POTENTIALLY CONTAMINATED SITES - database of Hazardous Waste Facilities as defined by section 22a 134f of the Connecticut General Statute.

STATE SITES: ***RI DEM*** DATABASE OF CERCLA/STATE - database of EPA CERCLA and RI DEM STATE sites containing location and project information.

SPILLS-1990: ***CT DEP*** EMERGENCY RESPONSE ACTIONS AND SPILL RELEASES - database of oil and chemical spills. The database includes discharger, reporter, date of release, cause of incident, and emergency measurement information.

SPILLS-1990: ***RI DEM*** LISTING OF OIL AND CHEMICAL SPILLS - database of spills reported to the Rhode Island Department of Environmental Protection since 1990. The data includes spill date, inspection date, and the amount of spilled material.

SWL: ***CT DEP*** ACTIVE SOLID WASTE LANDFILL FACILITIES - database of landfills including active and closed facilities.

SWL: ***RI DEM*** SOLID WASTE MANAGEMENT FACILITIES LIST - database of permitted waste management facilities. The data includes acreage, owner, operator, and status

REG UST/AST: ***RI DEM*** UNDERGROUND STORAGE TANKS FACILITY MASTER LIST - database of underground storage tanks registered with the Rhode Island Department of Environmental Management. The data includes information regarding tank installation date, capacity, and product stored.

REG UST/AST: ***CT DEP*** REGISTERED UNDERGROUND STORAGE TANKS - database of underground storage tanks, the data includes capacity, substance stored, status, tank material and piping material.

LEAKING UST: ***CT DEP*** LEAKING UNDERGROUND STORAGE TANKS(LUST) - database of lusts, the data reported includes actions, agency, class, and media affected

LEAKING UST: ***RI DEM*** LEAKING UNDERGROUND STORAGE TANKS - database of leaking underground storage tanks that have been reported to the Rhode Island Department of Environmental Management.

RADON: ***NTIS*** NATIONAL RADON DATABASE - EPA radon data from 1990-1991 national radon project collected for a variety of zip codes across the United States.

Environmental FirstSearch Database Sources

NPL: ***EPA*** Environmental Protection Agency

Updated quarterly

CERCLIS: ***EPA*** Environmental Protection Agency

Updated quarterly

NFRAP: ***EPA*** Environmental Protection Agency.

Updated quarterly

RCRA TSD: ***EPA*** Environmental Protection Agency.

Updated quarterly

RCRA COR: ***EPA*** Environmental Protection Agency.

Updated quarterly

RCRA GEN: ***EPA*** Environmental Protection Agency.

Updated quarterly

ERNS: ***EPA/NRC*** Environmental Protection Agency

Updated semi-annually

FINDS: ***EPA*** Environmental Protection Agency

Updated annually

STATE SITES: ***CT DEP*** Connecticut Department of Environmental Protection

Updated quarterly

STATE SITES: ***RI DEM*** Rhode Island Department of Environmental Management

Updated quarterly

SPILLS-1990: ***CT DEP*** Connecticut Department of Environmental Protection's Bureau of Waste Management

Updated quarterly

SPILLS-1990: ***RI DEM*** Rhode Island Department of Environmental Management, Division of Site Remediation

Updated quarterly

SWL: ***CT DEP*** Department of Environmental Protection's Bureau of Waste Management, Solid Waste Program

Updated annually

SWL: ***RI DEM*** Rhode Island Department of Environmental Management, Division of Waste Management

Updated annually

REG UST/AST: ***RI DEM*** Rhode Island Department of Environmental Management, Division of Waste Management

Updated quarterly

REG UST/AST: ***CT DEP*** Connecticut Department of Environmental Protection's Bureau of Waste Management, Underground Storage Tank Enforcement Program.

Updated quarterly

LEAKING UST: ***CT DEP*** The Department of Environmental Protection's Bureau of Waste Management, Underground Storage Tank Enforcement Program

Updated quarterly

LEAKING UST: ***RI DEM*** Rhode Island Department of Environmental Management

Updated quarterly

RADON: ***NTIS*** Environmental Protection Agency, National Technical Information Services

Updated periodically

APPENDIX B

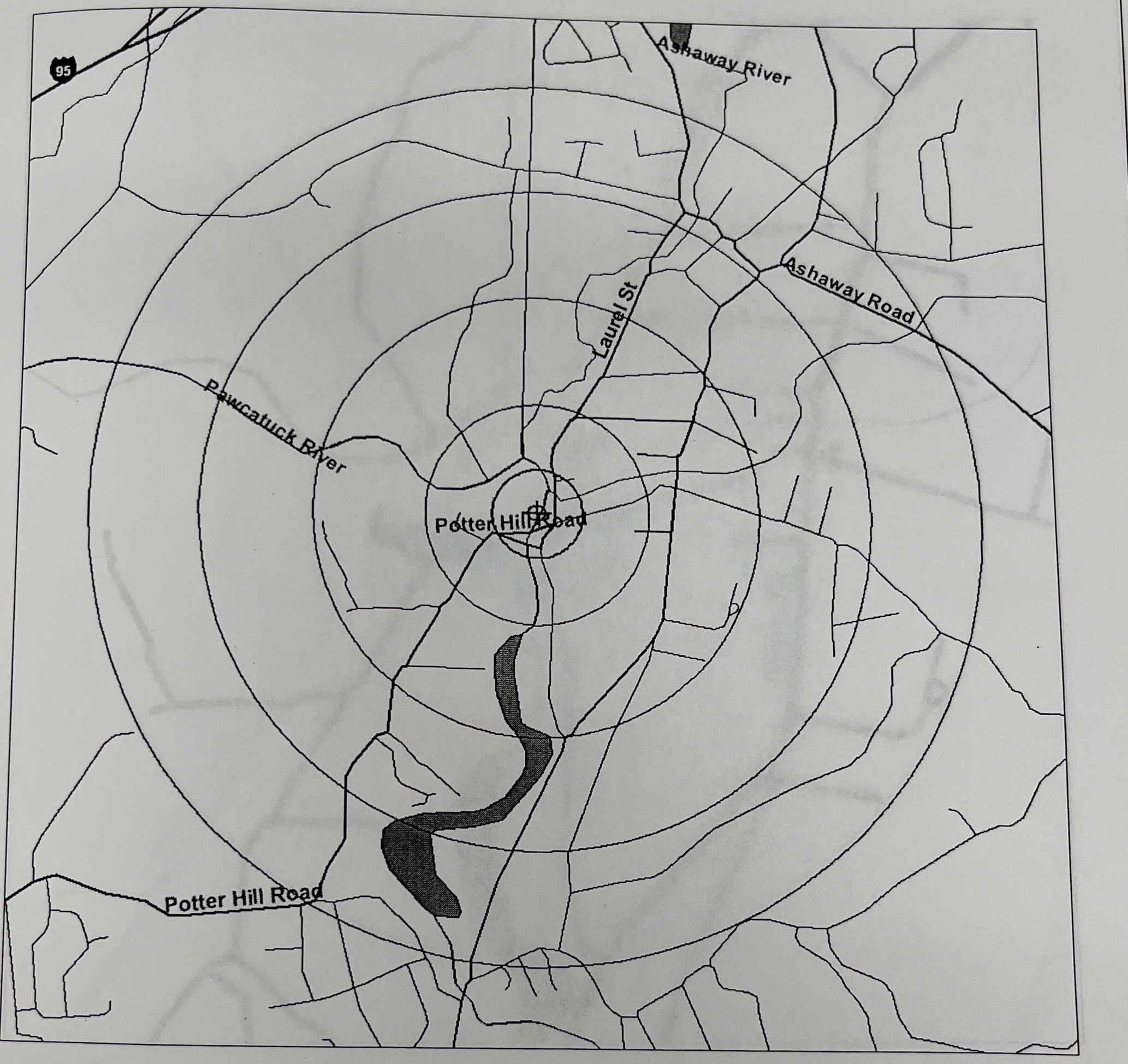
APPENDIX C

Environmental FirstSearch

1 Mile Radius

ASTM Map: NPL, RCRACOR, STATE Sites

POTTER HILL ROAD, WESTERLY RI 02891



Source: 2002 U.S. Census TIGER Files

Target Site (Latitude: 41.4147 Longitude: -71.797) .....

Identified Site, Multiple Sites, Receptor .....

NPL, Brownfield, Solid Waste Landfill (SWL) or Hazardous Waste

Railroads .....

Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius

Environmental FirstSearch

.5 Mile Radius

ASTM Map: CERCLIS, RCRATSD, LUST, SWL

POTTER HILL ROAD, WESTERLY RI 02891



Source: 2002 U.S. Census TIGER Files

Target Site (Latitude: 41.4147 Longitude: -71.797) .....

Identified Site, Multiple Sites, Receptor .....

NPL, Brownfield, Solid Waste Landfill (SWL) or Hazardous Waste

Railroads .....

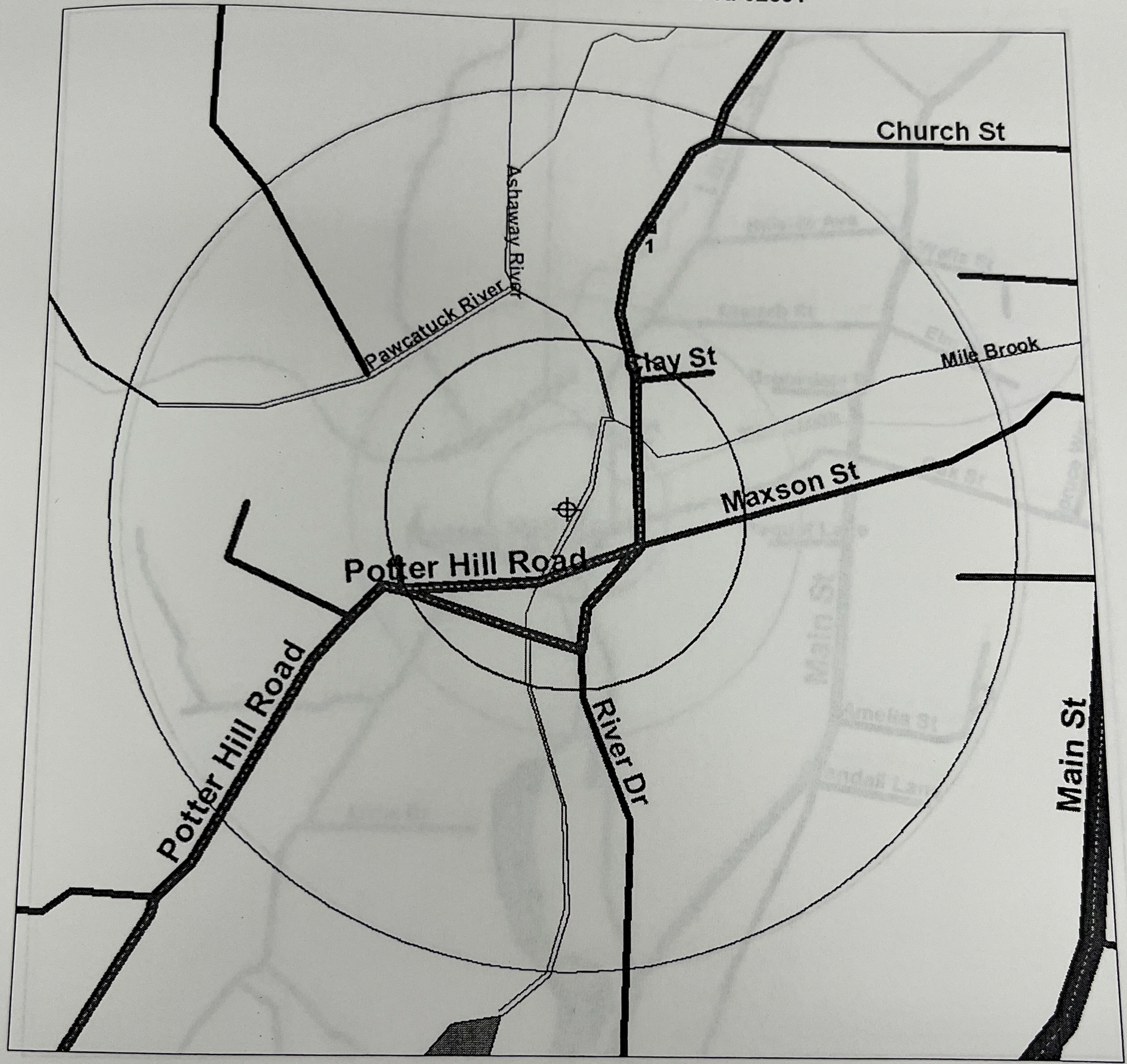
Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius

Environmental FirstSearch

.25 Mile Radius

ASTM Map: RCRAGEN, ERNS, UST

POTTER HILL ROAD, WESTERLY RI 02891



Source: 2002 U.S. Census TIGER Files

Target Site (Latitude: 41.4147 Longitude: -71.797) .....

Identified Site, Multiple Sites, Receptor .....

NPL, Brownfield, Solid Waste Landfill (SWL) or Hazardous Waste

Railroads .....

Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius

Environmental FirstSearch

.5 Mile Radius

ASTM AAI Map: Brownfield

POTTER HILL ROAD, WESTERLY RI 02891



Source: 2002 U.S. Census TIGER Files

Target Site (Latitude: 41.4147 Longitude: -71.797) .....

Brownfield.....

Railroads .....

Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius

Environmental FirstSearch

.5 Mile Radius

ASTM AAI Map: Federal Land Use Sites

POTTER HILL ROAD, WESTERLY RI 02891



Source: 2002 U.S. Census TIGER Files

Target Site (Latitude: 41.4147 Longitude: -71.797) .....

Fed. Land Use: Wilderness Areas, Wildlife Preserves .....

Fed. Land Use: Amer. Indian Sacred Sites, End. Species' Habitats...

Railroads .....

Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius

Environmental FirstSearch

.25 Mile Radius

Non-ASTM Map: Spills 90

POTTER HILL ROAD, WESTERLY RI 02891



Source: 2002 U.S. Census TIGER Files

Target Site (Latitude: 41.4147 Longitude: -71.797) .....

Identified Site, Multiple Sites, Receptor .....

NPL, Brownfield, Solid Waste Landfill (SWL) or Hazardous Waste

National Historic Sites and Landmark Sites .....

Railroads .....

Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius

Question	Owner			Occupants (If Applicable)			Observed (During Site Visit)		
1a. Is the property used for an industrial use?	Yes	No	Unk	Yes	No	Unk	Yes	(No)	Unk
1b. Is any adjoining property used for an industrial use?	Yes	No	Unk	Yes	No	Unk	Yes	(No)	Unk
2a. Did you observe evidence or do you have any prior knowledge that the property has been used for an industrial use in the past?	Yes	No	Unk	Yes	No	Unk	(Yes)	No	Unk
2b. Did you observe evidence or do you have any prior knowledge that any adjoining property has been used for an industrial use in the past?	Yes	No	Unk	Yes	No	Unk	Yes	(No)	Unk
3a. Is the property used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility (If applicable, identify which)?	Yes	No	Unk	Yes	No	Unk	Yes	(No)	Unk
3b. Is any adjoining property used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility (If applicable, identify which)?	Yes	No	Unk	Yes	No	Unk	Yes	(No)	Unk
4a. Did you observe evidence or do you have any prior knowledge that the property has been used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility (If applicable, identify which)?	Yes	No	Unk	Yes	No	Unk	Yes	(No)	Unk
4b. Did you observe evidence or do you have any prior knowledge that any adjoining property has been used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility (If applicable, identify which)?	Yes	No	Unk	Yes	No	Unk	Yes	(No)	Unk
5a. Are there currently any damaged or discarded automotive or industrial batteries, pesticides, paints, or other chemicals in individual containers of greater than 5 gal. (19 L) in volume or 50 gal. (190 L) in the aggregate, stored on or used at the property or at the facility?	Yes	No	Unk	Yes	No	Unk	(Yes)	No	Unk
5b. Did you observe evidence or do you have any prior knowledge that there have been previously any damaged or discarded automotive or industrial batteries, or pesticides, paints, or other chemicals in individual containers of greater than 5 gal. (19 L) in volume or 50 gal. (190 L) in the aggregate, stored on or used at the property or at the facility?	Yes	No	Unk	Yes	No	Unk	(Yes)	No	Unk

APPENDIX D

Interview Documentation

Question	Owner			Occupants (If Applicable)			Observed (During Site Visit)		
1a. Is the *property* used for an industrial use?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
1b. Is any *adjoining property* used for an industrial use?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
2a. Did you observe evidence or do you have any prior knowledge that the *property* has been used for an industrial use in the past?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
2b. Did you observe evidence or do you have any prior knowledge that any *adjoining property* has been used for an industrial use in the past?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
3a. Is the *property* used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility (if applicable, identify which)?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
3b. Is any *adjoining property* used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility (if applicable, identify which)?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
4a. Did you observe evidence or do you have any prior knowledge that the *property* has been used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility (if applicable, identify which)?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
4b. Did you observe evidence or do you have any prior knowledge that any *adjoining property* has been used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility (if applicable, identify which)?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
5a. Are there currently any damaged or discarded automotive or industrial batteries, pesticides, paints, or other chemicals in individual containers of greater than 5 gal. (19 L) in volume or 50 gal. (190 L) in the aggregate, stored on or used at the *property* or at the facility?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
5b. Did you observe evidence or do you have any prior knowledge that there have been previously any damaged or discarded automotive or industrial batteries, or pesticides, paints, or other chemicals in individual containers of greater than 5 gal. (19 L) in volume or 50 gal. (190 L) in the aggregate, stored on or used at the *property* or at the facility?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk

6a. Are there currently any industrial *drums* (typically 55 gal. (208 L)) or sacks of chemicals located on the property or at the facility?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
6b. Did you observe evidence or do you have any prior knowledge that there have been previously any industrial *drums* (typically 55 gal. (208 L)) or sacks of chemicals located on the property or at the facility?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
7a. Did you observe evidence or do you have any prior knowledge that *fill dirt* has been brought onto the property that originated from a contaminated site?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
7b. Did you observe evidence or do you have any prior knowledge that *fill dirt* has been brought onto the property that is of an unknown origin?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
8a. Are there currently any *pits, ponds, or lagoons* located on the *property* in connection with waste treatment or waste disposal?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
8b. Did you observe evidence or do you have any prior knowledge that there have been previously, any *pits, ponds, or lagoons* located on the *property* in connection with waste treatment or waste disposal?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
9a. Is there currently any stained soil on the *property*?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
9b. Did you observe evidence or do you have any prior knowledge that there have been previously, any stained soil on the *property*?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
10a. Are there currently any registered or unregistered storage tanks (above or underground) located on the *property*?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
10b. Did you observe evidence or do you have any prior knowledge that there have been previously, any registered or unregistered storage tanks (above or underground) located on the *property*?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
11a. Are there currently any vent pipes, fill pipes, or access ways indicating a fill pipe protruding from the ground on the *property* or adjacent to any structure located on the *property*?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
11b. Did you observe evidence or do you have any prior knowledge that there have been previously, any vent pipes, fill pipes, or access ways indicating a fill pipe protruding from the ground on the *property* or adjacent to any structure located on the *property*?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
12a. Is there currently evidence of leaks, spills or staining by substances other than water, or foul odors, associated with any flooring, drains, walls, ceilings, or exposed grounds on the property?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
12b. Did you observe evidence or do you have any prior knowledge that there have been previously any leaks, spills or staining by substances other than water, or foul odors, associated with any flooring, drains, walls, ceilings, or exposed grounds on the property?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk

13a. If the *property* is served by a private well or non-public water system, is there evidence or do you have prior knowledge that contaminants have been identified in the well or system that exceed guidelines applicable to the water system?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
13b. If the property is served by a private well or non-public water system, is there evidence or do you have prior knowledge that the well has been designated as contaminated by any government environmental/health agency?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
14. Does the *owner* or *occupant* of the *property* have any knowledge of *environmental liens* or governmental notification relating to past or recurrent violations of environmental laws with respect to the *property* or any facility located on the *property*?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
15a. Has the *owner* or *occupant* of the *property* been informed of the past existence of *hazardous substances* or *petroleum products* with respect to the *property* or any facility located on the *property*?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
15b. Has the *owner* or *occupant* of the *property* been informed of the current existence of *hazardous substances* or *petroleum products* with respect to the *property* or any facility located on the *property*?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
15c. Has the *owner* or *occupant* of the *property* been informed of the past existence of environmental violations with respect to the *property* or any facility located on the *property*?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
15d. Has the *owner* or *occupant* of the *property* been informed of the current existence of environmental violations with respect to the *property* or any facility located on the *property*?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
16. Does the *owner* or *occupant* of the *property* have any knowledge of any *environmental site assessment* of the *property* or facility that indicated the presence of *hazardous substances* or *petroleum products* on, or contamination of, the *property* or recommended further assessment of the *property*?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
17. Does the *owner* or *occupant* of the *property* know of any past, threatened, or pending lawsuits or administrative proceedings concerning a release or threatened release of any *hazardous substance* or *petroleum products* involving the *property* by any owner or occupant of the *property*?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
18a. Does the *property* discharge waste water (not including sanitary waste or storm water) onto or adjacent to the *property* and/or into a storm water system?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
18b. Does the *property* discharge waste water (not including sanitary waste or storm water) onto or adjacent to the *property* and/or into a sanitary sewer system?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk

19. Did you observe evidence or do you have any prior knowledge that any *hazardous substances* or *petroleum products*, unidentified waste materials, tires, automotive or industrial batteries, or any other waste materials have been dumped above grade, buried and/or burned on the *property*?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
20. Is there a transformer, capacitor, or any hydraulic equipment for which there are any records indicating the presence of PCB's?	Yes	No	Unk	Yes	No	Unk	Yes	No	Unk

21. Do any of the following Federal government record systems list the property or any property within the search distance noted below:		
Federal National Priorities List - within 1.0 miles (1.6 Km)?	Yes	No
Federal CERCLIS List - within 0.5 miles (0.8 Km)?	Yes	No
Federal CERCLIS NFRAP List – property & adjoining properties?	Yes	No
Federal RCRA CORRACTS Facilities List - within 1.0 miles (1.6 Km)?	Yes	No
Federal RCRA non-CORRACTS TSD Facilities List - within 0.5 miles (1.6 Km)?	Yes	No
Federal RCRA Generators List - property & adjoining properties?	Yes	No
Federal ERNS List - property only?	Yes	No
22. Do any of the following state record systems list the property or any property within the search distance noted below:		
State lists of hazardous waste sites identified for investigation or remediation:		
State – Equivalent National Priorities List - within 1.0 miles (1.6 Km)?	Yes	No
State – Equivalent CERCLIS List - within 0.5 mile (0.8 Km)?	Yes	No
State Landfill and/or Solid Waste Disposal Site Lists - within 0.5 mile (0.8 Km)?	Yes	No
State Leaking UST (LUST) Lists - within 0.5 mile (0.8 Km)?	Yes	No
State Registered UST Lists – property & adjoining properties?	Yes	No
23. Based upon a review of *fire insurance maps* 10.3.1.3 or consultation with the local fire department serving the *property*, all as specified in the guide, are any buildings or other improvements on the *property* or on an *adjoining property* identified as having been used for an industrial use or uses likely to lead to contamination of the *property*?	Yes	No

The preparer of the transaction screen questionnaire must complete and sign the following statement.

The ***Owner*** questionnaire was completed by:

Name _____ Title _____

Firm _____ Phone Number _____

Address _____

_____

_____

Date _____

Preparer's Relationship to Site _____

Preparer's Relationship to user (e.g., principal, employee, agent, consultant, client) _____

198 Potter Hill Road, Westerly, RI

The ***Occupant*** questionnaire was completed by:

Name _____ Title _____

Firm _____ Phone Number _____

Address _____

_____

_____

Date _____

Preparer's Relationship to Site _____

Preparer's Relationship to user (e.g., principal, employee, agent, consultant, client) _____

The ***Site Visit*** questionnaire was completed by:

Name Joseph Unsworth Title Project Manager

Firm Jacques Whitford Company, Inc. Phone Number 401-312-8005

Address 24 Albion Road, Suite 220

Lincoln, RI 02865

Date 10/7/2005

Preparer's Relationship to Site None

Preparer's Relationship to user (e.g., principal, employee, agent, consultant, client) Consultant

The ***Government Records*** and ***Historical Sources Inquiry*** questionnaire was completed by:

Name Joseph Unsworth Title Project Manager

Firm Jacques Whitford Company, Inc. Phone Number 401-312-8005

Address 24 Albion Road, Suite 220

Lincoln, RI 02865

Date 10/7/2005

Preparer's Relationship to Site None

Preparer's Relationship to user (e.g., principal, employee, agent, consultant, client) Consultant

198 Potter Hill Road, Westerly, RI

User's relationship to the Site (for example, owner, prospective purchaser, lender, etc.)

If the preparer(s) is different from the user, complete the following:

Name of User Renewable Resources Inc.

User's Address 900 North Strafford, Suite 2428

Arlinton, VA 22203

User's Phone Number

Copies of the completed questionnaire have been filed at: Jacques Whitford Company, Inc

Copies of the completed questionnaire have been mailed or delivered to:

Preparer represents that to the best of the preparer's knowledge the above statements and facts are true and correct and to the best of the preparer's actual knowledge no material facts have been suppressed or misstated.

Signature 2/27/2006

Signature Date

Signature Date

Signature Date

Guide to Transaction Screen Questionnaire - (ASTM Designation: E 1528-00)

Question 1

It is recommended that the preparer describe the use of the *property* and *adjoining properties.* Certain industrial uses on the *property* may raise concerns regarding the possibility of contamination affecting the *property*. For the purposes of the transaction screen questionnaire, an industrial use is an activity requiring the application of labor and capital for the production or distribution of a product or article, including, without limitation, manufacturing, processing, extraction, refining, warehousing, transportation, and utilities. Manufacturing is defined as a process or operation of producing by hand, machinery, or other means a finished product or article from raw material. Industrial uses may be categorized as light or heavy industrial uses, depending on the scale of the operations and the impact upon surrounding property in terms of smoke, fumes, and noise. Regardless of such categorization, the concern for purposes of the transaction screen process is whether the use involves the processing, storage, manufacture, or transportation of *hazardous substances* or *petroleum products.* The term *adjoining properties* means any real property or properties the border of which is contiguous or partially contiguous with that of the property, or that would be contiguous or partially contiguous with that of the property but for a street, road, or other public thoroughfare separating them. *Adjoining properties* means the *property* and include *properties* across the street or any right of way from the property.

Question 2

See guide for Question 1.

Question 3

It is recommended that the *preparer* describe the uses of the *property* and *adjoining properties*. The facilities mentioned in this question all involve the use of *hazardous substances* or *petroleum products* and therefore require further inquiry concerning the possible release of such substances.

Question 4

See guide for Question 3.

Question 5

Are there any containers on the site that may contain any of these items? Is there any reason to suspect that chemicals or *hazardous substances* in such quantities may be stored on the site? Sheltered areas, cartons, sacks, storage bins, large canisters, sheds, or cellars of existing improvements are examples of containers and areas where chemicals or *hazardous substances* may be stored. If the answer to this question is "yes", list the items and the location(s) where they are stored. If unfamiliar with the contents of any container located on the site, the question must be answered "yes" until the materials are identified. *Hazardous substances* may often be unmarked. The *preparer* should never open any containers that are unmarked because they may contain explosive materials or acids. Consumer products in undamaged containers used for routine office maintenance or business, such as copy toner, should not create a need for further inquiry unless the quantity of such products is in excess of what would be customary for such use.

Question 6

Chemicals are frequently stored in large 55-gal (208-L) drums and dry chemicals are often stored in 20 lb (9 kg) sacks.

Question 7

The origin of *fill dirt* brought onto the *property* should be investiagted to determine whether such dirt originated from a contaminated site. *Fill dirt* is defined as dirt, soil, sand, or other earth, that is obtained off-Site, that is used to fill holes or depressions, create mounds, or otherwise artificially change the grade or elevation of real property. It does not include material that is used in limited quantities for normal landscaping activities. If any structures have been demolished on the *property*, the *preparer* should investigate whether the structures were demolished in place and *fill dirt* compacted over them because such demolition debris may contain asbestos or *hazardous substances*.

Question 8

The presence of *pits*, *ponds*, or *lagoons*, together with waste treatment or waste disposal may indicate contaminated property. *Pits*, *ponds*, or *lagoons* are defined as man-made or natural depressions in a ground surface that are likely to hold liquids or sludge containing *hazardous substances* or *petroleum products*. The likelihood of such liquids or sludge being present is determined by evidence of factors associated with the pit, pond, or lagoon, including, but not limited to, discolored water, distressed vegetation, or the presence of an obvious wastewater discharge.

Question 9

Stained soils are frequently associated with contamination and often are an indication of either current or previous leakage associated with piping and liquid storage containers. Soils that are stained show a marked discoloration as compared to other soils in the immediate vicinity.

Question 10

Tanks are often used to store heating fuels, chemicals, and petroleum products; while tanks may be associated with the storage of chemicals, they are most often associated with liquid fuel heating systems (e.g., oil furnaces).

Question 11

Vent or fill pipes often signal the current or previous existence of underground storage tanks. Additionally, in answering this question the owner and occupant should consider any asphalt or concrete patching that would indicate the possibility of a previous underground storage tank removal.

Question 12

Stains (other than water stains) or foul odors may indicate leaks of hazardous substances or contaminants. Floor drains located within a building adjacent to hazardous substance storage areas or connected to an on-site disposal system (e.g., septic system) present a potential source of subsurface discharge of contaminants.

Question 13

Private wells and non-public water systems are not monitored daily for water quality as municipal systems are monitored. If the system is private, it probably has been tested for contamination or evidence that it is free from contamination, and the results of any such tests should be produced by the *owner* or *occupant* of the well. The preparer is not required to test the water system to conduct the *transaction screen*.

Question 14

In most cases, the federal or state government will notify the property owner prior to filing a lien on the *property*. Sections 302, 311, 312, and 313 of the Emergency Planning and Community Right-To-Know Act and other provisions of federal and state environmental laws establish reporting requirements with respect to business storing or using *hazardous substances* in excess of certain quantities. These businesses should be making periodic reports to a federal, state, or local environmetal department, agency, or bureau. The government may periodically inspect such facilities to ensure compliance with environmental laws. In the event of a release of a reportable quantity within a 24-hour period (as defined in CERCLA and regulations promulgated pursuant to CERCLA), the person in charge of the facility is obligated to notify the U.S. EPA of the release. Any notification or response by any governmental entity will be in writing.

Question 15

Consider whether any *environmental professionals* familiar with *hazardous substances* or *petroleum products* have observed or determined that contamination existed on the property. *Hazardous substances* or *petroleum products* from the *property* may have affected soils, air quality, water quality, or otherwise affected structures located on the *property*.

Question 16

Copies of *reasonably ascertainable* prior *environmental site assessments* of the *property* or any portion thereof should be obtained and examined to determine whether further action or inquiry is necessary in connection with any environmental problems raised by a prior *environmental site assessment*.

Question 17

The *user* is not required to make an independent investigation or search of records on file with a court or public agency in answering this question; this question is to be answered by the *owner* or *occupant* based on upon their respective *actual knowledge* and review of *reasonably ascertainable* records in their possession.

Question 18

The *owner* and each *occupant* should be asked where drain traps lead and the purpose of drainage pipes at the facility. Domestic sewage is not a CERCLA issue and the reference to *wastewater* does not include domestic sewage.

Question 19

Past waste disposal practices should be examined because these may have resulted in *hazardous substances* or *petroleum products* being released on the *property*. Does the *property* evidence any mounds or depressions that suggest a disposal site?

Question 20

The PCBs are regulated by the Toxic Substances Control Act 15 USC. Section 2601 *et seq*. and, in the absence of a release, are not regulated by CERCLA. The provisions of CERCLA do apply if there is a release of PCBs. Accordingly, if an affirmative answer is obtained to this question, the further focus should be on whether there have been any instances of insulating oil leakage and, if so, whether these are suspected of being PCB or PCB-contaminated. Transformers containing PCBs may have many different sizes and shapes and are to be registered pursuant to 40 CFR § 761.30. Elevators and auto lifts are often run by hydraulically controlled systems containing PCBs. If inspection or maintenance records for the elevator, capacitor, or other hydraulic equipment indicate no release has occurred or that regular, scheduled maintenance has taken place and the machinery does not appear to be damaged or leaking, no further inquiry is required.

Definitions

Actual Knowledge – the knowledge actually possessed by an individual who is a real person, rather than an entity. Actual knowledge is to be distinguished from constructive knowledge, that is, knowledge imputed to an individual or entity.

Adjoining Properties – any real property or properties the border of which is contiguous or partially contiguous with that of the property, or that would be contiguous or partially contiguous with that of the property but for a street, road, or other public thoroughfare separating them. *Adjoining properties* means the *property* and include *properties* across the street or any right of way from the property.

Asbestos Containing Material (ACM) - any material or product that contains more than 1% abestos.

Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) – the list of sites compiled by EPA that EPA has investigated or is currently investigating for potential hazardous substance contamination for possible inclusion on the National Priorities List.

CORRACTS List – list of hazardous waste treatment, storage or disposal facilities and other RCRIS facilities (due to past interim status or storage of hazardous waste beyond 90 days) who have been notified by the U.S. Environmental Protection Agency to undertake corrective action under RCRA.

Environmental Lien - a charge, security, or encumberance upon title to a *property* to secure the payment of a cost, damage, debt, obligation, or duty arising out of response actions, cleanup, or other remediation of *hazardous substances* or *petroleum products* upon a *property*.

ERNS List – EPA's Emergency Response Notification System list of reported CERCLA hazardous substance releases or spills in quantities greater than the reportable quantity, as maintained at the National Response Center.

Hazardous Substance - A substance defined as a hazardous substance pursuant to CERCLA 42 USC 9601 (14), as interpreted by EPA regulations and the courts: "(A) any substance designated pursuant to section 1321(b)(2)(A) of Title 33, (B) any element, compound, mixture, solution, or substance designated pursuant to section 9602 of this title, (C) any hazardous waste having the characteristics identified under or listed pusuant to section 3001 of the Solid Waste Disposal Act, (D) any toxic pollutant listed under section 1317(a) of Title 33, (E) any hazardous air pollutant listed under section 112 of the Clean Air Act, and (F) any imminently hazardous chemical substance or mixture with respect to which the Administrator (of EPA) has taken action pursuant to section 2602 of Title 15.

LUST Sites – state lists of leaking underground storage tank sites.

National Priorities List (NPL) – list compiled by EPA pursuant to CERCLA 42 USC ξ 9605 (a)(8)(B) of properties with the highest priority for cleanup pursuant to EPA's hazard ranking system.

Occupants - those tenants, subtenants, or other persons or entities using the *property* or a portion of the *property*.

Owner - generally the fee owner of record of the *property*.

Petroleum Exclusion - the exclusion from CERCLA liability provided 42 USC ξ 9601(14), as interpreted by the courts and EPA: "The term (hazardous substance) does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance under Subparagraphs (A) through (F) of this paragraph, and the term does not include natural gas, natural gas liquids, liquified natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas)."

Petroleum Products - those substances included within the meaning of the *petroleum exclusion* to CERCLA.

Phase I Environmental Site Assessment – the practice described in Practice E 1527. The process by which a person or entity seeks to determine if a particular parcel of real property (including improvements) is subject to *recognized environmental conditions.*

Preparer – The person preparing the *environmental transaction screen questionnaire* pursuant to this practice, who may be either the *user* or the person to whom the *user* has delegated the preparation.

Property - the real property that is the subject of the environmental site assessment described in this practice. Real property includes buildings and other fixtures and improvements located on the property and affixed to the land.

RCRA Generators – those persons or entities which generate *hazardous wastes*, as defined and regulated by RCRA.

RCRA Generators List – list kept by EPA of those persons or entities that generate hazardous wastes as defined and regulated by RCRA.

Recognized Environmental Conditions – the presence or likely presence of any *hazardous substances* or *petroleum products* on a *property* under conditions that indicate an existing release, a past release, or a material threat of a release of any *hazardous substances* or *petroleum products* into structures on the *property* or into the ground, ground water, or surface water of the *property.*

Underground Storage Tank (UST) – any tank, including underground piping connected to the tank, that is or has been used to contain *hazardous substances* or *petroleum products* and the volume of which is 10 % or more beneath the surface of the ground.

User – the party seeking to use the transaction screen process of this practice or the *Phase I Environmental Site Assessment* of Practices E 1527 or E 1528 to perform an environmental assessment of the *property*. A *user* may include, without limitation, a purchaser of *property*, a potential tenant of *property*, an owner of *property*, a lender, or a property manager.

APPENDIX E

Miscellaneous Documentation

APPENDIX E

Miscellaneous Documentation

N121,000

E 419,000

11
77,175 sq.ft.

14
106,813 sq.ft.

19

20
182,665 sq.ft.

21

22

23
198,280 sq.ft.

18
78,190 sq.ft.

12

13

15

16

17

24

25
56,335 sq.ft.

26

27

28

29

30

31

32
172,132 sq.ft.

5

POST OFFICE

ROAD

HILL ROAD

HILL

River

HOPKINS

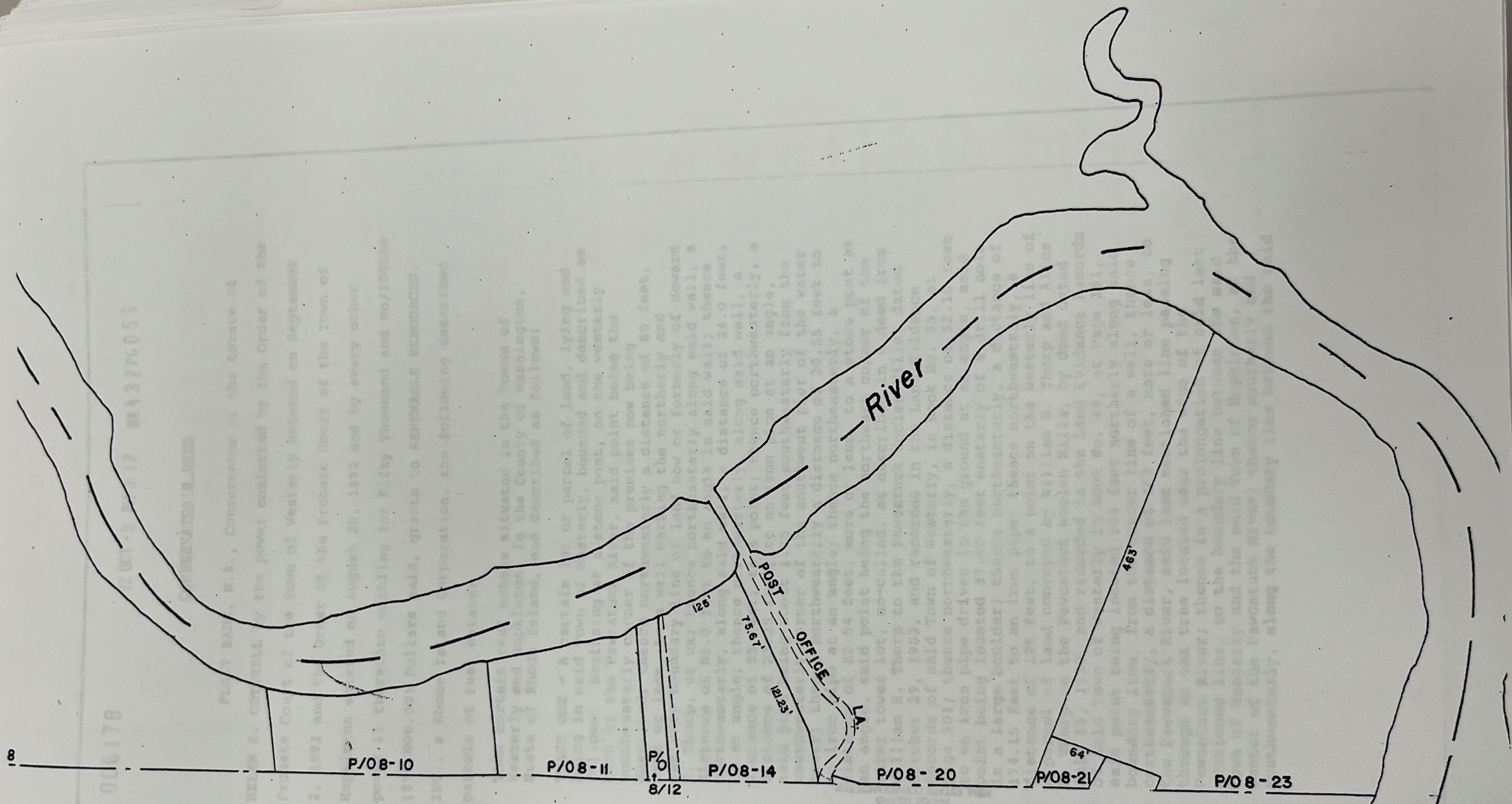
NOTE

THE AREAS, BOUNDARIES AND SUBDIVISION ON THIS TAX MAP ARE DERIVED FROM RECORDED PLATS, GROUND SURVEYS AND RECORDED DEEDS. MAPS, DEEDS AND WILLS ARE TO BE USED FOR PROPERTY ASSESSMENT PURPOSES ONLY AND NOT FOR CONVEYANCE

TOWN OF WESTERLY
WASHINGTON COUNTY, RHODE ISLAND
PREPARED BY
JAMES W. SEWALL COMPANY, OLD TOWN, MAINE

APPENDIX B

APPENDIX C



REVISIONS			
RIPTION	MADE	CH'K'D	AP'V'D

Grid North

NOTE

THE AREAS, BOUNDARIES AND DIMENSIONS SHOWN ON THIS TAX MAP ARE DERIVED FROM AERIAL PHOTOGRAPHS, GROUND SURVEYS AND RECORDED PLANS, MAPS, DEEDS AND WILLS AND ARE TO BE USED FOR PROPERTY ASSESSMENT PURPOSES ONLY AND NOT FOR CONVEYANCE

ASSESSORS PLAT

TOWN OF WESTERLY

WASHINGTON COUNTY, RHODE ISLAND

PREPARED BY

JAMES W. SEWALL COMPANY, OLD TOWN, MAI

SCALE 1"=100'

0 50 100 200 400 600 FE

0 5 10 20 50 100 150 MI

006178

92 OCT -8 PM 3:12 BK 432 PG 053

CONSERVATOR'S DEED

FLEET BANK, N.A., Conservator of the Estate of HELEN E. COTTRELL by the power conferred by the Order of the Probate Court of the Town of Westerly entered on September 2, 1992 and the Order of the Probate Court of the Town of Hopkinton entered on August 20, 1992 and by every other power it thereunto enabling for Fifty Thousand and No/100ths ($50,000.00) Dollars paid, grants to RENEWABLE RESOURCES, INC., a Rhode Island Corporation, the following described parcels of real estate:

That certain real estate situated in the Towns of Westerly and Hopkinton, in the County of Washington, State of Rhode Island, and described as follows:

TRACT ONE - A certain lot or parcel of land, lying and being in said Town of Westerly, bounded and described as follows: Beginning at a stone post, on the westerly bank of the Pawcatuck River, said point being the southeasterly corner of the premises now being described; thence northwesterly a distance of 60 feet, more or less, to a wall marking the northerly and easterly boundary line of land now or formerly of Howard E. Thorp, et ux; thence northeasterly along said wall, a distance of 85.0 feet to an angle in said wall; thence northwesterly, along said wall, a distance of 24.0 feet, to an angle; thence northwesterly, along said wall, a distance of 35 feet, to a point; thence northwesterly, a distance of 23.25 feet, to an iron pipe at an angle, said pipe being about 1.75 feet southwesterly from the southwesterly corner of the southwest pier of the water tower; thence northwesterly a distance of 20.55 feet to an iron pipe at an angle; thence northeasterly, a distance of 32.54 feet, more or less, to a stone post at an angle, said point being the northwest corner of the water tower lot, so-called, as described in a deed from William H. Thorp to the Pawcatuck Woolen Mills, dated October 29, 1903, and recorded in the Land Evidence Records of said Town of Westerly, in Book No. 35, at page 301; thence northwesterly, a distance of 52.10 feet to an iron pipe driven in the ground at an angle, said point being located 37.40 feet easterly of a drill hole in a large boulder; thence northeasterly, a distance of 174.15 feet to an iron pipe; thence northwesterly, a distance of 125 feet, to a point on the westerly line of a parcel of land conveyed by William H. Thorp and Alice E. Thorp to the Pawcatuck Woolen Mills, by deed dated July 15, 1920, and recorded in the Land Evidence Records of said Town of Westerly in Book No. 46, at Page 161, said point being located 100 feet northerly along said boundary line, from the center line of a well, thence northeasterly, a distance of 463 feet, more or less, to the Pawcatuck River, said last mentioned line passing through an oak tree located near the edge of the Pawcatuck River; thence in a prolongation of said last mentioned line, to the boundary line between the said Town of Westerly and the said Town of Hopkinton, at the center of the Pawcatuck River; thence southerly and southwesterly, along the boundary line between the said

RHODE ISLAND REAL ESTATE CONVEYANCE TAX
TAX $ 140.00
DATE 10/8/92
RECORDED IN WESTERLY
001759

Town of Westerly and the said Town of Hopkinton, to a point on the prolongation easterly of the first described boundary line of the premises now being described; thence westerly to the point and place of beginning. Said premises are shown and delineated on a plat entitled, "Plat Showing Location of Properties belonging to The Pawcatuck Woolen Mills, Potter Hill--Westerly--R.I. Scale 40 feet to an Inch, July 1920. George W. Woodward, Surveyor, Revised March 1930, Rossi & Lewis, Engineers," on file or to be placed on file in the office of the Town Clerk of said Town of Westerly, reference to which plat being hereby had and made, and the same being made a part hereof. Reserving and excepting the same right to pass over and across so much of said premises as are designated as Lot No. 5 on said plat, and by the same parties as is mentioned and are named in certain deeds to Edwin Babcock and Horace Babcock of said Lot No. 5, which said deeds are now on record in the Records of Land Evidence of said Town of Westerly reference thereto being hereby made. Being Lots Nos. 3A, 5 and 11, as shown on said revised plat dated March, 1930, but not including lot No. 11A, as shown on said plat.

Being the same premises described as Parcel No. 1 in that certain deed of Frederick T. Lawrence and Carrie K. Lawrence to Swift River Woolen Co. dated April 15, 1930 and recorded in the Land Evidence Records of said Town of Hopkinton in Book No. 37 at Page 489.

Being the same premises described as Tract One in that certain deed of Swift River Woolen Co. to Helen E. Cottrell dated August 4, 1955 and recorded in the Land Evidence Records of the Town of Westerly in Book 74 at Page 354.

TRACT TWO - A certain lot or parcel of land lying and being in said Town of Hopkinton, bounded and described as follows: Commencing on the easterly bank of the Pawcatuck River, at the northerly side of the abutment to the Potter Hill bridge, so-called, and running in a northeasterly and northerly direction, with the northwesterly and westerly boundary of the Ashaway Road, so-called, 1100 feet, more or less, to land now or formerly of Charles W. Austin; thence in a northwesterly direction with the southeasterly line of said Austin land, 87.5 feet, more or less, to a corner; thence in a northerly direction with the westerly line of said Austin land, 23.5 feet, more or less, to a corner; thence in a westerly direction about 95 feet, along land formerly of said Austin, to the Pawcatuck River; thence in a continuation of said last mentioned line, to the boundary line between said Town of Westerly and Hopkinton; thence upstream southeasterly, southerly and southwesterly, along the boundary line of said Town of Westerly and Hopkinton, to the northerly side of said Potter Hill Bridge, over said Pawcatuck River; thence southeasterly to the point and place of beginning. Said premises are shown and delineated on said plat above referred to, as Lot No. 8, reference to the same being hereby had and made and the same being made a part hereof.

Being the same premises described as Parcel No. 2 in that certain deed of Frederick T. Lawrence and Carrie K. Lawrence to Swift River Woolen Co. dated April 15, 1930 and recorded in the Land Evidence Records of said Town of Westerly in Book No. 53 at Page 427 and also recorded

in the Land Evidence Records of said Town of Hopkinton in Book 37 at Page 489. Being the same premises described as TRACT TWO in that certain deed of Swift River Woolen Co. to Helen E. Cottrell dated August 4, 1955 and recorded in the Land Evidence Records of the Town of Westerly in Book 74 at Page 354.

TRACT THREE - A certain lot or parcel of land, lying and being in the Village of Potter Hill, in said Town of Westerly, which formerly contained an office building and other improvements bounded and described as follows, to wit:- Beginning at a stone post on the westerly bank of the Pawcatuck River, said point being the southeasterly corner of land now or formerly of Frederick T. Lawrence, and the northeasterly corner of the premises herein conveyed; thence run southerly, 13 feet, more or less, along said Pawcatuck River, to a point three (3) feet southerly from the southerly side of the southerly side extended to the former office building, as the stood in 1955; thence run westerly, in a line three (3) feet southerly from and parallel with the southerly side of the former office building, to a point three (3) westerly from the westerly side of the former office building, if extended southerly; thence run northerly, in a line three (3) feet westerly from the westerly side of the former office building, to land now or formerly of said Frederick T. Lawrence; thence run easterly, along land now or formerly of said Frederick T. Lawrence, to the point and place of beginning.

Being the same premises conveyed to Swift River Woolen Co. by deed of Frederick T. Lawrence, dated May 6, 1930 and recorded in the Land Evidence Records of said Town of Westerly in Book No. 53 at Page 443.

Being the same premises described as TRACT THREE in that certain deed of the Swift River Woolen Co. to Helen E. Cottrell dated August 4, 1955 and recorded in the Land Evidence Records of the Town of Westerly in Book 74 at Page 354.

Together with all and singular the factories, store houses, barns and other improvements standing upon each of said tracts and premises aforedescribed, and the dam and water power and water rights and water privileges connected with and belonging to the said premises; subject, however, to the obligations made and contained in a certain agreement between Thomas W. Potter and Edwin Babcock and Horace Babcock, dated January 7, A.D. 1850, and recorded in Book 18, at Page 707, and in a certain deed from Thomas W. Potter to Edwin Babcock and Horace Babcock, of the same date, and recorded in the said agreement and to said deed being hereby made. Subject also to the obligations, if any, that the said Potter Hill Woolen Co., Inc., may be under by virtue of a certain agreement between the Potter Hill Manufacturing Company and the White Rock Company, so-called, dated September 25, 1828, and recorded in the records of Land Evidence in said Town of Westerly, in deed Book 18, at Page 554, reference to said agreement being hereby made. Subject, also, to any changes in the bank of said Pawcatuck River by reason of the action of the water thereof, since the year 1873.

Subject also to a certain pole line agreement granted to the Narragansett Electric Company by the Swift River Woolen Co.

Subject also to a Condemnation Order of the Town of Westerly which has been affirmed by the Rhode Island Washington County Superior Court in Civil Action File No. 80-4 entitled "Helen E. Cottrell, d/b/a Westerly Woolen Company vs. R.I. State Board of Standards and Appeals."

IN WITNESS WHEREOF, FLEET BANK, N.A., Conservator of the Estate of HELEN E. COTTRELL, has caused its corporate name and seal to be affixed hereto by ALLEN J. WELCH, Vice President, Fleet Bank, N.A. this 22nd day of SEPTEMBER, 1992.

FLEET BANK, N.A.
Conservator of the Estate of
HELEN E. COTTRELL

BY: _____
ALLEN J. WELCH
Its Vice President

STATE OF CONNECTICUT
COUNTY OF NEW LONDON

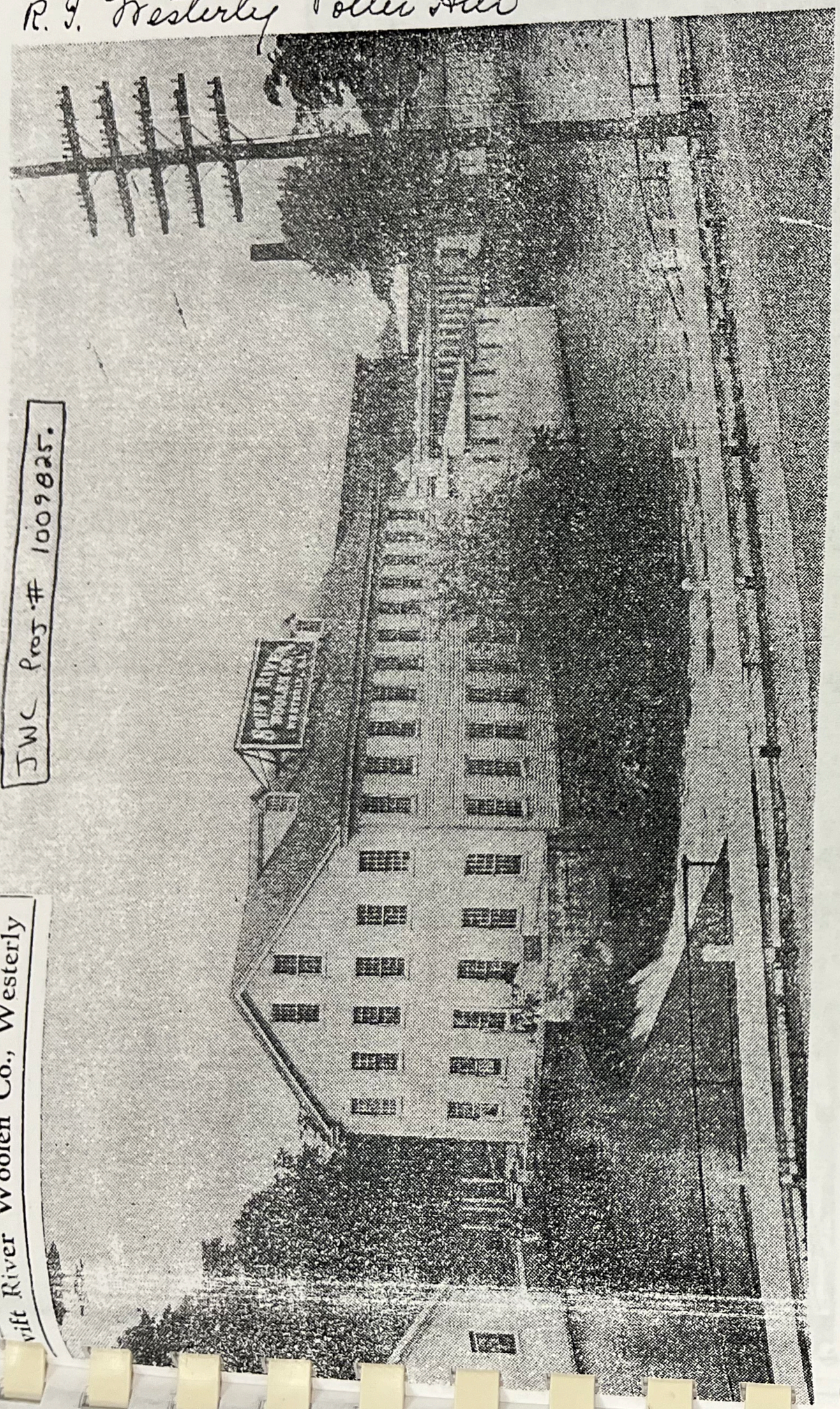
In New London on the 22nd day of September, 1992 before me personally appeared ALLEN J. WELCH, a Vice President of the said FLEET BANK, N.A., Conservator of the Estate of HELEN E. COTTRELL, to me known and known by me to be the party executing the foregoing in his said capacity for and in behalf of the said FLEET BANK, N.A., Conservator of the Estate of HELEN E. COTTRELL, and he then and there acknowledged said instrument, by him executed in his capacity for and in behalf of the said FLEET BANK, N.A., Conservator of the Estate of HELEN E. COTTRELL, to be the free act and deed of the said FLEET BANK, N.A., Conservator of the Estate of HELEN E. COTTRELL and his own free act and deed.

_____
Maureen S. Gaudett
Notary Public
My Commission Expires: 3/31/93

DONNA L. GIORDANO, TOWN CLERK
WESTERLY, R I. RET: _____

APPENDIX B
APPENDIX C
APPENDIX D

R. I. Westerly Potter Hill



JWC Proj # 1009825.

Swift River Woolen Co., Westerly

Westerly - Potter Hill

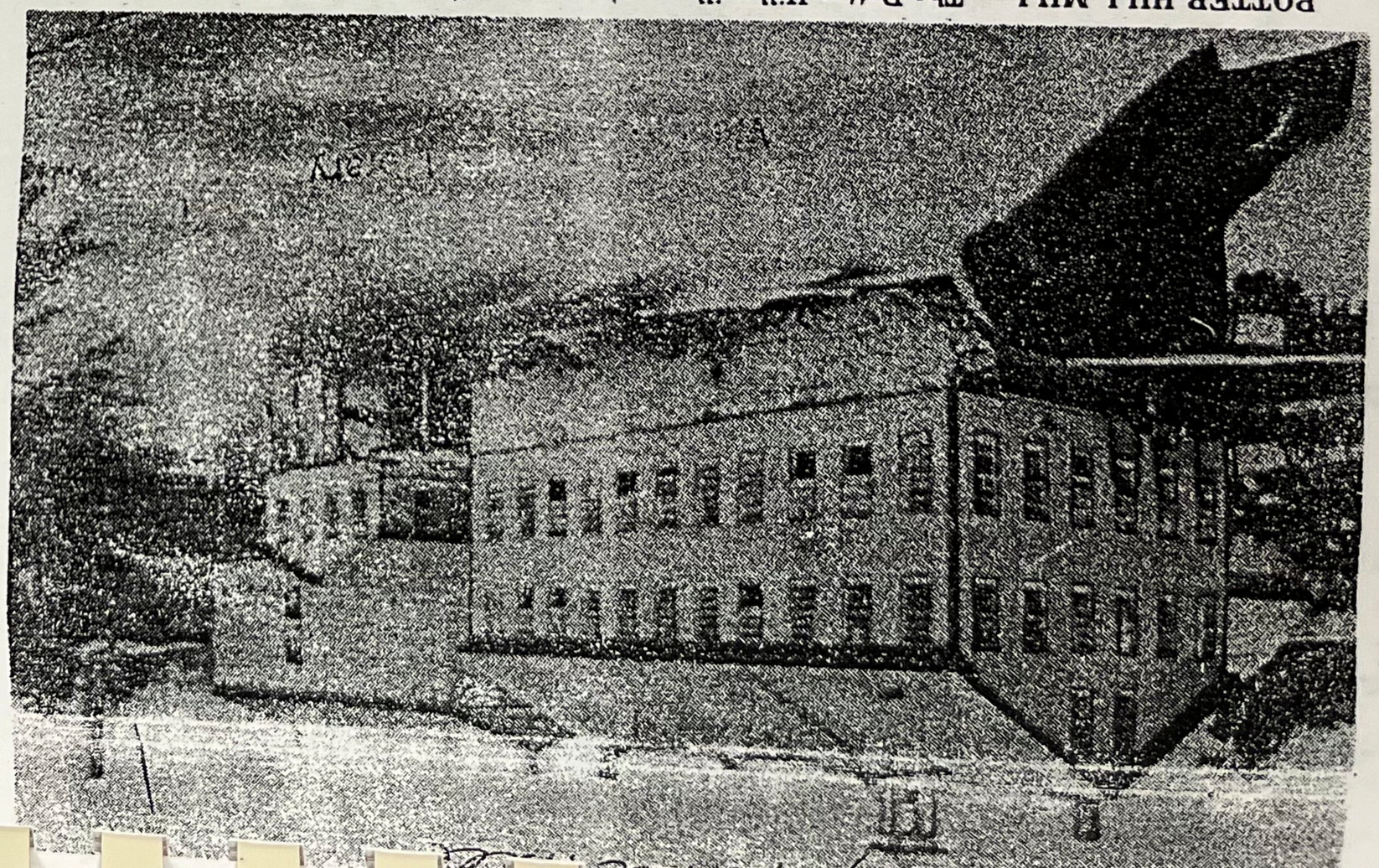
Westerly Public Library
Local History



POTTER HILL MITT — This is the way the Potter Hill Mill, located at the town line dividing Westerly and Ashaway in Potter Hill, looked around the turn of the century. The building is still standing but has been closed for many years and is beginning to show its age.

WS 3 NOV. 75

POTTER HILL MILL — The Potter Hill mill was a flourishing industry when this photo was taken. Located on the Westerly side of the river separating Westerly and Ashaway, the building is still standing but has not been occupied for many years. WS 7-15-74



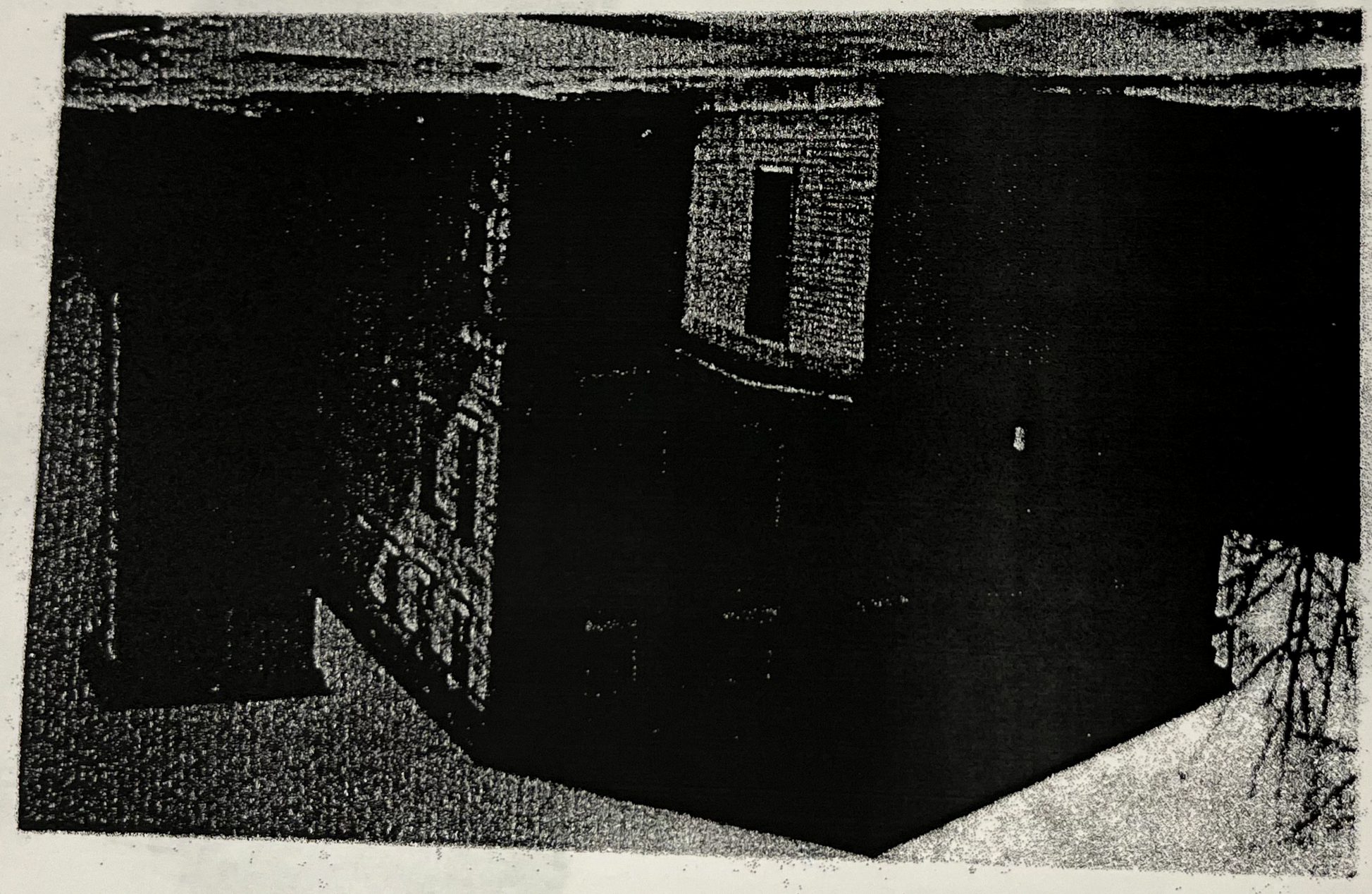


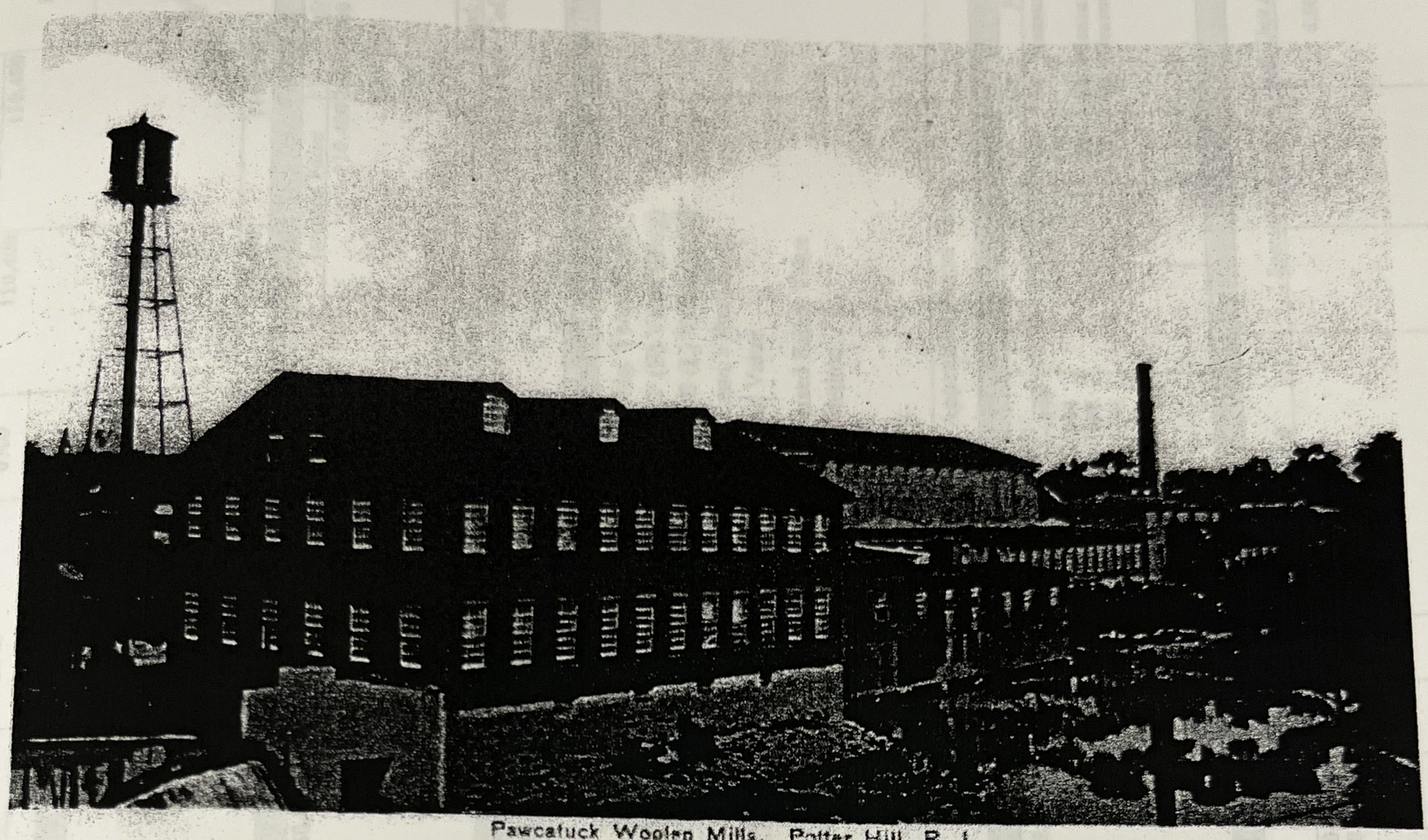
Potter Hill Dam and Bridge, near Westerly, R. I.

Boys-32. Girls-16. 9-24-01. Lillian Wilson.

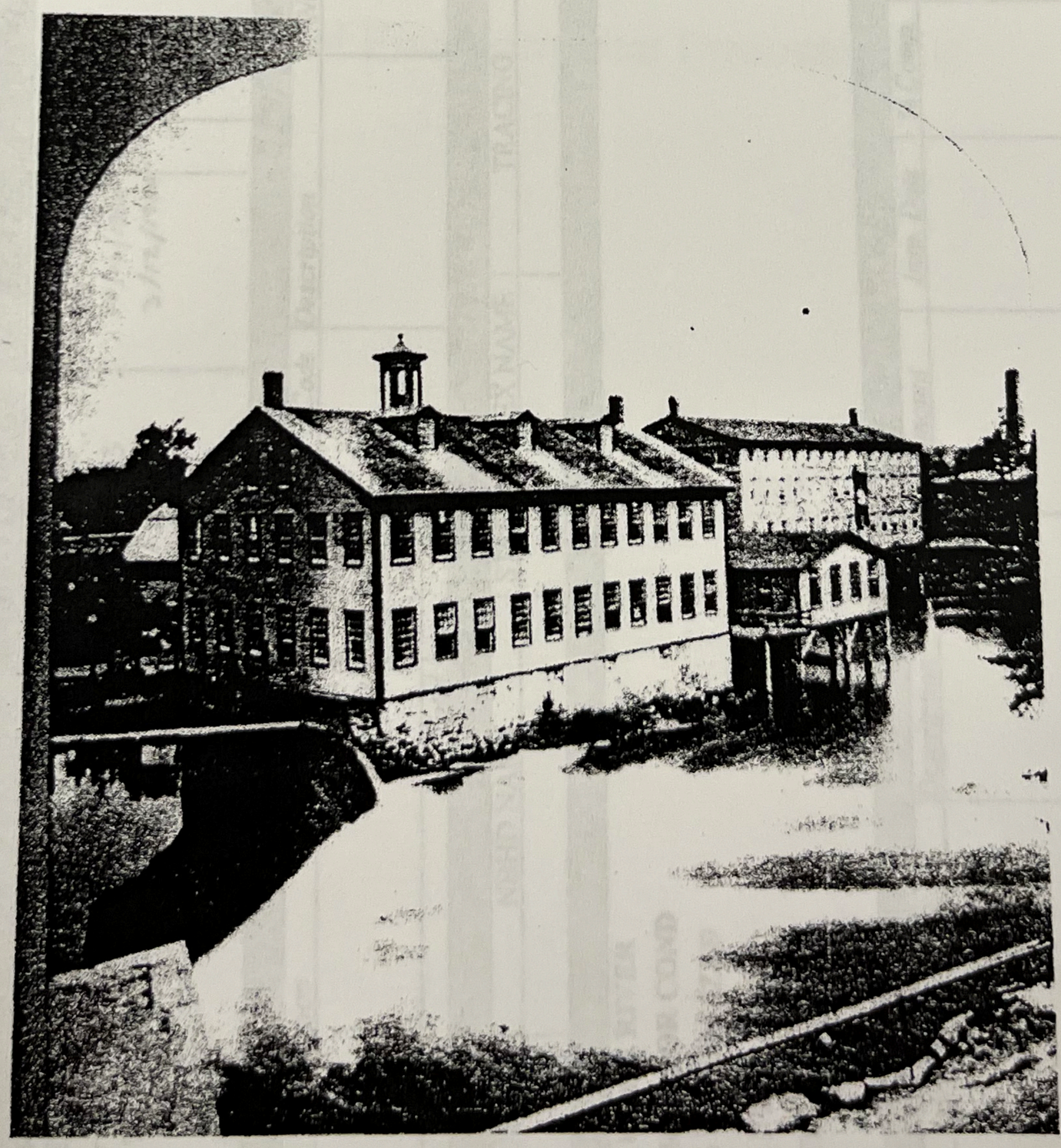
Made in Germany for Woodmansee Westerly R.I.

Stone Mill Building (1847)





Pawcatuck Woolen Mills. Potter Hill, R. I.



Property Location: 198 [illegible] RD MAP [illegible] 23/ [illegible] Bldg Na[illegible] State [illegible]400N
Vision ID: 55 Account #18049575 Bldg #: 1 of 1 Sec #: 1 of 1 Card 1 of 1 Print Date: 02/27/2006 10:36

CURRENT OWNER	TOPO.	UTILITIES	STRT./ROAD	LOCATION
RENEWABLE RESOURCES INC	1 Level	2 Public Water	1 Paved	3 Rural
C/O ED CARAPEZZA		6 Septic		7 Waterfront
900 N STAFFORD ST APT 2428				
ARLINGTON, VA 22203				
Additional Owners:				

SUPPLEMENTAL DATA

Other ID:	008-023
FIRE DIST	WFD
STATE CODE	07
SEWER	N
DEED TYPE	
GIS ID:	
DATE RECO	
	55
ASSOC PID#	

CURRENT ASSESSMENT

Description	Code	Appraised Value	Assessed Value
IND LND	0700	110,400	110,400
	Total	110,400	110,400

1401
WESTERLY, RI

VISION

RECORD OF OWNERSHIP	BK-VOL/PAGE	SALE DATE	q/u	v/i	SALE PRICE	V.C.
RENEWABLE RESOURCES INC	432/ 53	10/08/1992	U	I	50,000	1N
COTTRELL HELEN E	74/ 354	08/15/1955			0	
Swift River Woolen Co.	53/443	05/06/1950				
Frederick T. Lawrence	53/190	3/12/1930				

PREVIOUS ASSESSMENTS (HISTORY)

Yr.	Code	Assessed Value	Yr.	Code	Assessed Value	Yr.	Code	Assessed Value
2005	0700	110,400	2005	0700	110,400	2003	0700	110,400
	Total:	110,400		Total:	110,400		Total:	110,400

EXEMPTIONS

Year	Type	Description	Amount
		Total:	

OTHER ASSESSMENTS

Code	Description	Number	Amount	Comm. Int.

This signature acknowledges a visit by a Data Collector or Assessor

APPRAISED VALUE SUMMARY

Appraised Bldg. Value (Card)	0
Appraised XF (B) Value (Bldg)	0
Appraised OB (L) Value (Bldg)	0
Appraised Land Value (Bldg)	110,400
Special Land Value	0
Total Appraised Parcel Value	110,400
Valuation Method:	C
Adjustment:	0
Net Total Appraised Parcel Value	110,400

ASSESSING NEIGHBORHOOD

NBHD/ SUB	NBHD NAME	STREET INDEX NAME	TRACING	BATCH
0035/A				

NOTES

MILL COMPLEX ON RIVER
BLDGS IN VERY POOR COND
VACANT AND VANDALIZED
BLDGS HAVE NO VALUE
LOCKED GATE

BUILDING PERMIT RECORD

Permit ID	Issue Date	Type	Description	Amount	Insp. Date	% Comp.	Date Comp.	Comments

VISIT/ CHANGE HISTORY

Date	Type	IS	ID	Cd.	Purpose/Result
10/28/1999			WW	04	Measur/Vac/Boarded up
6/1/1994			CV		
8/3/1990			DT	10	Measu/LtrSnt Letter Se
3/1/1990	X		TT	00	Measur+Listed

LAND LINE VALUATION SECTION

B #	Use Code	Use Description	Zone	D	Frontage	Depth	Units		Unit Price	I. Factor	S.A.	Acre Disc	C. Factor	ST. Idx	Adj.	Notes- Adj	Special Pricing		Adj. Unit Price	Land Value
1	400V	INDUSTRL MDL-00	R60				60,000	SF	1.74	1.00	9	1.0000	1.00	0035	0.85				1.48	88,800
1	400V	INDUSTRL MDL-00	R60				3.17	AC	8,000.00	1.00	9	1.0000	1.00	0035	0.85				6,800.00	21,600
																			Total Land Value:	110,400
		Total Card Land Units:					4.55	AC	Parcel Total Land Area:	198,085 SF										

APPENDIX B

APPENDIX F

Resumes of Environmental Professionals

Joseph T. Unsworth, P.E.

Project Manager

PROFILE

Mr. Unsworth is a licensed professional engineer in Rhode Island. Mr. Unsworth started his career with the Rhode Island Department of Environmental Management (RIDEM). Mr. Unsworth was an Air Pollution Engineer for three years and a Principal Engineer for approximately five years in the Site Remediation program. Mr. Unsworth has been employed in the environmental consulting industry for the past nine years primarily as a Project Manager for the investigation and remediation of various types of property.

At Jacques Whitford, he has applied his regulatory experience, project management skills, and contractor management experience to the investigation of all facets of the environmental and engineering field. Currently Mr. Unsworth is a Project Manager located in the Rhode Island office and manages the daily progress of each project for which he is responsible. This involves project scheduling, work plan and quality assurance plan preparation, budget control, subcontractor interaction, client correspondence, data reduction and analysis, and report preparation. In addition to his direct project involvement, Mr. Unsworth manages the office's health and safety policies, implements the office's internal training program, and is the technical advisor for RIDEM regulations.

EDUCATION

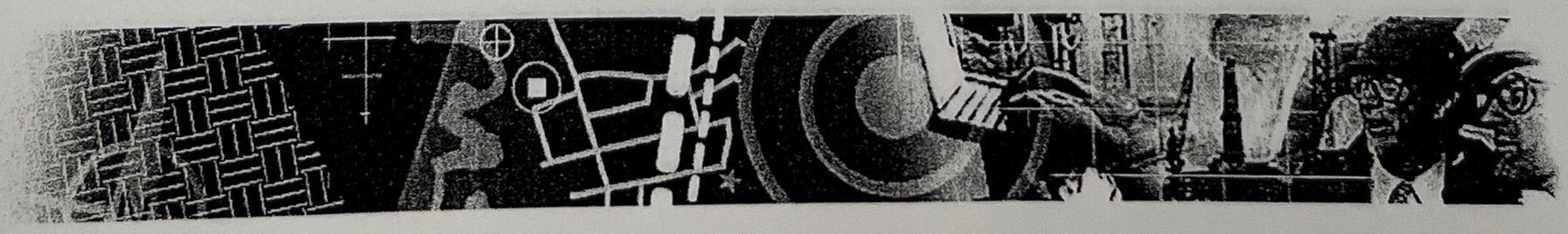
University of Rhode Island, 1988
BS in Chemical Engineering

PROFESSIONAL COURSES AND DESIGNATIONS

- Licensed Professional Engineer (RI), 2002
- OSHA 29 CFR 1910.120, 40 Hour Hazardous Waste Site Worker Protection Training
- First Aid & CPR

CAREER SUMMARY

2002-Present	**Jacques Whitford, Rhode Island** Project Manager
1998-2002	**GZA Geoenvironmental** Project Manager
1997-1998	**Environmental Science Services** Project Manager
1996-1997	**Coneco Environmental** Project manager
1988-1996	**Rhode Island Department of Environmental Management** Principal Engineer



LANDMARK PROJECTS

International Depository Inc, North Kingstown, RI. *Client:* Rhode Island Department of Transportation, 1992

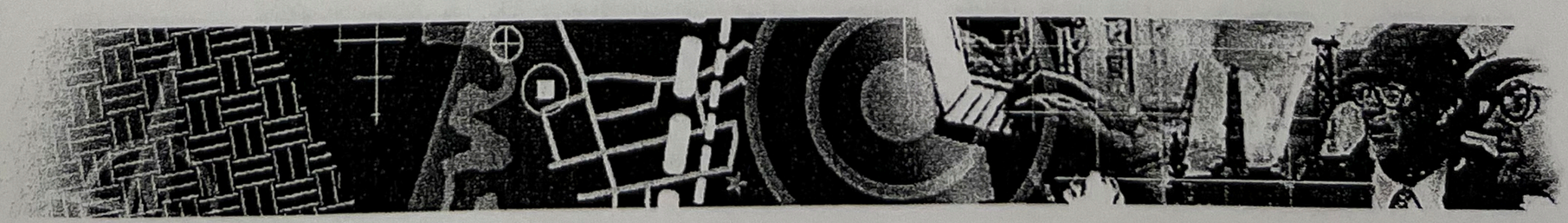
Supervised the removal of over 2,000 drums of various hazardous materials stored in deteriorating conditions at a former hazardous waste storage facility. Also managed the remediation of two areas of soil contamination. Responsibilities included subcontractor management, maintaining site security, overseeing emergency response actions, and ensuring project was completed within budget and in compliance with a USEPA order.
Role: Project Manager

Central Landfill, Johnston, RI
Client: Rhode Island Resource Recovery Corporation, 1999-2002

As Project Manger, responsibilities included the management of all environmental monitoring programs. The project included the quarterly sampling and analysis of over 40 groundwater monitoring wells, 10 surface waster and sediment locations, leachate sampling, ambient air testing, indoor air testing, and surface emission monitoring. The project also required data reduction and reporting to the RIDEM that included statistical analysis of laboratory results.

Former Providence Steel, Providence, RI
Client: Millhaus LLC, 2003-Ongoing

The project included the excavation and onsite treatment of soil impacted with high levels of lead. The treatment included the stabilization of the lead in the soil with a phosphorous based chemical that reduced the leachable lead to below hazardous waste standards. The treatment of the soil resulted in saving the client over $75,000 in disposal cost. In additional to the onsite treatment, other responsibilities included managing the testing of all soils, managing the transportation of disposal of contaminated soil, and all regulatory correspondence with the RIDEM. Ongoing activities include capping of the site with a combination of soil and asphalt and filing of an Environmental Land Use Restriction on the deed of the property.
Role: Project Manager



Vincent L. Jacques, P.E.

Civil/Environmental Engineer

PROFILE

Mr. Jacques is a Professional Engineer with 12 years experience conducting environmental investigations at contaminated sites, due diligence assessments, and hazardous material assessment and abatement projects throughout New England. Mr. Jacques has supervised and completed numerous Level I & II Environmental Site Assessments on industrial, commercial and residential properties for lending institutions, municipalities and private clients. Mr. Jacques has also been involved in various Phase III/remediation projects involving the restoration of impact soil, groundwater, and vapor gas. He also completed numerous asbestos and lead-based paint surveys, abatement plans, operations and maintenance programs, project monitoring, and final clearance testing for various types of properties, each approved by appropriate state agencies. Mr. Jacques also has significant experience in preparing storm water permits, Title V air permits, underground injection control permits, and spill prevention counter control measure plans.

Mr. Jacques is currently the Area Manager for Jacques Whitford's Rhode Island office. In this capacity, Mr. Jacques is responsible for ensuring that the quality of all projects meets Jacques Whitford's stringent quality standards, the appropriate resources are assigned to each project, and ensuring project success through appropriate communication with clients.

EDUCATION

The University of Rhode Island, 1992
B.S in Civil Environmental Engineering

Northeastern University, 1997
Certificate of Professional Achievement, Specialization:
Hazardous Waste Management,
Concentration: Site Investigation and Remediation

PROFESSIONAL COURSES AND DESIGNATIONS

- Professional Engineer, Rhode Island – No. 7047, 1999
- Certified Asbestos Inspector & Project Designer, Rhode Island – AAC-0409IS/AAC-0909PD
- Certified Asbestos Inspector, Project Designer and Project Monitor, Massachusetts – AI 040309/AD 40576/AM 040310
- Certified Asbestos Inspector & Project Designer, New Hampshire –224-I
- Certified Asbestos Inspector, Maine – AI-0224
- Environmental Lead Inspector Training – Initial 40 hour course
- Princeton Gamma-Tech, Inc. X-ray Fluorescence Analyzer Training
- Certified Environmental Inspector/Specialist, Environmental Assessment Association



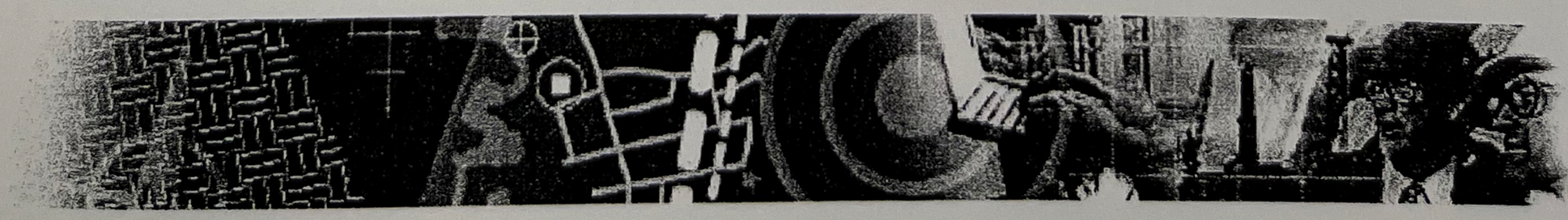
- OSHA 29 CFR 1910.120, 40 Hour Hazardous Waste Site Worker Protection Training
- OSHA 29 CFR 1910.120, Confined Space Entry
- OSHA 29 CFR 1910.120, 8 Hour Supervisor Training
- OSHA 29 CFR 1910.120, 8 Hour Refresher Training
- First Aid and CPR Trained

CAREER SUMMARY

2002-present	**Jacques Whitford Company, Inc. – Lincoln, Rhode Island** Area Manager
1994-2002	**Kenyon Environmental, Inc. – Pawtucket, RI** President
1991-1994	**Kenyon Environmental, Inc. – East Providence, RI** Vice President
1988-1991	**Narragansett Bay Commission, Providence, RI** Environmental Engineer

MEMBERSHIPS/ASSOCIATIONS

- Voting Member, ASTM, Committee E50, Environmental Assessment
- Member, Chi Epsilon – Civil Engineering Honor Society
- Member, Tau Beta Pi – Engineering Honor Society
- Member, Golden Key – National Honor Society
- PADI Certified for Scuba Diving
- Member, The University Club, Providence, Rhode Island
- St. James Church, Finance Committee Member
- Pack 1 Manville, Cub Scout Leader and Committee Member



Appendix E – Qualifications

Hannah Pallein

Project Manager / Geologist

LOCATION

Cromwell, CT

EDUCATION

BS, Environmental Earth Science, with dual focuses in Sustainable Energy and Geology – Eastern Connecticut State University

AFFILIATIONS

Environmental Professionals' Organization of Connecticut

EXPERTISE

- Petroleum portfolio case management
- Account management
- UST system assessment and remediation
- Construction project management
- Rapid Response
- Industrial Stormwater compliance monitoring

Hannah Pallein is project manager / geologist with over 10 years of environmental consulting experience. She joined GES in 2014. She manages approximately 25 sites for major petroleum clients in Connecticut, Vermont, and Rhode Island and approximately 10 sites for industrial stormwater clients in Connecticut and Massachusetts. She also serves as account manager for 35 sites, including financial tracking, reviewing invoices and associated backup documentation, and preparing and tracking cost proposals, change orders, project schedules, and budgets, including project forecasting and using a client financial database. Hannah performs technical report writing, editing/report review, prepares site work plans, prepares and coordinates local and state permits including attendance at town meetings, schedules projects, and tracks deadlines using a deliverable tracking database. She manages subcontractors, communicates with third parties and property owners, and meets with clients and regulatory agents regarding schedules and compliance issues.

Hannah has performed and managed emergency response activities, sensitive receptor surveys, Phase I, Phase II, and Phase III environmental site assessments (ESAs) (including soil vapor, soil, surface-water, groundwater and potable well sampling), and remediation including pilot testing, excavations, and system installations. She has also managed large-scale site development and rebuild construction projects including contractor, client, and state communications and on-site construction meetings, scheduling, permitting, and reporting. She is knowledgeable with respect to the Connecticut Remedial Standard Regulations (RSRs) and the Underground Storage Tank (UST) Regulations, in addition to Vermont Department of Environmental Conservation (VTDEC) Site Management Section (SMS) and Rhode Island Department of Environmental Management (RIDEM) UST Regulations and Remediation Regulations.

Project Experience

Retail Petroleum Station Construction Raze and Rebuild Projects, CT, RI, and VT

Served as project manager on various projects that included due diligence for off-site property acquisition (Phase I and Phase II environmental site assessments (ESAs), soil and groundwater management plans, geotechnical investigations, aquifer testing, oil/hazardous material surveys, public notice with environmental justice focus, remedial action work plans, and on-site raze and rebuild/remediation activities activities. Projects have included, gasoline and diesel system removal and replacement; heating oil, waste oil, hydraulic lift, and oil/water separator system removals; remedial excavation activities; asbestos abatement; soil management; dewatering and groundwater management; subcontractor oversight; installation of engineered & institutional controls (environmental land use restrictions) and regulatory correspondence and reporting.

Stormwater Sampling and Inspections at Industrial Facilities, CT

Serves as project manager for routine semi-annual stormwater sampling and inspections at industrial facilities in accordance with the general permit for discharge of stormwater associated with industrial activities. During inspections, coordinates with stormwater pollution prevention team and records observations. Monitors rainfall events and determines if they achieve specific qualifying criteria for sample collection events. Conducts semi-annual sampling following a qualifying storm and submits water samples to an approved laboratory for permit-required analytical parameters.

Rapid Response Activities at Petroleum Sites, CT, MA, and RI

Conducted emergency response activities including interviews with knowledgeable site personnel; containment, evaluation, and documentation of cleanup activities; subcontractor oversight; and air monitoring immediately following release.

Chemical Oxidation Remediation of Petroleum Station, Lyndonville, VT

Served as project manager/primary client contact for assessment, pilot testing, and remediation. In response to historical petroleum impact from UST area on site, performed site assessment, groundwater sampling, vapor screening of adjacent building, remediation pilot testing, and chemical oxidation injection event via iron-activated sodium persulfate. Provides continuous client updates during the project and coordination with off-site property owner and regulatory agency to maintain project schedule.

Water-Quality Monitoring, Inspections, and Reporting at Closed Landfill, CT

Served as case manager for closed solid-waste disposal facility, which included coordination and execution of routine groundwater, stormwater, and drinking-water supply well monitoring; annual leachate inspections; data review and verification; and preparation of quarterly and annual reports.

Training

- Loss Prevention System (LPS)
- OSHA HAZWOPER – initial, refresher, and supervisor
- Stormwater Sector C Training – CTDEEP
- Hazardous and Non-Hazardous Waste Handling and Transportation Training Requirements – RCRA
- DOT Training
- Remediation Standard Regulations – CTDEEP
- PIC Training – Buckeye
- Field Ergonomics and Permit Issuer/Recipient Training – EMES
- Safe Driver Training
- First Aid and CPR/AED – American Red Cross

Melissa D. Davis

Senior Project Manager

LOCATION

Windsor, CT

EDUCATION

BS, Renewable Natural Resources/Water Resources – University of Connecticut

AFFILIATIONS

Environmental Professionals' Organization of Connecticut

EXPERTISE

- Petroleum portfolio management
- Account management
- Regulatory consulting
- Construction project management
- Rapid response

Melissa Davis is a senior project manager with over 25 years of environmental consulting experience. She joined GES in 2000. She manages a team of two staff and approximately 50 sites for two major petroleum clients in Connecticut, Vermont, and Rhode Island. She also serves as account manager for 50 sites, including financial tracking, reviewing invoices and associated backup documentation, and preparing and tracking cost proposals, change orders, project schedules, and budgets, including project forecasting and using a client financial database. Melissa performs technical editing/report review, prepares site work plans, prepares and coordinates local and state permits including attendance at town meetings, schedules projects, and tracks deadlines using a deliverable tracking database. She manages subcontractors, communicates with third parties and property owners, and meets with clients and regulatory agents regarding schedules and compliance issues.

Melissa has performed and managed emergency response activities, sensitive receptor surveys, Phase I, Phase II, and Phase III environmental site assessments (ESAs) (including soil vapor, soil, surface-water, groundwater and potable well sampling), and remediation including pilot testing, excavations, and system installations. She has also managed large-scale site development and rebuild construction projects including contractor, client, and state communications and on-site construction meetings, scheduling, permitting, and reporting. She is knowledgeable with respect to the Connecticut Remedial Standard Regulations (RSRs) and the Underground Storage Tank (UST) Regulations, in addition to Vermont Department of Environmental Conservation (VTDEC) Site Management Section (SMS) and Rhode Island Department of Environmental Management (RIDEM) UST Regulations and Remediation Regulations.

Project Experience

Site Rebuild/Remediation Excavation Construction at Petroleum Station, East Greenwich, RI

Serves as project manager and primary client contact. In response to historical petroleum impact from on-site UST system and impact located near stormwater system drywell, performed scheduling, project updates, permitting, RIDEM approval for reimbursement; classification for soil and groundwater management, profiling, and disposal coordination; hazard and geotechnical assessment for redevelopment; dewatering; UST removal, closure sampling, and reporting; remediation excavation, confirmatory sampling and remedial action plan reporting; closure of groundwater discharge system sampling and reporting; communication with state for approvals and reporting requirements; and follow-up questions on reimbursement approvals through RIDEM.

Pollution Abatement and Consent Order Site, Retail Petroleum Station, Hebron, CT

Serves as project/account manager, and primary client contact. In response to petroleum impact from UST area, performed site assessment (on and off site), pilot testing, UST system removal and excavation, soil sampling, and disposal of impacted soils. Collected potable water supply well samples from residences and local businesses, involving coordination and communication with each property owner. Coordinated, installed, and sampled point-of-treatment (POET) systems on numerous potable water supply wells and, ultimately, decommissioned POET systems and provided environmental oversight during municipal water line installation. Initiated additional remediation, including horizontal drilling on and off site and installation and operation of bioremediation system enhanced with oxygen injection. Worked closely with surveyors, contractors, engineering, and field staff to ensure that public and private utilities were not compromised during drilling activities. Provides continuous updates during project, and coordination with CT DEEP, CT DOT, town, property owners, and subcontractors to maintain project schedule. Oversees financial tracking/project forecasting, and has completed initial proposal and subsequent change orders for out-of-scope work identified to accommodate sale of property and new property owner's requirements.

Site Development and Rebuild of Petroleum Station, Lyndonville, VT

Served as project manager and primary client contact. In response to historical petroleum impact from a UST area on site and a spill from a former heating-oil tank off site located in a building that was demolished for construction, performed scheduling, project updates, permitting, classification for soil and groundwater management and disposal coordination, geotechnical assessment for development, dewatering, UST removal and closure sampling, remediation excavation, pilot testing, and reporting including spill, UST closure, and remediation scopes/state communications.

Remediation System Installation and Operation: Active Retail Petroleum Station, Plainfield, CT

Serves as project/account manager for assessment, pilot testing, and remediation. In response to historical petroleum impact from UST area and diesel surface spill, performed site and subsurface assessment, soil sampling, potable drinking-water supply well sampling of adjacent residents, disposal of impacted soils, remediation pilot testing, and air sparge/soil vapor extraction (AS/SVE) system installation, operation, and post-remediation groundwater and soil sampling. AS/SVE system operated between March 2010 and June 2013. The system has been effective in removing petroleum impact in both the soil and groundwater on site and, therefore, has been decommissioned and removed from the site. Post-remediation groundwater and soil sampling was completed in 2016. In 2017, worked with CT DEEP to abate the SEHN condition that was associated with previous petroleum impact on site. Recently, additional post-remediation soil sampling was performed for evaluation of a site closure strategy.

Transfer Act Site Investigation, Remediation, and Closure: Truck Maintenance Facility, Torrington, CT

On behalf of the property owner of a former truck maintenance facility, submitted an Environmental Condition Assessment Form (ECAF) to the CT DEEP. The CT DEEP approved entry of the site into the VRP in a letter which stated that a Licensed Environmental Professional (LEP) could verify that remedial activities were performed in accordance with CT DEEP standards and guidelines. Oversaw Phase III assessment activities in the field. Submitted a remedial action plan and a total of 35 cubic yards of soil was removed from designated excavation areas. Submitted the final verification report to the CT DEEP. Through receipt of a letter of no audit findings from CT DEEP, the site was considered clean and closed.

UST System Replacement and Remedial Excavation, Middletown, RI

Serves as project manager and primary client contact for the site. Oversees financial tracking, and completed initial proposals and subsequent change orders for out-of-scope work identified during the project. During 2017, remedial soil excavation and groundwater dewatering and treatment was completed concurrent with station construction activities associated with a station raze and rebuild and replacement of UST system. While completing remedial excavation activities, two orphan 1,000-gallon USTs were encountered and removed to access petroleum-impacted soils in the area. This required additional coordination with the client, construction contractor, and RIDEM regarding out-of-scope activities and impact on project schedule. Remediation activities included dewatering and treatment of groundwater, removal of UST system and two orphaned USTs, and completion of soil excavation. Petroleum-impacted soils were removed from the site for recycling. Petroleum-impacted groundwater was removed from the excavation area, treated through on-site carbon remediation system, and discharged to municipal sanitary sewer system in accordance with discharge permit. Assisted in renewal of discharge permit and reporting as needed to accommodate changes in construction schedule start date and end date as the project progressed, to stay in compliance with permit. During excavation activities, provided continuous updates to client and RIDEM, as well as coordination with client's direct subcontractors and construction group to keep remediation on schedule and complement the construction schedule. Post-excavation groundwater monitoring well installation activities are currently being planned.

Remediation Excavation Construction Project, Retail Petroleum Station, Stamford, CT

Served as project manager for remediation activities conducted during dispenser island canopy footing replacements. During uncovering of the dispenser island canopy footings, an orphan 5,000-gallon UST was encountered and removed to access petroleum-impacted soils in the area. Remediation activities included removal of the UST, completion of soil excavation to the extent possible, and the installation of remedial system piping within the excavation area for future bioremediation options. Approximately 293 tons of petroleum-impacted soils were removed for recycling. Served as primary contact for the client and provided continuous updates during the project, as well as coordinating with the station personnel, the client's direct subcontractors, and the construction group to keep the remediation on schedule. Oversaw the financial tracking, completed the initial proposal and subsequent change orders for out-of-scope work identified when the remediation excavation area had to be advanced beyond the original scope due to the discovery of the orphan UST.

Remediation System Installation and Operation Project, Retail Petroleum Station, Milldale, CT

Serves as project manager, account manager, and primary client contact. Project included assessment and remediation at a third-party-owned active service station. Assessment activities have included records review, sensitive receptor survey, soil borings, monitoring well installations, site survey, and soil vapor, soil, and groundwater sampling. Used assessment data to delineate soil vapor, soil, and groundwater impacts, evaluate potential risk and receptors, and develop a remedial action program. Remediation efforts have included pilot testing, remediation soil excavations, and the design and installation of a vacuum enhanced groundwater extraction (VEGE) remediation system. During excavation activities, one 550-gallon waste-oil UST and one 550-gallon heating-oil UST were removed, and during the heating-oil UST removal, impacted soils were over-excavated. Approximately 33 tons of petroleum-impacted soil was removed from the site for recycling. Provided continuous updates and coordination with local regulators (permitting), subcontractors, property owners, and on-site tenants to maintain a rapid remediation project schedule. Oversaw financial tracking and completed the initial proposal and subsequent change orders for out-of-scope work identified during the project.

Rapid Response at Active Petroleum Station, Cheshire, CT

Provided field and client support during initial response and subsequent activities. CT DEEP noted a discrepancy of about 11,000 gallons of gasoline. GES and GES' subcontractors were mobilized. Activities included a test pit to be excavated near a suspect leaking transfer pipe which resulted in elevated VOC levels and shutting down of station operations. GES staff from both the CT and MA offices responded to on-site activities in 12-hour shifts, which included a total of 40 people each day during the first week of the response. Activities included installation of 26 monitoring, recovery, and vapor recovery wells; design and installation of a temporary vapor/soil phase extraction remediation system (completed and running within two days of the event); removal of three gasoline USTs and associated piping; and removal of 4,000 tons of soil.

Rapid Response, Site Investigation, and Remediation: Styrene Release in Stormwater System, Hamden, CT

Served as emergency responder following release of styrene at active service station. Release occurred during installation of cured-in-place pipe liner (CIPP) within a stormwater pipe transecting the site's subsurface. The CIPP liner was installed in response to previously-identified internal damage and infiltration of petroleum-impacted groundwater into stormwater pipe. Release occurred in the pipe, located 10 to 20 feet beneath the active service station property. As part of the emergency response, responsibilities included groundwater, stormwater, and stream sampling, subcontractor management, and client/third-party correspondence.

Training

- Loss Prevention System (LPS)
- OSHA HAZWOPER – initial, refresher, and supervisor
- Remediation Standard Regulations Course – CT DEEP and EPOC
- RCRA and DOT Training
- Site Characterization Guidance Document Course – CT DEEP
- Safe Driver Training
- First Aid and CPR/AED – American Red Cross

Professional History

Hydrogeologist Specialist at S.S. Papadopulos & Associates, Inc.

Environmental Underwriter Assistant at Environmental Warranty, Inc.