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SITE INVESTIGATION REPORT ADDENDUM

90 Bay Spring Avenue
Map 2/Lot 154
Barrington, Rhode Island

RIDEM File No. SR-01-0106
(Former Case No. 2013-024)

Prepared for:

Bay Spring Realty Company
909 North Main Street
Providence, Rhode Island 02904

Prepared by:

Resource Control Associates, Inc.

474 Broadway
Pawtucket, Rhode Island 02860

200 Pocasset Street
Fall River, Massachusetts 02721

November 11, 2015

November 11, 2015

Mr. Nicholas Noons, Sanitary Engineer
RI Department of Environmental Management
Office of Waste Management
235 Promenade Street
Providence, RI 02908-5767

SUBJECT: **Site Investigation Report Addendum**
Bay Spring Realty Company
90 Bay Spring Avenue
Map 2/Lot 154
Barrington, Rhode Island
RIDEM File No. SR-01-0106 (Former Case No. 2013-024)

Dear Mr. Noons:

On behalf of Bay Spring Realty Company, Resource Control Associates, Inc. (Resource Controls) has prepared this Site Investigation Report (SIR) Addendum for the property located at 90 Bay Spring Avenue, Barrington, Rhode Island (the Site) – RIDEM File No. SR-01-0106 (Former Case No. 2013-024). A Locus Map showing the location of the Site relative to regional geographic features is included as Attachment A, and a Water Table Elevation Contour Plan including sample locations and relevant historic and current Site features is attached as Attachment B.

The Site was historically utilized for industrial purposes including artificial leather and textile manufacturing. The Site is currently vacant wooded land and has been fenced and unoccupied since the 1950s/1960s. Remnants of the former manufacturing facility are evident throughout the Site in the form of concrete foundations, concrete aboveground storage tank (AST) saddles, steel and clay piping, and associated debris.

ASTM Phase I and II Environmental Site Assessment activities were conducted at the Site in 2012 and 2013. Recognized environmental conditions (RECs) associated with the former artificial leather manufacturing operations were identified and evaluated during ASTM assessment activities. Several suspect structures were identified and metals and polycyclic aromatic hydrocarbons (PAHs) were detected in soil and groundwater above applicable RIDEM standards. On May 16, 2013, on behalf of Bay Spring Realty Company, Resource Controls submitted a Hazardous Material Release Notification Form (RNF) to the Rhode Island Department of Environmental Management (RIDEM) Office of Waste Management.

Resource Controls completed a Site Investigation Report (SIR) dated October 30, 2014 to further evaluate RECs that were identified during ASTM efforts to adequately assess the nature and extent of contamination identified at the Site and to evaluate and identify a proposed remedy for each release.

In accordance with the directive from the RIDEM dated February 24, 2015 received via email, an additional round of groundwater samples from select monitoring wells were collected and analyzed to evaluate the potential impacts of a possible release of volatile organic compound (VOC)-impacted water that may have been release into the subsurface during the cistern remedial excavation on May 21 and 28, 2014. Following groundwater sampling events conducted in April 2015, Resource Controls submitted an SIR Addendum Report dated April 27, 2015 to the RIDEM.

In accordance with directive from the RIDEM and subsequent scope or work approval received via email from the RIDEM on June 30, 2015, a supplemental soil investigation and an additional groundwater sampling event were performed in July 2015. Concerns identified by the RIDEM were addressed by collecting two (2) additional soil samples in the area represented by TP-2 and TP-3 for TPH, metals, and PAH analysis, collecting two (2) soil samples in the area of the "Stock House No. 2" transformer pad, and collecting two (2) soil samples from the MW-104 area for TPH and VOC analysis. The purpose of the additional soil investigation was to further delineate the impact to soil at the Site. As previously noted, the purpose of the additional groundwater sampling event was to evaluate the potential impacts of a possible release of VOC-impacted water that may have been release into the subsurface during the cistern remedial excavation on May 21 and 28, 2014.

In accordance with the directive from the RIDEM dated August 4, 2015 received via email, volatile tentatively identified compound (TIC) analysis was performed on the soil (TP-201 and 202) and groundwater (MW-104, MW-105 and MW-3) samples noted above and collected from the Site in July 2015. The TIC analysis was requested due to prior analytical results from MW-104 that suggested required dilution due to the abundance of non-target analytes and because groundwater analytical results from MW-104 did not appear to reflect conditions (odors) observed in the field.

FIELD ACTIVITIES

On July 9, 2015, groundwater was gauged to the nearest 0.01 foot using an electronic interface probe, and groundwater samples were collected from monitoring wells MW-3, MW-5, MW-101, MW-104, MW-105 and MW-106. No light non-aqueous phase liquid (LNAPL) was detected. Fluid level measurements are summarized on the well monitoring form included in Attachment 3. The inferred direction of groundwater flow is to the south/southeast. Groundwater samples were collected by low flow sampling methodology. The samples were collected in clean, preserved glassware, labeled in the field, placed on ice and submitted under standard chain-of custody protocol to ESS Laboratory (ESS) of Cranston, Rhode Island. The samples were analyzed for VOCs and/or total and dissolved RCRA-8 metals.

On July 9, 2015, subsurface investigation/test pitting activities were conducted at the Site in an effort to delineate soil contamination observed during prior SIR activities. A track mounted excavator was utilized to excavate a total of nine (9) test pits (TP-201 through TP-209) to total depths ranging from 2.5 to 8 feet below grade surface. Soil collected from the test pits was field screened for the presence of organic vapors on a parts per million by volume (ppmv) basis with a photoionization detector (PID) equipped with a 10.6 electron volt lamp calibrated to read "as benzene" and the soil lithology was described in the field. PID screening results ranged from no detection through 898 ppmv. Lithological descriptions and PID screening results are included in Test Pit Logs included in Attachment D.

ANALYTICAL RESULTS

Laboratory analysis of soil samples indicated the presence of VOCs in TP-201 and TP-202 above the laboratory reporting limits but below the RIDEM Residential Direct Exposure Criteria. Total Petroleum Hydrocarbons (TPH) were detected in TP-202, TP-203, and TP-205 above the laboratory reporting limits but below the RIDEM Residential Direct Exposure Criteria. Laboratory analysis also indicated the presence of metals in TP-203, TP-204, TP-205, and TP-206 above the laboratory reporting limits but below the RIDEM Residential Direct Exposure Criteria. Elevated concentrations of total arsenic were detected in TP-204 above the RIDEM Residential and Industrial/Commercial Direct Exposure Criteria. The soil analytical results are summarized in Table 1 included in Attachment E, and a copy of the laboratory report is included in Attachment F.

Laboratory analysis of groundwater samples indicated multiple VOC compounds detected in MW-3, MW-104 and MW-105 above the laboratory reporting limits but below the RIDEM GA Groundwater Objectives. Trichloroethene was detected in MW-105 just above the applicable RIDEM GA Groundwater Objectives. Laboratory analysis also indicated total and dissolved metals detected in MW-3, MW-101, MW-104, and MW-106 above the laboratory reporting limits but below the RIDEM GA Groundwater Objectives. Concentrations of total and dissolved arsenic were detected in MW-101 above the RIDEM GA Groundwater objectives. Since the RIDEM does not have promulgated groundwater standards intended to be protective of surface water, Resource Controls compared the TCE and arsenic concentrations to the Massachusetts Contingency Plan (MCP) Method 1 GW-3 Groundwater Standards (TCE – 5,000 ug/l and Arsenic – 9 mg/l). TCE and arsenic concentrations at the Site in groundwater were reported below these standards. The groundwater analytical results are summarized in Table 2 included as Attachment E, and a copy of the laboratory report is included in Attachment F.

Laboratory analytical results indicate that concentrations of contaminants detected in groundwater from each well are similar to the previous sampling event conducted in April of 2015, with the exception of an increase in TCE concentrations in MW-105.

TIC soil and groundwater analytical results, included within the laboratory reports (Attachment F) indicated the following:

- Groundwater from MW-104 appeared to contain multiple BTEX derivatives ranging in value from 9 to 40 ug/L. The compound with the highest concentration (tetramethyl-benzene AKA "durene" at 40 ug/L) is a component of coal tar. Also, it appears that "Cumene" is present at 20 ug/L (listed as ethyl methyl benzene) which is a common component of crude oil and refined fuels. A few isomers that appear to be a degradant of xylenes (listed as ethyl-dimethyl benzene isomer 1-4) ranged from 9-30 ug/L (xylenes were commonly used as a solvent in the artificial leather manufacturing industry). Additionally, Trimethylbenzene isomers were detected at 9ug/L (commonly found in coal tar), and diethylbenzene isomers were detected at 10ug/L (also used as a solvent).

- Groundwater from MW-3 exhibited similar results to those obtained from MW-104, but at lower concentrations, and no TICs were detected in groundwater from MW-105.

- Soil from TP-201 & 202 exhibited low concentrations (equal to or less than one) of multiple aromatic hydrocarbons such as Cumene, p-cymene, and a degradant of xylenes.

SITE-SPECIFIC HYDROGEOLOGICAL PROPERTIES

The Water Table Elevation Contour Plan dated July 9, 2015, included herein as Attachment B, indicate that the inferred direction of groundwater flow beneath the Site is to the south/southeast with an average hydraulic gradient of approximately 0.011 (1.1 feet over 100 feet). Water table elevations calculated for MW-3 and MW-101 based on the July 9, 2015 gauging event were omitted on the Water Table Elevation Contour Plan due to anomalously high relative values that were inconsistent with past gauging efforts, likely due to approximately 0.36 inches of rain that fell on July 8, 2015.

Bedrock was not encountered during site investigation activities at depths to approximately 8 feet below grade. The unconsolidated overburden at the Site is generally described as fine to medium/coarse sand, and is interpreted as a glacial outwash unit. This interpretation is consistent with the Rhode Island GIS "Glacial Deposits" data layer, which depicts the Site as being underlain by an outwash plain. Hydraulic conductivity values for glacial outwash suggested in the literature range from 1×10^{-3} to 1×10^{-1} centimeters per second (cm/s).

Given the aforementioned Site hydrogeologic properties, the release that occurred during the cistern removal may have impacted the subsurface, as indicated by the TCE detection in the downgradient well MW-105.

STORMWATER INFILTRATION

In order to facilitate review of future redevelopment/stormwater management plans by the RIDEM Office of Water Resources, the following other site-specific factors are provided in accordance with the Section 3.2.8 RISDISM Subsurface Contamination Guidance dated October 17, 2014 (2014 Guidance Document).

A Stormwater Infiltration Diagram (Attachment G) has been included in this SIR Addendum, designating areas on the Site for the three types of allowable hydraulic loads (1. No hydraulic load, 2. Concentrated hydraulic loading allowed with RIDEM approval and/or direct precipitation only, and 3. Concentrated loading allowed), based on the nature and extent of contamination present at the Site. Because laboratory analytical results do not indicate any GA Leachability exceedances in soil at the Site, the entire Site is depicted as green (concentrated hydraulic loading allowed).

CONCLUSIONS & RECOMMENDATIONS

Based on the results of the July 9, 2014 supplemental soil assessment and groundwater gauging and sampling efforts, Resource Controls offers the following conclusions:

- Soil laboratory analytical results from the supplemental soil investigation indicated the following:
  - Total arsenic was detected in TP-204 at concentrations exceeding the applicable RIDEM Residential and Industrial/Commercial Direct Exposure Criteria.
- Groundwater laboratory analytical results for the groundwater sampling event indicated the following:
  - Total and dissolved arsenic were detected in MW-101 at concentrations exceeding the RIDEM GA Groundwater Objectives, and below the MCP GW-3 Groundwater Standards (intended to be protective of surface water bodies); and
  - Trichloroethene was detected in MW-105 above the RIDEM GA Groundwater Objectives, and below the MCP GW-3 Groundwater Standards (intended to be protective of surface water bodies).
- An increase in TCE concentrations to just above the applicable RIDEM GA Groundwater Objective was observed in MW-105. This increase may indicate the potential for contaminant migration from the former cistern area located just upgradient of MW-105.
- TIC results suggest the MW-104 area was used for the disposal of varied manufacturing wastes; similar to other lowland areas of around the Site. Other than disposal, no specific source (tank, pipe discharge point, storage area, etc.) has been identified.

Resource Controls does not suggest a change to the previously recommended remedial alternative – the implementation of engineering and institutional controls as a cost-effective remedial alternative that is in compliance with the intent of the RIDEM Remediation Regulations, is consistent with current and future land use, and manages actual and potential risks to human health and the environment. The institutional controls shall prohibit the construction of any buildings within the waterfront areas of the Site (75-foot CRMC Setback) in which TCE exceeds the GA Groundwater Objective (the area of the former cistern and downgradient) and the areas with detected volatile TICs (the area of MW-104 and MW-3 and downgradient).

LIMITATIONS

This report is not intended to guarantee that the Subject Property is or is not free from conditions, materials or substances that could adversely impact the environment or pose a threat to public health and safety. Rather, it is intended to be used as a summary of available information on existing conditions, the conclusions of which are based upon a reasonable review of information found in accordance with normally accepted industry standards and protocols, subject to and as limited by the scope and budget established with the client.

Should further research on the Subject Property be warranted, Resource Controls must review any additional data obtained and the conclusions presented herein may be modified accordingly.

Conclusions stated herein are based on the available information summarized herein and refer only to the specific Subject Property investigated. No warranty is implied or given and the report is subject to the agreement for the work, including the Standard Terms and Conditions attached to said agreement.

Please do not hesitate to contact the undersigned if additional information is needed.

Very truly yours,

RESOURCE CONTROL ASSOCIATES, INC.

Mark J. House
Vice President and Principal Scientist

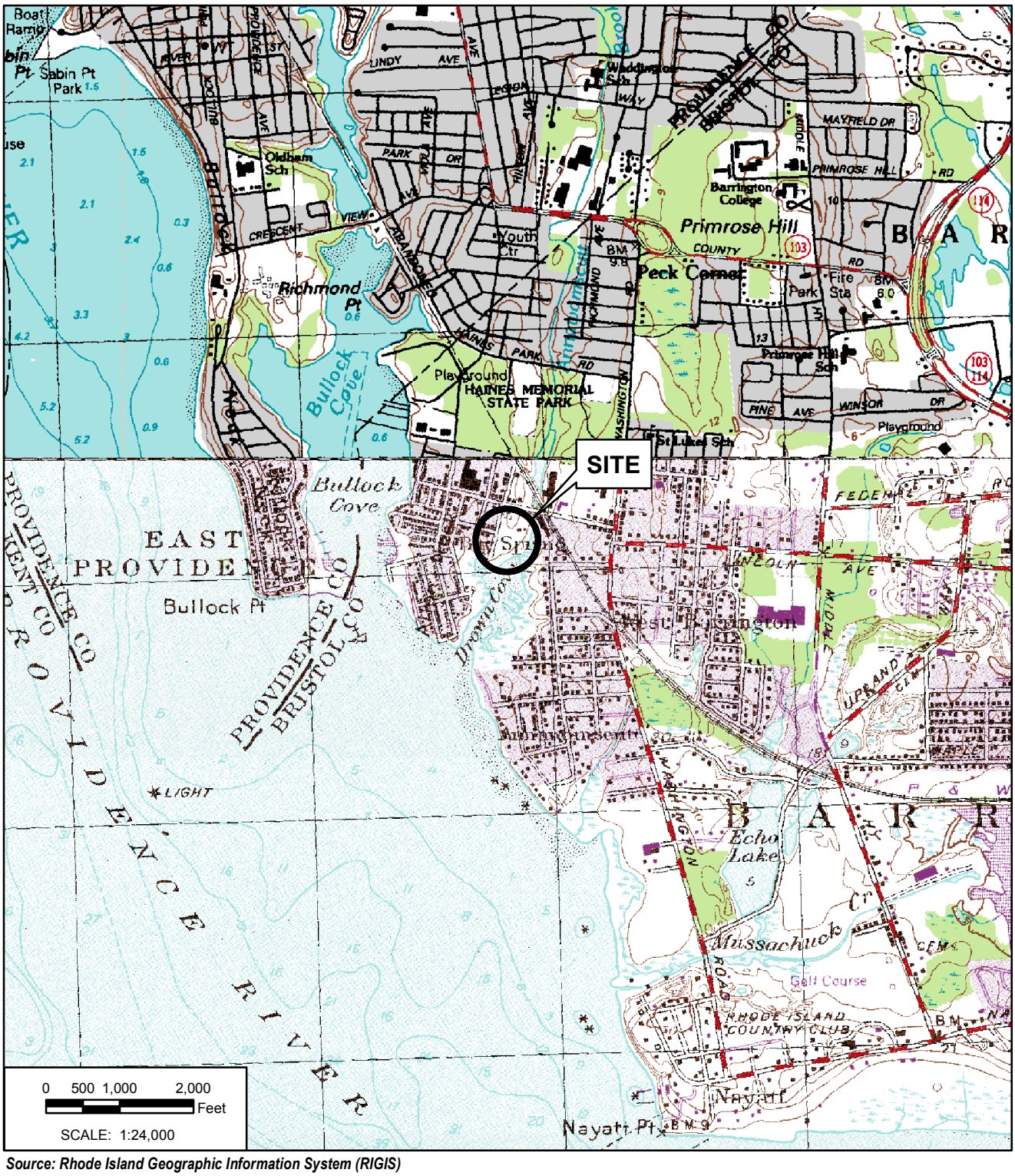
Attachments:

Attachment A	Locus Map
Attachment B	Water Table Elevation Contour Plan
Attachment C	Well Monitoring Form
Attachment D	Test Pit Logs
Attachment E	Tables
Attachment F	Laboratory Reports
Attachment G	Stormwater Infiltration Diagram
Attachment H	Additional Limitations

cc: Bay Spring Realty Company

ATTACHMENT A

Locus Map



Source: Rhode Island Geographic Information System (RIGIS)

1955 (Photorevised 1970 and 1975) USGS Topographic Map - Bristol, Rhode Island-Massachusetts Quad

Resource Controls
Proven Environmental & Engineering Solutions

LOCUS MAP

90 BAY SPRING AVENUE
BARRINGTON, RHODE ISLAND

DRAWN BY	PROJECT	PRINT DATE	FIGURE
EFG	7131A	04/18/2014	1

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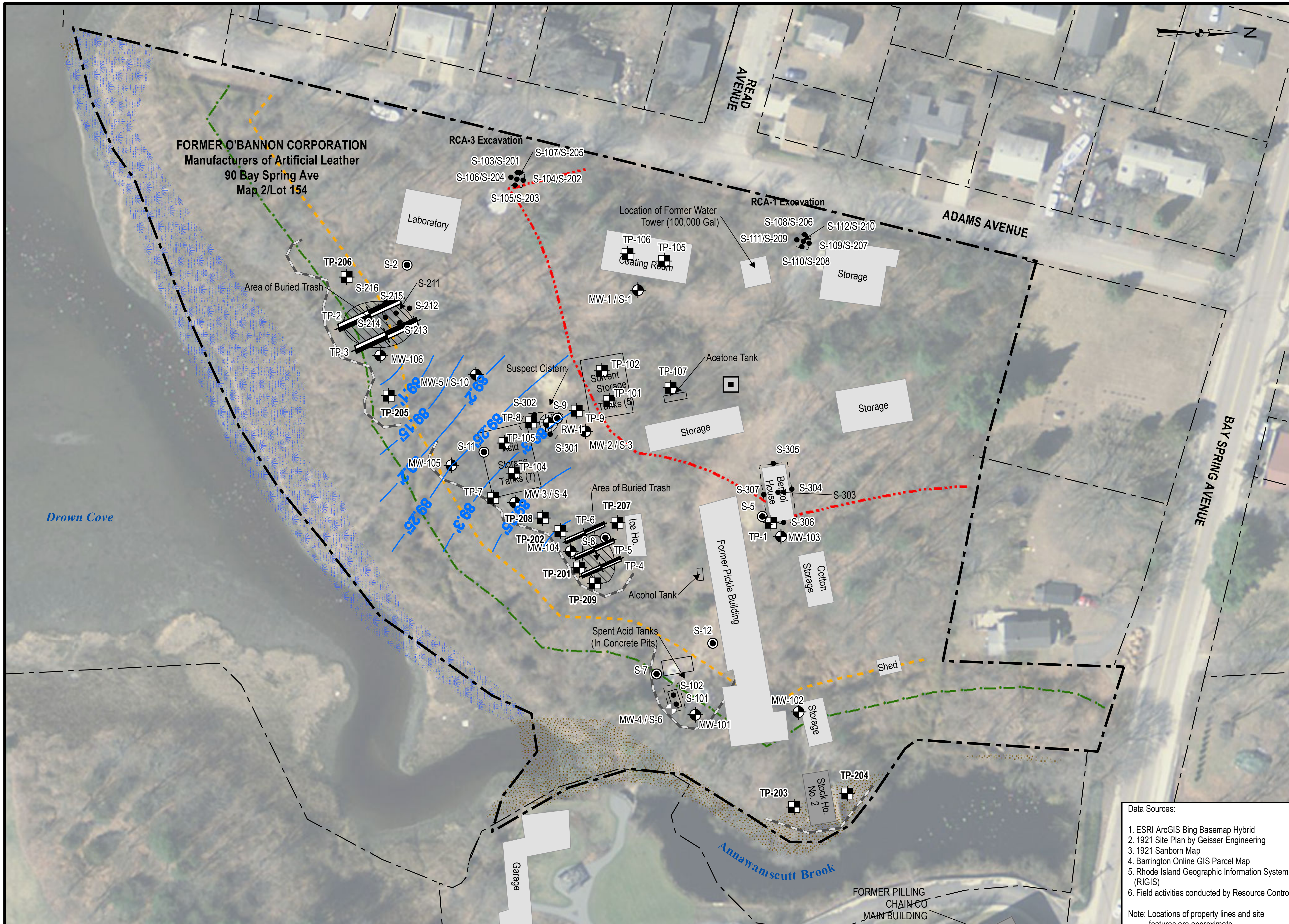
ATTACHMENT B

Water Table Elevation Contour Plan



LEGEND

- Property Line
- Existing Building
- Former Building
- Former Tank(s)
- Beach
- Salt Marsh
- Extent of Excavation
- Approximate 50 ft Vegetated Buffer
- Approximate 75 ft CRMC Setback
- Approximate 200 ft CRMC Juristiction
- Hydrant
- Existing Monitoring Well
- Former Monitoring Well
- Test Pit
- Soil Sample
- 84 Water Table Elevation Contours
- (88.55') Water Table Elevation (feet)

0 17.5 35 70 Feet

Approximate Scale: 1 inch = 70 feet

PREPARED BY:

Resource Controls
Engineering & Environmental Solutions

DRAWING DESCRIPTION:

WATER TABLE ELEVATION CONTOUR PLAN

JULY 9, 2015

CLIENT:

Bay Spring Realty Co.

LOCATION:

90 BAY SPRING AVENUE BARRINGTON, RHODE ISLAND

DESIGNED BY:	CHECKED BY:	APPROVED BY:
BPC	JVF	MJH

DRAWING DATE:	SHEET NUMBER:
07/10/2015	1 of 1
PROJECT NUMBER: 7131A	DRAWING NAME: WTEC PLAN

FIGURE 2

Data Sources:

1. ESRI ArcGIS Bing Basemap Hybrid
2. 1921 Site Plan by Geisser Engineering
3. 1921 Sanborn Map
4. Barrington Online GIS Parcel Map
5. Rhode Island Geographic Information System (RIGIS)
6. Field activities conducted by Resource Controls

Note: Locations of property lines and site features are approximate.

Path: P:\7000\7131A.00 Bay Spring realty Co., Barrington, RI\Graphics\GIS\7131A_WTEC_07092015-rev.mxd

ATTACHMENT C

Well Monitoring Form

Resource Controls
Engineering & Environmental Solutions

WELL MONITORING FORM

Project: Bay Spring Realty Co., Barrington
Project No.: 7131A
Location: 90 Bay Spring Avenue
Date: 07/09/15
Operator: BPC
Method: Interface Probe

Well ID	Top of Casing Elevation (feet)	Depth to LNAPL (feet)	Depth to Water (feet)	Depth to Bottom (feet)	LNAPL Thickness (feet)	LNAPL Specific Gravity (unitless)	Water Equivalent (feet)	Corrected Depth to Water (feet)	Corrected Water Table Elevation (feet)
MW-1	101.78	ND	NM	17.37	ND	NA	NA	NA	NA
MW-2	101.97	ND	NM	12.59	ND	NA	NA	NA	NA
MW-3	95.66	ND	6.51	13.21	ND	NA	NA	NA	89.15
MW-5	98.61	ND	9.42	14.30	ND	NA	NA	NA	89.19
MW-101	96.29	ND	7.74	12.48	ND	NA	NA	NA	88.55
MW-102	97.05	ND	NM	14.85	ND	NA	NA	NA	NA
MW-103	100.98	ND	NM	12.89	ND	NA	NA	NA	NA
MW-104	96.20	ND	6.77	13.79	ND	NA	NA	NA	89.43
MW-105	97.18	ND	7.93	12.73	ND	NA	NA	NA	89.25
MW-106	97.50	ND	8.50	14.59	ND	NA	NA	NA	89.00

NM *= Not Measured;* ***ND*** *= None Detected at >0.01 feet;* ***NA*** *= Not Applicable;* ***DRY*** *= No Water in Well*

NOTES:

ATTACHMENT D

Test Pit Logs

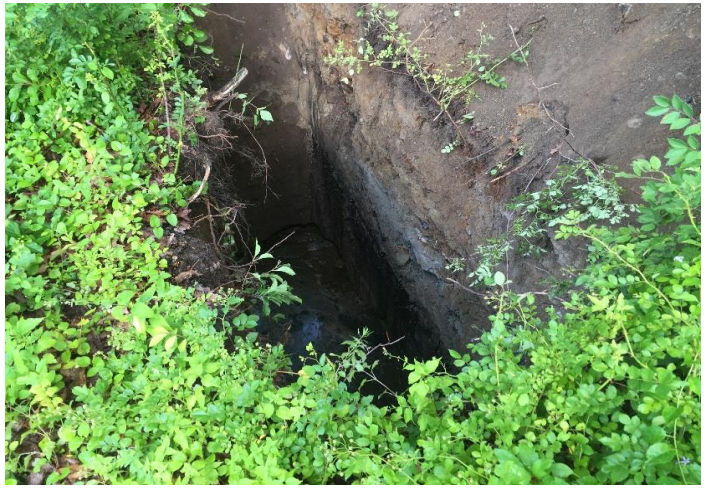
RESOURCE CONTROLS TEST PIT/EXCAVATION SAMPLING LOG

Project Number:	7131A	**Inspected By:**	NRH
Date:	7/9/2015	**Excav. Contractor:**	Jimmy
Site Name:	Bay Spring, Barrington	**Test Pit ID:**	TP-201
Site Address:	90 Bay Spring Ave, Barrington	**Test Pit Location:**	Adjacent to MW-104

No.	SAMPLE ID	DEPTH (ft)	PID 10.6	PID 11.7	P-FLAG	DESCRIPTION
1	TP-201	3.5-4.5	37.8	--	--	Grey f-m sand
2		5.5-6	331.0	--	--	Black fine sand, odor
3		7-8	59.2	--	--	Black fine sand, odor
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

Comments: Samples collected at 4.5 - 5.5' analyzed for VOCs, TPH, and PAHs

PHOTOGRAPH



TEST PIT CROSS SECTION

__0' - 3.5' - Brown fine to medium sand, some organics and gravel, trace fill (Ash)

__3.5' - 5.5' - Gray fine to medium sand, some gravel, trace ash/brick fill

__5.5' - 8' - Dark brown/black fine sand, some silt, compact, strong odor

RESOURCE CONTROLS TEST PIT/EXCAVATION SAMPLING LOG

Project Number:	7131A	**Inspected By:**	NRH
Date:	7/9/2015	**Excav. Contractor:**	Jimmy
Site Name:	Bay Spring, Barrington	**Test Pit ID:**	TP-202
Site Address:	90 Bay Spring Ave, Barringtor	**Test Pit Location:**	Adjacent to MW-104

No.	SAMPLE ID	DEPTH (ft)	PID 10.6	PID 11.7	P-FLAG	DESCRIPTION
1	TP-202	1-2	31.5	--	--	Brown F-M Sand
2		5-5.5	898.0	--	--	Light Brown F-M sand, strong odor
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
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16						
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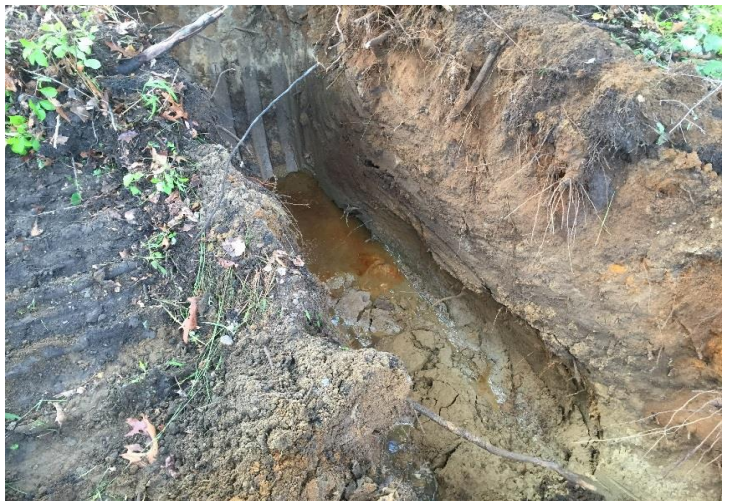
Comments: Samples collected at 4-5' analyzed for VOCs, TPH, and PAHs

Slight sheen obsereved on water table.

PHOTOGRAPH



TEST PIT CROSS SECTION

__0' - 2' - Brown fine to medium sand w/ organics and some fill observerd.

__2' - 5.5' - Light Brown fine to medium sand and silt, some organics, trace fill (ash)

RESOURCE CONTROLS TEST PIT/EXCAVATION SAMPLING LOG

Project Number:	7131A	**Inspected By:**	NRH
Date:	7/9/2015	**Excav. Contractor:**	Jimmy
Site Name:	Bay Spring, Barrington	**Test Pit ID:**	TP-203
Site Address:	90 Bay Spring Ave, Barrington	**Test Pit Location:**	Adjacent to Stockhouse No. 2

No.	SAMPLE ID	DEPTH (ft)	PID 10.6	PID 11.7	P-FLAG	DESCRIPTION
1	TP-203	1-1.5	0.1	--	--	Dark brown f-m with fill
2		2-2.5	0.2	--	--	Dark brown f-m with fill
3						
4						
5						
6						
7						
8						
9						
10						
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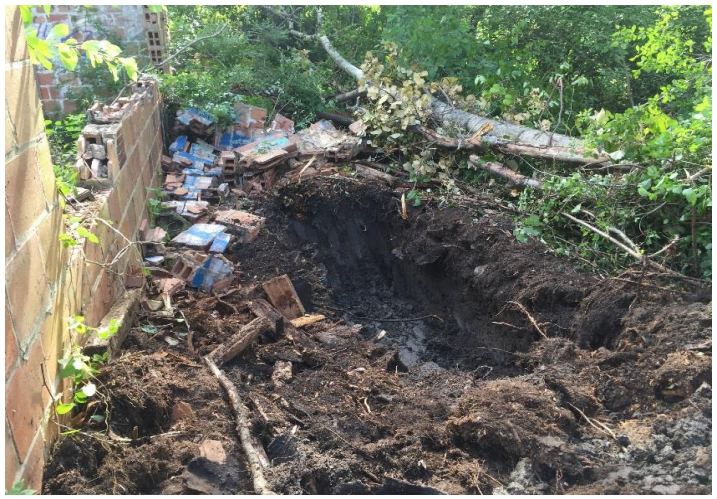
Comments: Samples collected at 1.5-2' analyzed for TPH, Metals, and PCBs.

PHOTOGRAPH



TEST PIT CROSS SECTION

0' - 3' - Dark brown fine to medium sand, some organics and fill material (Brick/ash) and metal debris, trace silt

RESOURCE CONTROLS TEST PIT/EXCAVATION SAMPLING LOG

Project Number:	7131A	**Inspected By:**	NRH
Date:	7/9/2015	**Excav. Contractor:**	Jimmy
Site Name:	Bay Spring, Barrington	**Test Pit ID:**	TP-204
Site Address:	90 Bay Spring Ave, Barrington	**Test Pit Location:**	Adjacent to Stock House No. 2

No.	SAMPLE ID	DEPTH (ft)	PID 10.6	PID 11.7	P-FLAG	DESCRIPTION
1	TP-204	0-1	0.2	--	--	Brown F-M sand w/ organics
2		1.5-2	0.1	--	--	Light brown/orange
3		2.5-3	0.3	--	--	Light brown/orange
4						
5						
6						
7						
8						
9						
10						
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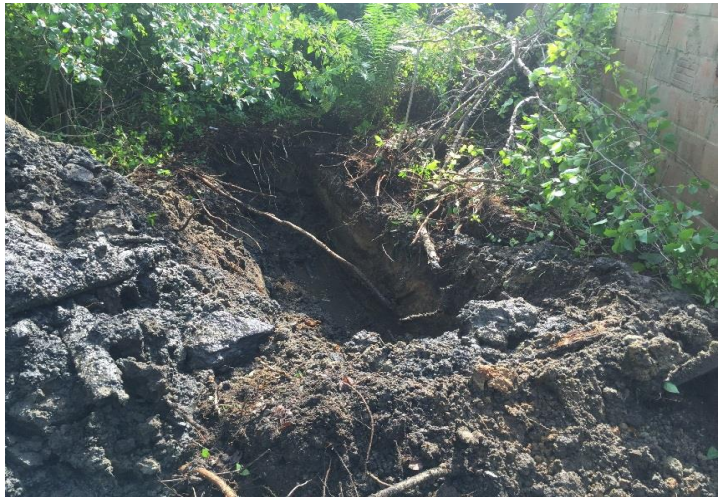
Comments: Samples collected at 1.5-2' analyzed for TPH, Metals, and PCBs.

PHOTOGRAPH



TEST PIT CROSS SECTION

__0' - 1' - Brown fine to medium sand, some organics, trace fill and debris

__1' - 3.5' - Light brown/orange fine to medium sand, some gravel, trace organics and trace fill material (brick/ash) and metal debris

RESOURCE CONTROLS TEST PIT/EXCAVATION SAMPLING LOG

Project Number:	7131A	**Inspected By:**	NRH
Date:	7/9/2015	**Excav. Contractor:**	Jimmy
Site Name:	Bay Spring, Barrington	**Test Pit ID:**	TP-205
Site Address:	90 Bay Spring Ave, Barrington	**Test Pit Location:**	West of TP-2

No.	SAMPLE ID	DEPTH (ft)	PID 10.6	PID 11.7	P-FLAG	DESCRIPTION
1	TP-205	0-1	--	--	--	Dark brown F-M organic rich
2		1-2	--	--	--	Light gray F-M
3		2-3	--	--	--	Light gray F-M
4						
5						
6						
7						
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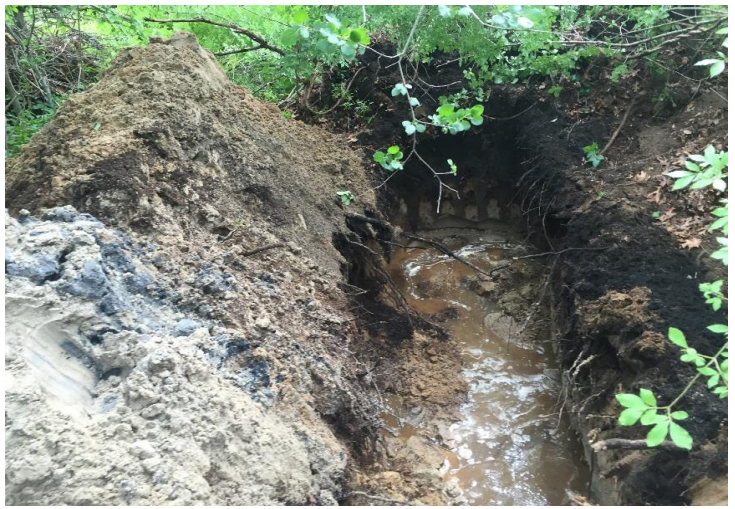
Comments: Samples collected at 1-2' analyzed for TPH, Metals, and PAHs.

PHOTOGRAPH



TEST PIT CROSS SECTION

__0' - 1' - Dark brown fine to medium sand and organics

__1' - 3' - Light gray fine to medium sand, some silt, trace fill material

RESOURCE CONTROLS TEST PIT/EXCAVATION SAMPLING LOG

Project Number:	7131A	**Inspected By:**	NRH
Date:	7/9/2015	**Excav. Contractor:**	Jimmy
Site Name:	Bay Spring, Barrington	**Test Pit ID:**	TP-206
Site Address:	90 Bay Spring Ave, Barrington	**Test Pit Location:**	East of TP-3

No.	SAMPLE ID	DEPTH (ft)	PID 10.6	PID 11.7	P-FLAG	DESCRIPTION
1	TP-206	0-1	0.0	--	--	Light brown F-M native
2		2-3	0.3	--	--	Light brown F-M native
3						
4						
5						
6						
7						
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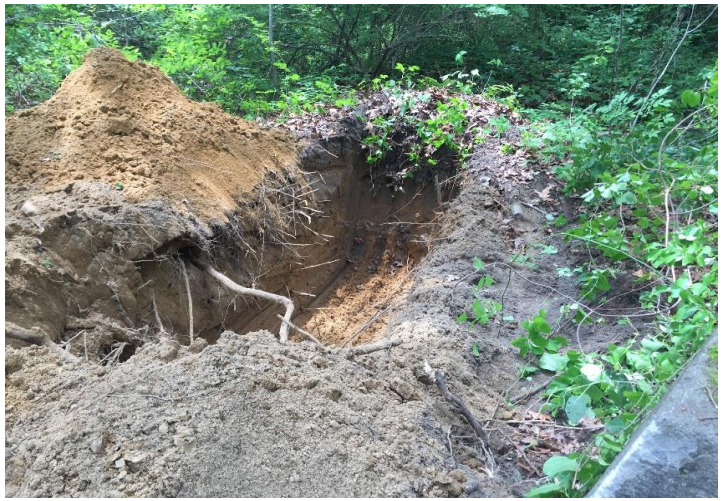
Comments: Samples collected at 1-2' analyzed for TPH, Metals, and PAHs.

PHOTOGRAPH



TEST PIT CROSS SECTION

__0' - 3' - Light brown fine to medium sand with organics, trace gravel, native

RESOURCE CONTROLS TEST PIT/EXCAVATION SAMPLING LOG

Project Number:	7131A	**Inspected By:**	NRH
Date:	7/9/2015	**Excav. Contractor:**	Jimmy
Site Name:	Bay Spring, Barrington	**Test Pit ID:**	TP-207
Site Address:	90 Bay Spring Ave, Barrington	**Test Pit Location:**	North of MW-104 (Upgradient)

No.	SAMPLE ID	DEPTH (ft)	PID 10.6	PID 11.7	P-FLAG	DESCRIPTION
1	TP-207	0-1	0.0	--	--	Dark brown f-m sand w/ fill
2		2-3	0.3	--	--	Native
3		4-5	0.2	--	--	Native
4						
5						
6						
7						
8						
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Comments: No samples collected, appeared clean

PHOTOGRAPH

NA

TEST PIT CROSS SECTION

0' - 1.5' - Dark brown fine to medium sand with fill material and debris (Metal, brick, glass, ceramic blocks)

1.5' - 5' - Light brown fine to medium sand, native

RESOURCE CONTROLS TEST PIT/EXCAVATION SAMPLING LOG

Project Number:	7131A	**Inspected By:**	NRH
Date:	7/9/2015	**Excav. Contractor:**	Jimmy
Site Name:	Bay Spring, Barrington	**Test Pit ID:**	TP-208
Site Address:	90 Bay Spring Ave, Barrington	**Test Pit Location:**	Adjacent to TP-202

No.	SAMPLE ID	DEPTH (ft)	PID 10.6	PID 11.7	P-FLAG	DESCRIPTION
1	TP-208	4-5	3.7	--	--	Lt Brown sand, odor
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

Comments: No samples collected, slight odor in/above water table, no sheen visible

PHOTOGRAPH

NA

TEST PIT CROSS SECTION

0' - 2.5' - Brown fine to medium sand, some fill (Brick/ash) and organics

2.5' - 5' - Light brown fine to medium sand and silt, some organics and trace fill

RESOURCE CONTROLS TEST PIT/EXCAVATION SAMPLING LOG

Project Number:	7131A	**Inspected By:**	NRH
Date:	7/9/2015	**Excav. Contractor:**	Jimmy
Site Name:	Bay Spring, Barrington	**Test Pit ID:**	TP-209
Site Address:	90 Bay Spring Ave, Barrington	**Test Pit Location:**	Adjacent to TP-201

No.	SAMPLE ID	DEPTH (ft)	PID 10.6	PID 11.7	P-FLAG	DESCRIPTION
1	TP-209	5-6	0.9	--	--	Gray f-m layer
2		6-7	2.7	--	--	Black layer
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

Comments: No samples collected, slight odor dark brown/black layer, no sheen or source material observed.

PHOTOGRAPH

NA

TEST PIT CROSS SECTION

__0' - 3' - Brown fine to medium sand, some organics and trace fill (ash, glass)

__3' - 6' - Gray fine to medium sand with trace fill materials

__6' - 7' - Dark brown/black fine to medium sand, some silt, compact, slight odor

ATTACHMENT E

Tables

TABLE 1
SUMMARY OF SOIL ANALYTICAL RESULTS

BAY SPRING REALTY CO.
90 BAY SPRING AVENUE
BARRINGTON, RHODE ISLAND

	AOC-1: UST Area			AOC-2: RCA-1 Excavation											AOC-3: RCA-3 Excavation											AOC-4: Waste Disposal Area No. 1														RIDEM Soil Criteria	
Sample Identification	MW-4/S-6	S-101	S-102	RCA-1	S-108	S-109	S-110	S-111	S-112	S-206	S-207	S-208	S-209	S-210	RCA-3	S-103	S-104	S-105	S-106	S-107	S-201	S-202	S-203	S-204	S-205	S-2	TP-2	TP-2	TP-3	TP-3	S-211	S-212	S-213	S-214	S-215	S-216	MW-106	TP-205	TP-206	Direct Exposure Criteria	
Depth Sampled (feet)	5.0	6	6	0.5-2	1.5	1.5	1.5	1.5	3	1.5	1.5	1.5	1.5	3	0.5-2	1.5	1.5	1.5	1.5	3	1.5	1.5	1.5	1.5	3	8.3	2-2.5	4.8	5-5.5	2-.2.5	5.5	2.5	2.5	2.5	3	2	6-6.5	2'	2.5'		
Date Sampled	11/21/2012	4/2/2014	4/2/2014	2/13/2013	4/2/2014	4/2/2014	4/2/2014	4/2/2014	4/2/2014	5/21/2014	5/21/2014	5/21/2014	5/21/2014	5/21/2014	2/13/2013	4/2/2014	4/2/2014	4/2/2014	4/2/2014	4/2/2014	5/21/2014	5/21/2014	5/21/2014	5/21/2014	5/21/2014	11/21/2012	4/3/2014	4/3/2014	4/3/2014	4/3/2014	5/21/2014	5/21/2014	5/21/2014	5/21/2014	5/21/2014	5/21/2014	6/4/2014	7/9/2015	7/9/2015	Residential	I/C
VOLATILE ORGANIC COMPOUNDS (mg/kg)																																									
1,1,1-Trichloroethane	<0.0057	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.0041	--	--	--	--	--	--	--	--	--	<0.075	--	--	540	10,000
1,1-Dichloroethane	<0.0057	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.0041	--	--	--	--	--	--	--	--	--	<0.075	--	--	920	10,000
1,1-Dichloroethene	<0.0057	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.0041	--	--	--	--	--	--	--	--	--	<0.075	--	--	0.2	9.5
1,2,4-Trimethylbenzene	<0.0057	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0080	--	--	--	--	--	--	--	--	--	--	--	--	NS	NS
1,3,5-Trimethylbenzene	<0.0057	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0107	--	--	--	--	--	--	--	--	--	--	--	--	NS	NS
4-Methyl-2-Pentanone	<0.0568	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.0406	--	--	--	--	--	--	--	--	--	45	--	--	1,200	10,000
Acetone	<0.0568	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0968	--	--	--	--	--	--	--	--	--	<0.380	--	--	7,800	10,000
Chloroform	<0.0057	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.0041	--	--	--	--	--	--	--	--	--	<0.075	--	--	1.2	940
cis-1,2-Dichloroethene	<0.0057	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.0041	--	--	--	--	--	--	--	--	--	<0.075	--	--	630	10,000
Ethylbenzene	<0.0057	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.0041	--	--	--	--	--	--	--	--	--	<0.075	--	--	71	10,000
Isopropylbenzene	<0.0057	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.0041	--	--	--	--	--	--	--	--	--	<0.075	--	--	27	10,000
Methyl acetate	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.083	--	--	NS	NS
Methylene Chloride	<0.0284	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.0203	--	--	--	--	--	--	--	--	--	0.084	--	--	45	760
Naphthalene	<0.0057	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0079	--	--	--	--	--	--	--	--	--	--	--	--	54	10,000
Styrene	<0.0057	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.0041	--	--	--	--	--	--	--	--	--	<0.075	--	--	13	190
Toluene	<0.0057	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.0041	--	--	--	--	--	--	--	--	--	<0.075	--	--	190	10,000
Trichloroethene	<0.0057	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.0041	--	--	--	--	--	--	--	--	--	<0.075	--	--	13	520
Xylene O	<0.0057	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.0041	--	--	--	--	--	--	--	--	--	--	--	--	110	10,000
Xylene P,M	<0.0114	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.0081	--	--	--	--	--	--	--	--	--	--	--	--	110	10,000
Xylenes (Total)	<0.017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.0122	--	--	--	--	--	--	--	--	--	0.016	--	--	110	10,000
All other VOCs	ND	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	ND	--	--	--	--	--	--	--	--	--	ND	--	--	NS	NS
TOTAL METALS (mg/kg)																																									
Arsenic	18.9	2.3	5.9	25.7	6.5	7.3	4.3	4.9	5.5	--	--	--	--	--	6.0	2.2	1.7	<11	2.2	3.5	--	--	--	--	--	--	0.45	0.82	32	18	0.71	14	4.9	5.3	29	1.8	--	<2.53	<2.35	7	7
Barium	65.6	13	12	43.6	--	--	--	--	--	--	--	--	--	--	13.5	--	--	--	--	--	--	--	--	--	--	--	6.6	3.9	54	710	5.5	180	210	46	45	8.7	--	5.06	7.90	5,500	10,000
Cadmium	<0.57	0.033	<0.21	<0.5	--	--	--	--	--	--	--	--	--	--	<0.56	--	--	--	--	--	--	--	--	--	--	--	0.27	0.24	2.5	0.98	0.044	1.6	0.16	0.076	0.21	<0.21	--	<0.51	<0.47	39	1,000
Chromium (Total)	12.9	1.6	1.0	6.4	--	--	--	--	--	--	--	--	--	--	20.5	--	--	--	--	--	--	--	--	--	--	--	350	3.2	9,800	12	20	5,400	1,100	7.1	9.8	220	--	7.61	4.65	1,400	10,000
Lead	79.9	11	34	38.3	--	--	--	--	--	--	--	--	--	--	31.3	--	--	--	--	--	--	--	--	--	--	--	4.8	1.1	54	210	1.1	730	2,800	51	22	5.9	--	<5.06	<4.70	150	500
Mercury	1.96	0.026	0.12	0.164	--	--	--	--	--	--	--	--	--	--	0.394	--	--	--	--	--	--	--	--	--	--	--	0.11	<0.019	3.1	0.19	<0.018	1.3	0.18	0.059	0.089	0.024	--	<0.038	<0.034	23	610
Selenium	<5.6	<4.2	<4.2	<14.9	--	--	--	--	--	--	--	--	--	--	<5.6	--	--	--	--	--	--	--	--	--	--	--	<4.0	<3.7	1.5	2.5	<4.0	2.3	1	0.76	7.3	<4.2	--	<5.06	<4.70	390	10,000
Silver	<0.57	<0.62	<0.64	<0.5	--	--	--	--	--	--	--	--	--	--	<0.56	--	--	--	--	--	--	--	--	--	--	--	<0.59	<0.55	0.64	0.40	<0.59	0.64	<0.61	<0.59	<0.55	<0.63	--	<0.51	<0.47	200	10,000
TOTAL PETROLEUM HYDROCARBONS (mg/kg)																																									
C10-C-28 Aliphatics	--	7.4	22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	29	217	<42.6	NS	NS
POLYNUCLEAR AROMATIC HYDROCARBONS (mg/kg)																																									
2-Methylnaphthalene	<0.424	--	--	<0.417	--	--	--	--	--	< 0.180	< 0.180	< 0.190	< 0.180	< 0.180	<0.392	--	--	--	--	--	0.0042	< 0.190	< 0.190	< 190	< 0.180	--	--	--	--	--	< 0.210	< 2.9	0.073	0.037	0.023	< 0.190	--	<0.389	<0.373	123	10,000
Acenaphthene	<0.424	<0.2	<0.22	<0.417	--	--	--	--	--	< 0.180	< 0.180	< 0.190	< 0.180	< 0.180	0.862	--	--	--	--	--	0.0062	0.0031	< 0.190	0.0035	< 0.180	--	<0.18	<0.22	0.55	440	< 0.210	< 2.9	0.22	0.044	0.0043	0.0033	--	<0.389	<0.373	43	10,000
Acenaphthylene	<0.424	<0.2	<0.22	<0.417	--	--	--	--	--	< 0.180	< 0.180	< 0.190	< 0.180	< 0.180	<0.392	--	--	--	--	--	0.0041	< 0.190	<0.190	< 190	< 0.180	--	<0.18	<0.22	<3.3	<870	< 0.210	< 2.9	< 2.0	0.042	0.0048	< 0.190	--	<0.389	<0.373	23	10,000
Anthracene	1.11	<0.2	<0.22	<0.417	--	--	--	--	--	< 0.180	< 0.180	< 0.190	< 0.180	< 0.180	1.21	--	--	--	--	--	0.011	0.0076	< 0.190	0.01	< 0.180	--	0.0078	<0.22	1.2	1,100	< 0.210	0.12	0.54	0.1	0.015	0.0067	--	<0.389	<0.373	35	10,000
Benzo(a)anthracene	3.34	0.0064	<0.22	0.47	--	--	--	--	--	0.01	0.015	< 0.190	0.02	< 0.180	4.09	--	--	--	--	--	0.056	0.026	0.013	0.043	< 0.180	--	0.092	0.016	2.4	1,800	< 0.210	0.58	1.5	0.54	< 0.190	0.047	--	<0.389	<0.373	0.9	7.8
Benzo(a)pyrene	2.27	<0.2	<0.22	0.391	--	--	--	--	--	< 0.180	< 0.180	< 0.190	< 0.180	< 0.180	3.14	--	--	--	--	--	0.056	0.018	< 0.190	0.034	< 0.180	--	0.065	0.0097	1.9	1,600	< 0.210	1	1.2	0.47	0.05	0.037	--	<0.195	<0.187	0.4	0.8
Benzo(b)fluoranthene	3.83	<0.2	<0.22	0.545	--	--	--	--	--	< 0.180	< 0.180	< 0.190	0.022	< 0.180	4.14	--	--	--	--	--	0.077	0.023	< 0.190	0.045	< 0.180	--	0.1	0.017	2.6	2,200	< 0.210	0.98	1.7	0.69	0.13	0.056	--	<0.389	<0.373	0.9	7.8
Benzo(g,h,i)perylene	2.05	<0.2	<0.22	<0.417	--	--	--	--	--	< 0.180	< 0.180	< 0.190	< 0.180	< 0.180	1.25	--	--	--	--	--	0.11	0.031	0.011	0.031	< 0.180	--	0.034	<0.22	0.77	410	< 0.210	1.3	0.89	0.31	0.085	0.027	--	<0.389	<0.373	0.8	10,000
Benzo(k)fluoranthene	1.17	<0.2	<0.22	<0.417	--	--	--	--	--	< 0.180	< 0.180	< 0.190	0.01	< 0.180	1.15	--	--	--	--	--	0.031	0.012	< 0.190	0.023	< 0.180	--	<0.18	<0.22	0.24	660	< 0.210	0.4	0.69	0.24	0.024	0.021	--	<0.389	<0.373	0.9	78
Chrysene	4.09	0.0022	<0.22	0.499	--	--	--	--	--	0.009	0.016	< 0.190	0.022	< 0.180	4.29	--	--	--	--	--	0.069	0.025	0.012	0.054	< 0.180	--	0.12	0.014	2.3	1,900	< 0.210	0.78	1.7	0.71	0.14	0.057	--	<0.195	<0.187	0.4	780
Dibenzo(a,h)anthracene	0.910	<0.2	<0.22	<0.209	--	--	--	--	--	< 0.180	< 0.180	< 0.190	< 0.180	< 0.180	0.300	--	--	--	--	--	0.029	< 0.190	< 0.190	< 0.190	< 0.180	--	0.016	<0.22	0.28	170	< 0.210	0.69	0.32	0.084	0.026	< 0.190	--	<0.195	<0.187	0.4	0.8
Fluoranthene	7.25	<0.2	<0.22	1.16	--	--	--	--	--	0.012	0.023	< 0.190	0.035	< 0.180	9.00	--	--	--	--	--	0.12	0.042	0.018	0.087	< 0.180	--	0.17	0.029	5.1	4,700	< 0.210	0.9	3.4	1.3	0.11	0.1	--	<0.389	<0.373	20	10,000
Fluorene	<0.424	<0.2	<0.22	<0.417	--	--	--	--	--	< 0.180	< 0.180	< 0.190	< 0.180	< 0.180	0.535	--	--	--	--	--	< 0.190	< 0.190	< 0.190	< 0.190	< 0.180	--	<0.18	<0.22	0.46	420	< 0.210	< 2.9	0.22	0.046	< 0.190	< 0.190	--	<0.389	<0.373	28	10,000
Indeno(1,2,3-cd)Pyrene	1.81	<0.2	<0.22	<0.417	--	--	--	--	--	< 0.180	< 0.180	< 0.190	< 0.180	< 0.180	1.22	--	--	--	--	--	0.077	0.019	< 0.190	0.027	< 0.180	--	0.036	<0.22	0.73	420	< 0.210	0.91	0.87	0.3	0.071	0.026	--	<0.389	<0.373	0.9	7.8
Naphthalene	0.639	<0.2	<0.22	<0.417	--	--	--	--	--	< 0.180	< 0.180	< 0.190	< 0.180	< 0.180	<0.392	--	--	--	--	--	0.0081	< 0.190	< 0.190	< 0.190	< 0.180	--	<0.18	<0.22	0.40	360	< 0.210	< 2.9	0.18	0.035	0.021	< 0.190	--	<0.389	<0.373	54	10,000
Phenanthrene	5.81	<0.2	<0.22	0.733	--	--	--	--	--	0.0046	0.01	< 0.190	0.017	< 0.180	7.92	--	--	--	--	--	0.081	0.034	0.012	0.064	< 0.180	--	0.027	0.0073	4.2	4,300	< 0.210	0.61	2.5	0.82	0.12	0.055	--	<0.389	<0.373	40	10,000
Pyrene	5.41	<0.2	<0.22	0.932	--	--	--	--	--	0.014	0.025	< 0.190	0.04	< 0.180	9.66	--	--	--	--	--	0.15	0.051	0.025	0.11	< 0.180	--	0.13	0.021	3.7	3,000	< 0.210	0.88	3	1.3	0.11	0.1	--	<0.389	<0.373	13	10,000
POLYCHLORINATED BIPHENYLS BY AROCLOR(mg/kg)																																									
All PCB Aroclors	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

NOTES:
mg/kg = milligrams per kilogram.
-- = Not analyzed.
I/C = Industrial/Commercial
NS = No standard promulgated.
ND = Not detected above laboratory reporting limit.
Bold concentrations exceed laboratory reporting limits.
Bold Red concentrations exceed the applicable RIDEM Residential Direct Exposure Criteria.
Bold Red underlined concentrations exceed the applicable RIDEM Residential Direct Exposure Criteria.
Soil removed during remedial excavations.

TABLE 1
SUMMARY OF SOIL ANALYTICAL RESULTS

BAY SPRING REALTY CO.
90 BAY SPRING AVENUE
BARRINGTON, RHODE ISLAND

	AOC-5: Cistern					AOC-6: Drum Storage Area/Benzol House							AOC-7: Waste Disposal Area No. 2						AOC-8: Acid Storage Tanks					AOC-9: Solvent Storage Tanks					AOC-10: Coating Room				AOC-11: Acetone Tank		AOC-12: Surficial Contamination	AOC-13: Stock House No. 2			
Sample Identification	MW-2/S-3	TP-8	TP-8	S-301	S-302	TN	TP-1	S-303	S-304	S-305	S-306	S-307	TP-4	TP-5	S-8	MW-104	TP-201	TP-202	TP-7	TP-103	TP-103	TP-104	TP-104	TP-9	TP-101	TP-101	TP-102	TP-102	TP-105	TP-105	TP-106	TP-106	TP-107	TP-107	RCA-2	TP-203	TP-204	RIDEM Soil Criteria	
Depth Sampled (feet)	5.5	1-2	6	6-7	5-6	Composite	2.5-3.5	5-6	2-3	2-3	2-3	2-3	1.5-2	4-4.5	5.0	5-8	5'	5'	2.5	2-3	4	2-3	4	5-6.6	5-5.5	10	4-5	9.5	4-5	10	4-5	10	5.5	10	0.5-1.5	2'	2'	Direct Exposure Criteria	
Date Sampled	11/21/2012	4/3/2014	4/3/2014	5/28/2014	5/28/2014	4/2/2014	4/2/2014	5/30/2014	5/30/2014	5/30/2014	5/30/2014	5/30/2014	4/3/2014	4/3/2014	11/21/2012	6/4/2014	7/9/2015	7/9/2015	4/3/2014	5/21/2014	5/21/2014	5/21/2014	5/21/2014	4/3/2014	5/21/2014	5/21/2014	5/21/2014	5/21/2014	5/21/2014	5/21/2014	5/21/2014	5/21/2014	5/21/2014	5/21/2014	2/13/2013	7/9/2015	7/9/2015	Residential	I/C
VOLATILE ORGANIC COMPOUNDS (mg/kg)																																							
1,1,1-Trichloroethane	<0.0434	--	--	0.0026	0.031	--	--	--	--	--	--	--	--	--	<0.0027	<3.4	<0.0720	<0.063	--	--	--	--	--	<0.0056	--	--	--	--	--	--	--	--	--	--	--	--	--	540	10,000
1,1-Dichloroethane	<0.0434	--	--	0.0027	0.017	--	--	--	--	--	--	--	--	--	<0.0027	<3.4	<0.0720	<0.063	--	--	--	--	--	<0.0056	--	--	--	--	--	--	--	--	--	--	--	--	--	920	10,000
1,1-Dichloroethene	<0.0434	--	--	<0.0053	0.0019	--	--	--	--	--	--	--	--	--	<0.0027	<3.4	<0.0720	<0.063	--	--	--	--	--	<0.0056	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2	9.5
1,2,4-Trimethylbenzene	0.0321	--	--	--	--	<0.0054	--	--	--	--	--	--	--	--	<0.0027	--	1.08	1.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	NS	NS
1,3,5-Trimethylbenzene	0.0165	--	--	--	--	<0.0054	--	--	--	--	--	--	--	--	<0.0027	--	5.31	5.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	NS	NS
4-Methyl-2-Pentanone	<0.434	--	--	<0.027	<0.029	--	--	--	--	--	--	--	--	--	<0.0266	<17	<0.720	<0.683	--	--	--	--	--	<0.028	--	--	--	--	--	--	--	--	--	--	--	--	--	1,200	10,000
Acetone	9.93	--	--	<0.027	<0.029	<0.027	--	--	--	--	--	--	--	--	<0.0266	<17	<1.80	<1.71	--	--	--	--	--	0.0062	--	--	--	--	--	--	--	--	--	--	--	--	--	7,800	10,000
Chloroform	0.0174	--	--	<0.0053	<0.0059	<0.0054	--	--	--	--	--	--	--	--	<0.0027	<3.4	<0.0720	<0.0683	--	--	--	--	--	<0.0056	--	--	--	--	--	--	--	--	--	--	--	--	--	1.2	940
cis-1,2-Dichloroethene	<0.0434	--	--	0.002	0.013	--	--	--	--	--	--	--	--	--	<0.0027	<3.4	<0.0720	<0.0683	--	--	--	--	--	<0.0056	--	--	--	--	--	--	--	--	--	--	--	--	--	630	10,000
Ethylbenzene	0.325	--	--	<0.0053	0.0025	<0.0054	--	--	--	--	--	--	--	--	<0.0027	5.3	0.108	0.105	--	--	--	--	--	<0.0056	--	--	--	--	--	--	--	--	--	--	--	--	--	71	10,000
Isopropylbenzene	0.0426	--	--	<0.0053	<0.0059	<0.0054	--	--	--	--	--	--	--	--	<0.0027	5.5	0.0749	0.0724	--	--	--	--	--	<0.0056	--	--	--	--	--	--	--	--	--	--	--	--	--	27	10,000
Methyl acetate	--	--	--	<0.0053	<0.0059	--	--	--	--	--	--	--	--	--	--	<3.4	--	--	--	--	--	--	--	<0.0056	--	--	--	--	--	--	--	--	--	--	--	--	--	NS	NS
Methylene Chloride	<0.217	--	--	<0.0053	<0.0059	--	--	--	--	--	--	--	--	--	<0.0133	2.6	<0.360	<0.342	--	--	--	--	--	<0.0056	--	--	--	--	--	--	--	--	--	--	--	--	--	45	760
Naphthalene	0.11	--	--	--	--	<0.0054	--	--	--	--	--	--	--	--	<0.0027	--	0.121	0.0861	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	54	10,000
Styrene	0.127	--	--	<0.0053	<0.0059	<0.0054	--	--	--	--	--	--	--	--	<0.0027	<3.4	<0.0720	<0.0683	--	--	--	--	--	<0.0056	--	--	--	--	--	--	--	--	--	--	--	--	--	13	190
Toluene	0.0452	--	--	<0.0053	0.0085	<0.0054	--	--	--	--	--	--	--	--	<0.0027	<3.4	0.0576	0.0588	--	--	--	--	--	<0.0056	--	--	--	--	--	--	--	--	--	--	--	--	--	190	10,000
Trichloroethene	<0.0434	--	--	0.026	0.084	--	--	--	--	--	--	--	--	--	<0.0027	<3.4	<0.0720	<0.0683	--	--	--	--	--	<0.0056	--	--	--	--	--	--	--	--	--	--	--	--	--	13	520
Xylene O	1.34	--	--	--	--	<0.0054	--	--	--	--	--	--	--	--	<0.0027	--	0.233	0.220	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	110	10,000
Xylene P,M	2.11	--	--	--	--	<0.0054	--	--	--	--	--	--	--	--	<0.0053	--	1.20	1.16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	110	10,000
Xylenes (Total)	3.45	--	--	<0.011	0.0082	<0.0054	--	--	--	--	--	--	--	--	<0.008	52	1.43	1.38	--	--	--	--	--	<0.011	--	--	--	--	--	--	--	--	--	--	--	--	--	110	10,000
All other VOCs	ND	--	--	ND	ND	ND	--	--	--	--	--	--	--	--	ND	ND	ND	ND	--	--	--	--	--	ND	--	--	--	--	--	--	--	--	--	--	--	--	--	NS	NS
TOTAL METALS (mg/kg)																																							
Arsenic	--	20	0.6	0.76	0.84	2.4	1.6	4.5	1.6	14	4.5	7.2	3.5	1.8	<1.24	--	--	--	2	1	1.4	0.5	3.1	0.98	1.1	1	1.3	0.9	1.5	0.96	1.3	0.9	0.96	1.1	5.4	3.17	34.5	7	7
Barium	--	360	6.6	4.4	4.9	37	8.4	37	9.5	7.5	10	8.6	16	5.9	5.8	--	--	--	22	5.2	2.8	5.2	14	6.6	7.1	7.0	11	6.3	7.4	7.2	6.0	6.3	8.0	4.3	21.3	34.6	33.4	5,500	10,000
Cadmium	--	1.1	0.051	0.049	0.05	0.40	0.035	0.043	0.14	0.058	0.032	0.075	0.05	<0.19	<0.5	--	--	--	<0.18	< 0.21	< 0.22	< 0.20	< 0.19	<0.20	< 0.19	0.04	< 0.20	< 0.19	< 0.20	0.039	0.036	0.03	< 0.21	< 0.20	<0.57	<0.62	0.56	39	1,000
Chromium (Total)	--	21	26	16	7	32	2.9	6.1	2.4	3	1.3	2.2	7.8	3.4	2.1	--	--	--	1.9	0.53	0.31	< 0.49	1.3	1.9	1.3	1.4	2.1	1.4	2.1	1.7	1.7	1.3	1.4	1.3	7.7	6.38	6.51	1,400	10,000
Lead	--	350	1.6	1.2	0.99	480	15	8.7	1.8	2.3	0.77	1.5	14	1.8	<5	--	--	--	130	5.5	3.0	12	83	1.3	1.2	1.1	1.5	0.8	1.3	0.98	1.2	0.72	1.2	0.88	31.0	47.7	38.7	150	500
Mercury	--	0.2	0.097	0.02	<0.020	0.076	0.014	<0.020	<0.021	<0.020	<0.018	0.011	19	0.071	0.052	--	--	--	0.16	0.0099	0.20	< 0.020	0.0081	<0.020	< 0.018	< 0.020	< 0.020	< 0.019	< 0.021	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	0.067	0.313	0.473	23	610
Selenium	--	1.5	<4.1	<3.8	<3.7	<4.0	<3.7	<3.6	<4.4	<4.3	<3.7	<4.1	<4.2	<3.8	<5	--	--	--	<3.7	< 4.2	0.45	< 3.9	0.49	<4.0	< 3.9	0.4	0.48	< 3.9	< 4.0	< 4.0	< 3.8	< 3.8	< 4.3	< 4.0	<5.7	<6.18	<5.18	390	10,000
Silver	--	<0.62	<0.62	0.44	<0.55	<0.60	<0.56	<0.54	<0.66	0.83	2	0.62	<0.63	<0.57	<0.5	--	--	--	<0.55	< 0.62	0.22	< 0.59	< 0.58	<0.60	< 0.58	< 0.61	< 0.60	< 0.58	< 0.60	< 0.60	< 0.57	< 0.56	< 0.64	< 0.61	<0.57	<0.62	<0.052	200	10,000
TOTAL PETROLEUM HYDROCARBONS (mg/kg)																																							
C10-C-28 Aliphatics	--	--	--	--	--	38	--	--	--	--	--	--	<0.019	<0.020	--	3,100	<47.8	240	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	323	153	500	2,500
POLYNUCLEAR AROMATIC HYDROCARBONS (mg/kg)																																							
2-Methylnaphthalene	--	--	--	<0.2	<1.1	0.0021	--	<0.18	<0.17	<0.17	<0.18	<0.18	--	--	<0.36	--	<0.414	<0.437	--	< 0.19	< 4.1	< 0.18	< 0.19	--	0.0058	< 0.17	< 0.17	< 0.2	< 0.18	< 0.2	< 0.18	< 0.21	< 0.17	< 0.2	<0.399	--	--	123	10,000
Acenaphthene	--	520	0.21	<0.2	0.045	0.051	--	<0.18	<0.17	<0.17	<0.18	<0.18	0.014	0.0043	<0.36	--	<0.414	<0.437	--	< 0.19	< 4.1	< 0.18	< 0.19	--	0.0042	< 0.17	< 0.17	< 0.2	< 0.18	< 0.2	< 0.18	< 0.21	< 0.17	< 0.2	<0.399	--	--	43	10,000
Acenaphthylene	--	<1,100	<0.22	<0.2	<1.1	0.049	--	<0.18	<0.17	<0.17	<0.18	<0.18	<0.19	<0.21	<0.36	--	<0.414	<0.437	--	< 0.19	< 4.1	< 0.18	< 0.19	--	< 0.2	< 0.17	< 0.17	< 0.2	< 0.18	< 0.2	< 0.18	< 0.21	< 0.17	< 0.2	<0.399	--	--	23	10,000
Anthracene	--	1,100	0.25	<0.2	0.13	0.16	--	<0.18	<0.17	<0.17	<0.18	<0.18	0.022	<0.21	<0.36	--	<0.414	<0.437	--	< 0.19	< 4.1	< 0.18	< 0.19	--	< 0.2	< 0.17	< 0.17	< 0.2	< 0.18	< 0.2	< 0.18	< 0.21	< 0.17	< 0.2	<0.399	--	--	35	10,000
Benzo(a)anthracene	--	2,300	0.53	<0.2	<1.1	0.73	--	<0.18	<0.17	<0.17	<0.18	<0.18	0.11	0.0071	<0.36	--	<0.414	<0.437	--	< 0.19	< 4.1	< 0.18	< 0.19	--	< 0.2	< 0.17	< 0.17	< 0.2	< 0.18	0.012	< 0.18	< 0.21	< 0.17	< 0.2	<0.399	--	--	0.9	7.8
Benzo(a)pyrene	--	1,900	0.44	<0.2	0.2	0.67	--	0.03	<0.17	<0.17	<0.18	<0.18	0.11	<0.21	<0.181	--	<0.208	<0.219	--	< 0.19	< 4.1	< 0.18	< 0.19	--	< 0.2	< 0.17	< 0.17	< 0.2	< 0.18	< 0.2	< 0.18	< 0.21	< 0.17	< 0.2	<0.2	--	--	0.4	0.8
Benzo(b)fluoranthene	--	2,300	0.57	<0.2	0.25	0.97	--	0.02	<0.17	0.0034	<0.18	0.0044	0.14	<0.21	<0.36	--	<0.414	<0.437	--	< 0.19	< 4.1	< 0.18	< 0.19	--	< 0.2	< 0.17	< 0.17	< 0.2	< 0.18	< 0.2	< 0.18	< 0.21	< 0.17	< 0.2	<0.399	--	--	0.9	7.8
Benzo(g,h,i)perylene	--	590	0.17	<0.2	<1.1	0.41	--	<0.18	<0.17	<0.17	<0.18	<0.18	0.043	<0.21	<0.36	--	<0.414	<0.437	--	< 0.19	< 4.1	< 0.18	< 0.19	--	< 0.2	< 0.17	< 0.17	< 0.2	< 0.18	< 0.2	< 0.18	< 0.21	< 0.17	< 0.2	<0.399	--	--	0.8	10,000
Benzo(k)fluoranthene	--	1,100	0.25	<0.2	0.16	0.39	--	0.01	<0.17	<0.17	<0.18	<0.18	0.014	<0.21	<0.36	--	<0.414	<0.437	--	< 0.19	< 4.1	< 0.18	< 0.19	--	< 0.2	< 0.17	< 0.17	< 0.2	< 0.18	< 0.2	< 0.18	< 0.21	< 0.17	< 0.2	<0.399	--	--	0.9	78
Chrysene	--	2,400	0.53	<0.2	0.29	0.83	--	0.02	<0.17	<0.17	<0.18	0.0078	0.16	<0.21	<0.181	--	<0.208	<0.219	--	< 0.19	< 4.1	< 0.18	< 0.19	--	< 0.2	< 0.17	< 0.17	< 0.2	< 0.18	0.011	< 0.18	< 0.21	< 0.17	< 0.2	<0.2	--	--	0.4	780
Dibenzo(a,h)anthracene	--	180	0.045	<0.2	<1.1	0.13	--	0.035	<0.17	<0.17	<0.18	<0.18	0.017	<0.21	<0.181	--	<0.208	<0.219	--	< 0.19	< 4.1	< 0.18	< 0.19	--	< 0.2	< 0.17	< 0.17	< 0.2	< 0.18	< 0.2	< 0.18	< 0.21	< 0.17	< 0.2	<0.2	--	--	0.4	0.8
Fluoranthene	--	5,400	1.10	0.0054	0.59	1.4	--	0.02	0.0028	0.0034	<0.18	0.0072	0.23	0.01	<0.36	--	<0.414	<0.437	--	0.01	0.19	0.0076	< 0.19	--	< 0.2	< 0.17	< 0.17	< 0.2	< 0.18	0.018	< 0.18	< 0.21	< 0.17	< 0.2	<0.399	--	--	20	10,000
Fluorene	--	510	0.14	<0.2	0.066	0.055	--	<0.18	<0.17	<0.17	<0.18	<0.18	0.0096	<0.21	<0.36	--	<0.414	<0.437	--	< 0.19	< 4.1	< 0.18	< 0.19	--	< 0.2	< 0.17	< 0.17	< 0.2	< 0.18	< 0.2	< 0.18	< 0.21	< 0.17	< 0.2	<0.399	--	--	28	10,000
Indeno(1,2,3-cd)Pyrene	--	550	0.16	<0.2	0.15	0.36	--	0.028	<0.17	<0.17	<0.18	<0.18	0.035	<0.21	<0.36	--	<0.414	<0.437	--	< 0.19	< 4.1	< 0.18	< 0.19	--	< 0.2	< 0.17	< 0.17	< 0.2	< 0.18	< 0.2	< 0.18	< 0.21	< 0.17	< 0.2	<0.399	--	--	0.9	7.8
Naphthalene	--	370	0.46	<0.2	0.055	0.032	--	0.0036	<0.17	<0.17	<0.18	<0.18	0.030	0.021	<0.36	--	<0.414	<0.437	--	< 0.19	< 4.1	< 0.18	< 0.19	--	0.022	< 0.17	< 0.17	< 0.2	< 0.18	< 0.2	< 0.18	< 0.21	< 0.17	< 0.2	<0.399	--	--	54	10,000
Phenanthrene	--	5,100	1.10	0.0061	0.57	0.74	--	0.012	0.0037	<0.17	<0.18	0.0072	0.15	0.009	<0.36	--	<0.414	<0.437	--	0.0067	< 4.1	0.0064	< 0.19	--	0.0088	< 0.17	< 0.17	< 0.2	< 0.18	0.014	< 0.18	< 0.21	< 0.17	< 0.2	<0.399	--	--	40	10,000
Pyrene	--	3,900	0.86	0.0045	0.59	1.2	--	0.022	0.0028	0.004	<0.18	0.0086	0.20	0.0049	<0.36	--	<0.414	<0.437	--	< 0.19	< 4.1	< 0.18	< 0.19	--	< 0.2	< 0.17	< 0.17	< 0.2	< 0.18	0.021	< 0.18	< 0.21	< 0.17	< 0.2	<0.399	--	--	13	10,000
POLYCHLORINATED BIPHENYLS BY AROCLOR(mg/kg)																																							
All PCB Aroclors	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	ND	ND	10	10

NOTES:
mg/kg = milligrams per kilogram.
-- = Not analyzed.
I/C = Industrial/Commercial
NS = No standard promulgated.
ND = Not detected above laboratory reporting limit.
Bold concentrations exceed laboratory reporting limits.
Bold Red concentrations exceed the applicable RIDEM Residen
Bold Red underlined concentrations exceed the applicable RID
Soil removed during remedial excavations.

TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

BAY SPRING REALTY CO.
90 BAY SPRING AVENUE
BARRINGTON, RHODE ISLAND

	AOC-1: UST Area							AOC-4: Waste Disposal Area No. 1				AOC-5: Cistern Area																		AOC-6: Drum Storage Area/Benzol House	AOC-7: Waste Disposal Area No. 2				AOC-8: Acid Storage Tanks						AOC-9: Solvent Storage Tanks		AOC-10: Coating Room			
Sample Identification	MW-4		MW-101				MW-102	MW-106				MW-3						MW-5				RW-1	MW-105				MW-103	MW-104				MW-3						MW-2		MW-1		RIDEM Groundwater Objectives	
Date Sampled	11/26/2012	2/13/2013	6/6/2014	10/9/2014	4/9/2015	7/9/2015	6/6/2014	6/6/2014	10/9/2014	4/9/2015	7/9/2015	11/26/2012	2/13/2013	6/6/2014	10/9/2014	4/9/2015	7/9/2015	11/26/2012	6/6/2014	10/9/2014	4/9/2015	5/30/2014	6/6/2014	10/9/2014	4/9/2015	7/9/2015	6/6/2014	6/6/2014	10/9/2014	4/9/2015	7/9/2015	11/26/2012	2/13/2013	6/6/2014	10/9/2014	4/9/2015	7/9/2015	11/26/2012	6/6/2014	11/26/2012	6/6/2014	GA Objectives	GB UCLs
VOLATILE ORGANIC COMPOUNDS (ug/L)																																											
1,1,1-Trichloroethane	<1	--	--	--	--	--	--	<1	--	--	--	1.2	--	<1	0.0021	<1	2.1	<1	<1	<0.0010	<1	43,000	2.9	0.0333	23.2	19.8	--	2.7	--	--	2.7	1.2	--	<1	0.0021	<1	2.1	<0.1	<1	<1	--	200	68,000
1,1,2-Trichloroethane	<1	--	--	--	--	--	--	<1	--	--	--	<1	--	<1	<0.0010	<1	<1	<1	<1	<0.0010	<1	140	<1	<0.0010	<1	<1	--	<1	--	--	<1	<1	--	<1	<0.0010	<1	<1	<0.1	<1	<1	--	5	NS
1,1,2-Trichloro-1,2,2-trifluoroethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	7.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	NS	NS
1,1-Dichloroethane	<1	--	--	--	--	--	--	<1	--	--	--	3	--	<1	0.0018	<1	<1	<1	<1	<0.0010	<1	25,000	14.3	0.0261	7	3.4	--	1.2	--	--	4.0	3	--	<1	0.0018	<1	<1	<0.1	<1	<1	--	NS	NS
1,1-Dichloroethene	<1	--	--	--	--	--	--	<1	--	--	--	<1	--	<1	<0.0010	<1	1.7	<1	<1	<0.0010	<1	2,900	<1	<0.0010	<1	<1	--	<1	--	--	<1	<1	--	<1	<0.0010	<1	1.7	<0.1	<1	<1	--	7	23,000
1,2,4-Trimethylbenzene	<1	--	--	--	--	--	--	<1	--	--	--	1	--	4.1	<0.0010	<1	2.3	4.5	3.2	0.011	1.2	--	<1	<0.0010	<1	<1	--	62.7	--	--	48.4	1	--	4.1	<0.0010	<1	2.3	<0.1	<1	<1	--	NS	NS
1,2-Dibromo-3-Chloropropane	<5	--	--	--	--	--	--	<5	--	--	--	<5	--	<5	<0.0050	<5	<5	<5	<5	<0.0050	<5	1.1	<5	<0.0050	<5	<5	--	<5	--	--	<5	<5	--	<5	<0.0050	<5	<5	<0.5	<5	<5	--	0.2	NS
1,2-Dibromoethane	<1	--	--	--	--	--	--	<1	--	--	--	<1	--	<1	<0.0010	<1	<1	<1	<1	<0.0010	<1	<1.0	<1	<0.0010	<1	<1	--	<1	--	--	<1	<1	--	<1	<0.0010	<1	<1	<0.1	<1	<1	--	0.05	NS
1,2-Dichloroethane	<1	--	--	--	--	--	--	<1	--	--	--	<1	--	<1	<0.0010	<1	<1	<1	<1	<0.0010	<1	110	<1	<0.0010	<1	<1	--	<1	--	--	<1	<1	--	<1	<0.0010	<1	<1	<0.1	<1	<1	--	5	670,000
1,3,5-Trimethylbenzene	<1	--	--	--	--	--	--	<1	--	--	--	<1	--	<1	<0.0010	<1	<1	139	79.5	0.0084	37.4	--	3.1	<0.0010	<1	<1	--	285	--	--	84.6	<1	--	<1	<0.0010	<1	<1	<0.1	<1	<1	--	NS	NS
2-Butanone	<10	--	--	--	--	--	--	<10	--	--	--	<10	--	<10	<0.0100	<10	<10	<10	<10	<0.0100	<10	820	<10	<0.0100	<10	<10	--	<10	--	--	<10	<10	--	<10	<0.0100	<10	<10	<1	<10	<10	--	NS	NS
2-Hexanone	<10	--	--	--	--	--	--	<10	--	--	--	<10	--	<10	<0.0100	<10	<10	<10	<10	<0.0100	<10	29	<10	<0.0100	<10	<10	--	<10	--	--	<10	<10	--	<10	<0.0100	<10	<10	<1	<10	<10	--	NS	NS
4-Isopropyltoluene	<1	--	--	--	--	--	--	<1	--	--	--	<1	--	<1	<0.0010	<1	<1	9.4	8.9	0.0058	6.5	--	<1	<0.0010	<1	<1	--	8	--	--	5.2	<1	--	<1	<0.0010	<1	<1	<0.1	<1	<1	--	NS	NS
4-Methyl-2-Pentanone	<25	--	--	--	--	--	--	<25	--	--	--	<25	--	<25	<0.0250	<25	<25	<25	<25	<0.0250	<25	130	<25	<0.0250	<25	<25	--	<25	--	--	<25	<25	--	<25	<0.0250	<25	<25	<2.5	<25	<25	--	NS	NS
Acetone	<10	--	--	--	--	--	--	<10	--	--	--	102	--	<10	<0.0100	<10	<10	<10	<10	<0.0100	<10	290	<10	<0.0100	<10	<10	--	<10	--	--	<10	102	--	<10	<0.0100	<10	<10	10.4	<10	<10	--	NS	NS
Benzene	<1	--	--	--	--	--	--	<1	--	--	--	1.1	--	3.4	<0.0010	<1	<1	<1	<1	<0.0010	<1	120	<1	<0.0010	<1	<1	--	<1	--	--	<1	1.1	--	3.4	<0.0010	<1	<1	<0.1	<1	<1	--	5	18,000
Carbon Disulfide	<1	--	--	--	--	--	--	<1	--	--	--	<1	--	<1	<0.0010	<1	<1	<1	<1	<0.0010	<1	1.6	<1	<0.0010	<1	<1	--	<1	--	--	<1	<1	--	<1	<0.0010	<1	<1	<0.1	<1	<1	--	NS	NS
Carbon Tetrachloride	<1	--	--	--	--	--	--	<1	--	--	--	<1	--	<1	<0.0010	<1	<1	<1	<1	<0.0010	<1	1,400	<1	<0.0010	<1	<1	--	<1	--	--	<1	<1	--	<1	<0.0010	<1	<1	<0.1	<1	<1	--	5	NS
Chloroethane	<2	--	--	--	--	--	--	<2	--	--	--	<2	--	<2	<0.0020	<2	<2	<2	<2	<0.0020	<2	170	<2	<0.0020	<2	<2	--	<2	--	--	<2	<2	--	<2	<0.0020	<2	<2	<0.2	<2	<2	--	NS	NS
Chloroform	<1	--	--	--	--	--	--	<1	--	--	--	<1	--	<1	<0.0010	<1	<1	<1	<1	<0.0010	<1	16	<1	<0.0010	<1	<1	--	<1	--	--	<1	<1	--	<1	<0.0010	<1	<1	<0.1	<1	<1	--	NS	NS
cis-1,2-Dichloroethene	<1	--	--	--	--	--	--	<1	--	--	--	<1	--	<1	<0.0010	<1	<1	<1	<1	<0.0010	<1	830	3.8	<0.0010	<1	<1	--	<1	--	--	<1	<1	--	<1	<0.0010	<1	<1	<0.1	<1	<1	--	70	69,000
Ethylbenzene	<1	--	--	--	--	--	--	<1	--	--	--	<1	--	<1	<0.0010	<1	<1	<1	<1	<0.0010	<1	7,800	<1	<0.0010	<1	<1	--	4.4	--	--	6.0	<1	--	<1	<0.0010	<1	<1	<0.1	<1	<1	--	700	16,000
Isopropylbenzene	<1	--	--	--	--	--	--	<1	--	--	--	<1	--	<1	<0.0010	<1	<1	<1	<1	<0.0010	<1	40	<1	<0.0010	<1	<1	--	3.4	--	--	3.0	<1	--	<1	<0.0010	<1	<1	<0.1	<1	<1	--	NS	NS
Methylene Chloride	<2	--	--	--	--	--	--	<2	--	--	--	<2	--	<2	<0.0020	<2	<2	<2	<2	<0.0020	<2	80	<2	<0.0020	<2	<2	--	<2	--	--	<2	<2	--	<2	<0.0020	<2	<2	<0.2	<2	<2	--	5	NS
Naphthalene	<1	--	--	--	--	--	--	<1	--	--	--	<1	--	1.6	<0.0010	<1	1.3	<1	<1	<0.0010	<1	--	<1	<0.0010	<1	<1	--	2.6	--	--	2.4	<1	--	1.6	<0.0010	<1	1.3	<0.1	<1	<1	--	100	NS
n-Propylbenzene	<1	--	--	--	--	--	--	<1	--	--	--	<1	--	<1	<0.0010	<1	<1	1.3	<1	<0.0010	<1	--	<1	<0.0010	<1	<1	--	3.2	--	--	2.3	<1	--	<1	<0.0010	<1	<1	<0.1	<1	<1	--	NS	NS
sec-Butylbenzene	<1	--	--	--	--	--	--	<1	--	--	--	<1	--	<1	<0.0010	<1	<1	1.3	1	<0.0010	<1	--	<1	<0.0010	<1	<1	--	1.8	--	--	<1	<1	--	<1	<0.0010	<1	<1	<0.1	<1	<1	--	NS	NS
Tetrachloroethene	<1	--	--	--	--	--	--	<1	--	--	--	<1	--	<1	<0.0010	<1	<1	<1	<1	<0.0010	<1	110	<1	<0.0010	<1	<1	--	<1	--	--	<1	<1	--	<1	<0.0010	<1	<1	<0.1	<1	<1	--	5	NS
Toluene	<1	--	--	--	--	--	--	<1	--	--	--	1.1	--	<1	<0.0010	<1	<1	<1	<1	<0.0010	<1	13,000	<1	<0.0010	<1	<1	--	<1	--	--	1.3	1.1	--	<1	<0.0010	<1	<1	<0.1	<1	<1	--	1,000	21,000
Trichloroethene	<1	--	--	--	--	--	--	<1	--	--	--	<1	--	<1	<0.0010	<1	<1	<1	<1	<0.0010	<1	77,000	1.6	0.0026	4.6	8.2	--	<1	--	--	<1	<1	--	<1	<0.0010	<1	<1	<0.1	<1	<1	--	5	87,000
Vinyl Chloride	<1	--	--	--	--	--	--	<1	--	--	--	<1	--	<1	<0.0010	<1	<1	<1	<1	<0.0010	<1	160	<1	<0.0010	<1	<1	--	<1	--	--	<1	<1	--	<1	<0.0010	<1	<1	<0.1	<1	<1	--	2	NS
Xylene O	<1	--	--	--	--	--	--	<1	--	--	--	2.2	--	<1	<0.0010	<1	<1	<1	1.2	<0.0010	<1	--	<1	<0.0010	<1	<1	--	5.2	--	--	5.9	2.2	--	<1	<0.0010	<1	<1	1	<1	<1	--	10,000	NS
Xylene P,M	<2	--	--	--	--	--	--	<2	--	--	--	3.6	--	<2	<0.0020	<2	<2	<2	<2	<0.0020	<2	--	<2	<0.0020	<2	<2	--	27.9	--	--	27.6	3.6	--	<2	<0.0020	<2	<2	<0.2	<2	<2	--	10,000	NS
Xylenes (Total)	<3	--	--	--	--	--	--	<3	--	--	--	5.8	--	<2	<0.0020	<2	<2	<3	<2	<0.0020	<2	39,000	<2	<0.0020	<2	<2	--	33	--	--	33.5	5.8	--	<2	<0.0020	<2	<2	<0.3	<2	<3	--	NS	NS
All other VOCs	ND	--	--	--	--	--	--	ND	--	--	--	ND	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	--	ND	--	--	ND	ND	--	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS
SEMI-VOLATILE ORGANIC COMPOUNDS (ug/L)																																											
2,4-Dimethylphenol	<59	--	--	--	--	--	--	--	--	--	--	<51	--	--	--	--	--	<51	--	--	--	61	--	--	--	--	--	--	--	--	--	<51	--	--	--	--	--	--	--	--	--	NS	NS
2-Methylphenol	<12	--	--	--	--	--	--	--	--	--	--	<10	--	--	--	--	--	<10	--	--	--	37	--	--	--	--	--	--	--	--	--	<10	--	--	--	--	--	--	--	--	--	NS	NS
Acetophenone	<12	--	--	--	--	--	--	--	--	--	--	<10	--	--	--	--	--	<10	--	--	--	85	--	--	--	--	--	--	--	--	--	<10	--	--	--	--	--	--	--	--	--	NS	NS
Benzaldehyde	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	NS	NS
Di-n-butylphthalate	<12	--	--	--	--	--	--	--	--	--	--	<10	--	--	--	--	--	<10	--	--	--	9.8	--	--	--	--	--	--	--	--	--	<10	--	--	--	--	--	--	--	--	--	NS	NS
Isophorone	<12	--	--	--	--	--	--	--	--	--	--	<10	--	--	--	--	--	<10	--	--	--	20	--	--	--	--	--	--	--	--	--	<10	--	--	--	--	--	--	--	--	--	NS	NS
Nitrobenzene	<12	--	--	--	--	--	--	--	--	--	--	<10	--	--	--	--	--	<10	--	--	--	110	--	--	--	--	--	--	--	--	--	<10	--	--	--	--	--	--	--	--	--	NS	NS
Phenol	<12	--	--	--	--	--	--	--	--	--	--	<10	--	--	--	--	--	<10	--	--	--	65	--	--	--	--	--	--	--	--	--	<10	--	--	--	--	--	--	--	--	--	NS	NS
2-Methylnaphthalene	< 0.21	--	--	--	--	--	--	--	--	--	--	<0.2	--	--	--	--	--	2.63	--	--	--	<100	--	--	--	--	--	--	--	--	--	<0.2	--	--	--	--	--	--	--	--	--	NS	NS
Acenaphthene	< 0.21	--	--	--	--	--	--	--	--	--	--	<0.2	--	--	--	--	--	0.29	--	--	--	<100	--	--	--	--	--	--	--	--	--	<0.2	--	--	--	--	--	--	--	--	--	NS	NS
Acenaphthylene	< 0.21	--	--	--	--	--	--	--	--	--	--	0.3	--	--	--	--	--	<0.2	--	--	--	<100	--	--	--	--	--	--	--	--	--	0.3	--	--	--	--	--	--	--	--	--	NS	NS
Benzo(a)anthracene	0.08	--	--	--	--	--	--	--	--	--	--	<0.05	--	--	--	--	--	<0.05	--	--	--	<100	--	--	--	--	--	--	--	--	--	<0.05	--	--	--	--	--	--	--	--	--	NS	NS
Benzo(a)pyrene	< 0.05	--	--	--	--	--	--	--	--	--	--	0.08	--	--	--	--	--	<0.05	--	--	--	<100	--	--	--	--	--	--	--	--	--	0.08	--	--	--	--	--	--	--	--	--	0.2	NS
Benzo(b)fluoranthene	0.1	--	--	--	--	--	--	--	--	--	--	0.15	--	--	--	--	--	<0.05	--	--	--	<100	--	--	--	--	--	--	--	--	--	0.15	--	--	--	--	--	--	--	--	--	NS	NS
Benzo(k)fluoranthene	<0.05	--	--	--	--	--	--	--	--	--	--	0.05	--	--	--	--	--	<0.05	--	--	--	<100	--	--	--	--	--	--	--	--	--	0.05	--	--	--	--	--	--	--	--	--	NS	NS
Chrysene	0.1	--	--	--	--	--	--	--	--	--	--	0.09	--	--	--	--	--	<0.05	--	--	--	<100	--	--	--	--	--	--	--	--	--	0.09	--	--	--	--	--	--	--	--	--	NS	NS
Fluoranthene	<0.21	--	--	--	--	--	--	--	--	--	--	<0.2	--	--	--	--	--	<0.2	--	--	--	15	--	--	--	--	--	--	--	--	--	<0.2	--	--	--	--	--	--	--	--	--	NS	NS
Hexachlorobenzene	<0.21	--	--	--	--	--	--	--	--	--	--	<0.2	--	--	--	--	--	<0.2	--	--	--	<100	--	--	--	--	--	--	--	--	--	<0.2	--	--	--	--	--	--	--	--	--	1	NS
Indeno(1,2,3-cd)Pyrene	<0.05	--	--	--	--	--	--	--	--	--	--	0.07	--	--	--	--	--	<0.05	--	--	--	<100	--	--	--	--	--	--	--	--	--	0.07	--	--	--	--	--	--	--	--	--	NS	NS
Naphthalene	<0.21	--	--	--	--	--	--	--	--	--	--	0.62	--	--	--	--	--	1.27	--	--	--	<100	--	--	--	--	--	--	--	--	--	0.62	--	--	--	--	--	--	--	--	--	100	NS
Pentachlorophenol	<1.05	--	--	--	--	--	--	--	--	--	--	<1.01	--	--	--	--	--	<1	--	--	--	<200	--	--	--	--	--	--	--	--	--	<1.01	--	--	--	--	--	--	--	--	--	1	NS
Phenanthrene	<0.21	--	--	--	--	--	--	--	--	--	--	<0.2	--	--	--	--	--	<0.2	--	--	--	20	--	--	--	--	--	--	--	--	--	<0.2	--	--	--	--	--	--	--	--	--	NS	NS
Pyrene	<0.21	--	--	--	--	--	--	--	--	--	--	<0.2	--	--	--	--	--	<0.2	--	--	--	9.6	--	--	--	--	--	--	--	--	--	<0.2	--	--	--	--	--	--	--	--	--	NS	NS
All other SVOCs	ND	--	--	--	--	--	--	--	--	--	--	ND	--	--	--	--	--	ND	--	--	--	ND	--	--	--	--	--	--	--	--	--	ND	--	--	--	--	--	--	--	--	--	NS	NS
TOTAL PETROLEUM HYDROCARBONS (mg/L)																																											
Diesel Range Organics [C10-C28]	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	NS	NS
TOTAL METALS (mg/L)																																											
Arsenic	0.0146	0.0206	0.0807	--	--	0.102	0.0029	<0.001	--	--	<0.001	0.0065	0.0027	0.0042	--	--	0.003	<0.0025	<0.001	--	--	0.018	<0.001	--	--	--	<0.001	<0.001	--	--	0.003	0.0065	0.0027	0.0042	--	--	0.003	--	<0.001	--	<0.001	0.01	NS
Barium	0.096	0.09	0.039	--	--	0.030	0.025	<0.025	--	--	0.032	0.096	0.121	0.061	--	--	0.049	0.035	<0.025	--	--	0.72	<0.025	--	--	--	0.034	<0.025	--	--	<0.025	0.096	0.121	0.061	--	--	0.049	--	0.035	--	<0.025	2	NS
Cadmium	<0.0025	<0.0025	<0.0025	--	--	<0.0025	<0.0025	<0.0025	--	--	<0.025	<0.0025	<0.0025	<0.0025	--	--	<0.0025	<0.0025	<0.0025	--	--	0.0076	<0.0025	--	--	--	<0.0025	<0.0025	--	--	<0.0025	<0.0025	<0.0025	<0.0025	--	--	<0.0025	--	<0.0025	--	<0.0025	0.005	NS
Chromium	0.01	0.021	<0.01	--	--	<0.01	<0.01	<0.01	--	--	<0.01	<0.01	<0.01	<0.01	--	--	<0.01	<0.01	<0.01	--	--	0.16	<0.01	--	--	--	<0.01	<0.01	--	--	<0.01	<0.01	<0.01	<0.01	--	--	<0.01	--	<0.01	--	<0.01	0.1	NS
Lead	0.012	0.03	0.0222	--	--	<0.01	<0.01	<0.01	--	--	<0.01	0.053	0.03	0.0198	--	--	0.01	<0.01	<0.01	--	--	1.7	<0.01	--	--	--	<0.01	<0.01	--	--	<0.01	0.053	0.03	0.0198	--	--	0.01	--	<0.01	--	<0.01	0.015	NS
Mercury	<0.0005	0.00074	<0.0002	--	--	<0.0002	<0.0002	<0.0002	--	--	<0.0002	<0.0005	0.00055	<0.0002	--	--	0.00021	<0.0005	<0.0002	--	--	0.0047	<0.0002	--	--	--	<0.0002	<0.0002	--	--	<0.0002	<0.0005	0.00055	<0.0002	--	--	0.00021	--	<0.0002	--	<0.0002	0.002	NS
Selenium	<0.025	<0.025	<0.025	--	--	<0.025	<0.025	<0.025	--	--	<0.025	<0.025	<0.025	<0.025	--	--	<0.025	<0.025	<0.025	--	--	<0.025	<0.025	--	--	--	<0.025	<0.025	--	--	<0.025	<0.025	<0.025	<0.025	--	--	<0.025	--	<0.025	--	<0.025	0.05	NS
Silver	<0.005	<0.005	<0.005	--	--	<0.005	<0.005	<0.005	--	--	<0.005	<0.005	<0.005	<0.005	--	--	<0.005	<0.005	<0.005	--	--	0.0035	<0.005	--	--	--	<0.005	<0.005	--	--	<0.005	<0.005	<0.005	<0.005	--	--	<0.005	--	<0.005	--	<0.005	NS	NS
DISSOLVED METALS (mg/L)																																											
Arsenic	--	0.0123	0.0402	0.0342	0.009	0.059	0.0018	<0.001	<0.0025	<0.002	<0.002	--	<0.0025	0.0036	0.0052	<0.002	<0.002	--	<0.001	--	--	--	<0.001	--	--	--	<0.001	<0.001	<0.0025	<0.002	<0.002	--	<0.0025	0.0036	0.0052	<0.002	<0.002	--	<0.001	--	<0.001	0.01	NS
Barium	--	0.046	<0.025	0.026	<0.025	<0.025	<0.025	<0.025	0.036	0.026	0.027	--	0.093	0.052	0.028	0.09	0.041	--	<0.025	--	--	--	<0.025	--	--	--	0.028	<0.025	0.025	<0.025	<0.025	--	0.093	0.052	0.028	0.09	0.041	--	0.028	--	<0.025	2	NS
Cadmium	--	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	--	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	--	<0.0025	--	--	--	<0.0025	--	--	--	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	--	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	--	<0.0025	--	<0.0025	0.005	NS
Chromium	--	<0.01	<0.01	<0.010	<0.01	<0.01	<0.01	<0.01	<0.010	<0.01	<0.01	--	<0.01	<0.01	<0.010	<0.01	<0.01	--	<0.01	--	--	--	<0.01	--	--	--	<0.01	<0.01	<0.010	<0.01	<0.01	--	<0.01	<0.01	<0.010	<0.01	<0.01	--	<0.01	--	<0.01	0.1	NS
Lead	--	<0.01	0.0177	<0.010	0.036	<0.01	<0.01	<0.01	<0.010	<0.01	<0.01	--	<0.01	0.0117	<0.010	0.062	<0.01	--	<0.01	--	--	--	<0.01	--	--	--	<0.01	<0.01	<0.010	0.062	<0.01	--	<0.01	0.0117	<0.010	0.062	<0.01	--	<0.01	--	<0.01	0.015	NS
Mercury	--	<0.0002	<0.0002	<0.0020	<0.0002	<0.0002	<0.0002	<0.0002	<0.00020	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.00020	<0.0002	<0.0002	--	<0.0002	--	--	--	<0.0002	--	--	--	<0.0002	<0.0002	<0.00020	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.00020	<0.0002	<0.0002	--	<0.0002	--	<0.0002	0.002	NS
Selenium	--	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	--	<0.025	<0.025	<0.025	<0.025	<0.025	--	<0.025	--	--	--	<0.025	--	--	--	<0.025	<0.025	<0.025	<0.025	<0.025	--	<0.025	<0.025	<0.025	<0.025	<0.025	--	<0.025	--	<0.025	0.05	NS
Silver	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	--	<0.005	<0.005	<0.005	<0.005	<0.005	--	<0.005	--	--	--	<0.005	--	--	--	<0.005	<0.005	<0.005	<0.005	<0.005	--	<0.005	<0.005	<0.005	<0.005	<0.005	--	<0.005	--	<0.005	NS	NS

NOTES:
ug/L = micrograms per liter.
mg/L = milligrams per liter.
NS = No standard promulgated.
ND = Not detected above laboratory reporting limit.
-- = Not analyzed.
Bold concentrations exceed concentrations exceed laboratory reporting limits.
Red concentrations exceed the applicable RIDEM GA Groundwater Objectives.
Monitoring well destroyed during excavation activities.

ATTACHMENT F

Laboratory Reports

CERTIFICATE OF ANALYSIS

Mark House
Resource Controls
474 Broadway
Pawtucket, RI 02860-1377

RE: Bay Spring (7131)
ESS Laboratory Work Order Number: 1507217

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

REVIEWED
By ESS Laboratory at 5:29 pm, Sep 08, 2015

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with NELAC Standards, A2LA and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibrations, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring

ESS Laboratory Work Order: 1507217

SAMPLE RECEIPT

The following samples were received on July 09, 2015 for the analyses specified on the enclosed Chain of Custody Record.

Low Level VOA vials were frozen by ESS Laboratory on July 9, 2015 at 15:37.

The cooler temperature was not within the acceptance limit of <6°C, however, samples were delivered on ice.

Revision 1 September 8, 2015: This report has been revised to include VOA TICs.

Lab Number	Sample Name	Matrix	Analysis
1507217-01	TP-201	Soil	8100M, 8260B, 8270D
1507217-02	TP-202	Soil	8100M, 8260B, 8270D
1507217-03	TP-203	Soil	6010C, 7471B, 8082A, 8100M
1507217-04	TP-204	Soil	6010C, 7471B, 8082A, 8100M
1507217-05	TP-205	Soil	6010C, 7471B, 8100M, 8270D
1507217-06	TP-206	Soil	6010C, 7471B, 8100M, 8270D

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring

ESS Laboratory Work Order: 1507217

PROJECT NARRATIVE

5035/8260B Volatile Organic Compounds / Methanol

CG51043-BSD1 **Blank Spike recovery is above upper control limit (B+).**
2-Butanone (151% @ 70-130%), 2-Hexanone (135% @ 70-130%), Acetone (218% @ 70-130%)

CG51043-BSD1 **Relative percent difference for duplicate is outside of criteria (D+).**
2-Butanone (39% @ 25%), 2-Hexanone (34% @ 25%), Acetone (58% @ 25%)

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring

ESS Laboratory Work Order: 1507217

CURRENT SW-846 METHODOLOGY VERSIONS

Analytical Methods

1010A - Flashpoint
6010C - ICP
6020A - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015D - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260B - VOA
8270D - SVOA
8270D SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 04-1.1 - EPH / VPH

Prep Methods

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3541 - Automated Soxhlet Extraction
3546 - Microwave Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5030C - Aqueous Purge and Trap
5035 - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring
Client Sample ID: TP-201
Date Sampled: 07/09/15 12:50
Percent Solids: 80
Initial Volume: 15.6
Final Volume: 15
Extraction Method: 5035

ESS Laboratory Work Order: 1507217
ESS Laboratory Sample ID: 1507217-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: MD

5035/8260B Volatile Organic Compounds / Methanol

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
1,1,1,2-Tetrachloroethane	ND (0.144)	0.0125	8260B		1	07/10/15 17:04	CYG0117	CG51043
1,1,1-Trichloroethane	ND (0.0720)	0.0127	8260B		1	07/10/15 17:04	CYG0117	CG51043
1,1,2,2-Tetrachloroethane	ND (0.0720)	0.0196	8260B		1	07/10/15 17:04	CYG0117	CG51043
1,1,2-Trichloroethane	ND (0.0720)	0.0180	8260B		1	07/10/15 17:04	CYG0117	CG51043
1,1-Dichloroethane	ND (0.0720)	0.0115	8260B		1	07/10/15 17:04	CYG0117	CG51043
1,1-Dichloroethene	ND (0.0720)	0.0177	8260B		1	07/10/15 17:04	CYG0117	CG51043
1,1-Dichloropropene	ND (0.0720)	0.0111	8260B		1	07/10/15 17:04	CYG0117	CG51043
1,2,3-Trichlorobenzene	ND (0.0720)	0.0240	8260B		1	07/10/15 17:04	CYG0117	CG51043
1,2,3-Trichloropropane	ND (0.0720)	0.0179	8260B		1	07/10/15 17:04	CYG0117	CG51043
1,2,4-Trichlorobenzene	ND (0.0720)	0.0158	8260B		1	07/10/15 17:04	CYG0117	CG51043
1,2,4-Trimethylbenzene	**1.08** (0.0720)	0.0138	8260B		1	07/10/15 17:04	CYG0117	CG51043
1,2-Dibromo-3-Chloropropane	ND (0.432)	0.144	8260B		1	07/10/15 17:04	CYG0117	CG51043
1,2-Dibromoethane	ND (0.0720)	0.0183	8260B		1	07/10/15 17:04	CYG0117	CG51043
1,2-Dichlorobenzene	ND (0.0720)	0.0102	8260B		1	07/10/15 17:04	CYG0117	CG51043
1,2-Dichloroethane	ND (0.0720)	0.0193	8260B		1	07/10/15 17:04	CYG0117	CG51043
1,2-Dichloropropane	ND (0.0720)	0.0189	8260B		1	07/10/15 17:04	CYG0117	CG51043
1,3,5-Trimethylbenzene	**5.31** (0.0720)	0.0127	8260B		1	07/10/15 17:04	CYG0117	CG51043
1,3-Dichlorobenzene	ND (0.0720)	0.0091	8260B		1	07/10/15 17:04	CYG0117	CG51043
1,3-Dichloropropane	ND (0.0720)	0.0161	8260B		1	07/10/15 17:04	CYG0117	CG51043
1,4-Dichlorobenzene	ND (0.0720)	0.0192	8260B		1	07/10/15 17:04	CYG0117	CG51043
1,4-Dioxane - Screen	ND (7.20)	2.40	8260B		1	07/10/15 17:04	CYG0117	CG51043
1-Chlorohexane	ND (0.0720)	0.0137	8260B		1	07/10/15 17:04	CYG0117	CG51043
2,2-Dichloropropane	ND (0.144)	0.0246	8260B		1	07/10/15 17:04	CYG0117	CG51043
2-Butanone	ND (1.80)	0.416	8260B		1	07/10/15 17:04	CYG0117	CG51043
2-Chlorotoluene	ND (0.0720)	0.0203	8260B		1	07/10/15 17:04	CYG0117	CG51043
2-Hexanone	ND (0.720)	0.124	8260B		1	07/10/15 17:04	CYG0117	CG51043
4-Chlorotoluene	ND (0.0720)	0.0094	8260B		1	07/10/15 17:04	CYG0117	CG51043
4-Isopropyltoluene	**0.0878** (0.0720)	0.0128	8260B		1	07/10/15 17:04	CYG0117	CG51043
4-Methyl-2-Pentanone	ND (0.720)	0.0867	8260B		1	07/10/15 17:04	CYG0117	CG51043
Acetone	ND (1.80)	0.533	8260B		1	07/10/15 17:04	CYG0117	CG51043
Benzene	**J 0.0619** (0.0720)	0.0117	8260B		1	07/10/15 17:04	CYG0117	CG51043
Bromobenzene	ND (0.0720)	0.0197	8260B		1	07/10/15 17:04	CYG0117	CG51043

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring
Client Sample ID: TP-201
Date Sampled: 07/09/15 12:50
Percent Solids: 80
Initial Volume: 15.6
Final Volume: 15
Extraction Method: 5035

ESS Laboratory Work Order: 1507217
ESS Laboratory Sample ID: 1507217-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: MD

5035/8260B Volatile Organic Compounds / Methanol

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Bromochloromethane	ND (0.0720)	0.0233	8260B		1	07/10/15 17:04	CYG0117	CG51043
Bromodichloromethane	ND (0.0720)	0.0099	8260B		1	07/10/15 17:04	CYG0117	CG51043
Bromoform	ND (0.0720)	0.0207	8260B		1	07/10/15 17:04	CYG0117	CG51043
Bromomethane	ND (0.144)	0.0481	8260B		1	07/10/15 17:04	CYG0117	CG51043
Carbon Disulfide	ND (0.0720)	0.0107	8260B		1	07/10/15 17:04	CYG0117	CG51043
Carbon Tetrachloride	ND (0.0720)	0.0125	8260B		1	07/10/15 17:04	CYG0117	CG51043
Chlorobenzene	ND (0.0720)	0.0114	8260B		1	07/10/15 17:04	CYG0117	CG51043
Chloroethane	ND (0.144)	0.0480	8260B		1	07/10/15 17:04	CYG0117	CG51043
Chloroform	ND (0.0720)	0.0148	8260B		1	07/10/15 17:04	CYG0117	CG51043
Chloromethane	ND (0.144)	0.0183	8260B		1	07/10/15 17:04	CYG0117	CG51043
cis-1,2-Dichloroethene	ND (0.0720)	0.0179	8260B		1	07/10/15 17:04	CYG0117	CG51043
cis-1,3-Dichloropropene	ND (0.0720)	0.0163	8260B		1	07/10/15 17:04	CYG0117	CG51043
Dibromochloromethane	ND (0.0720)	0.0181	8260B		1	07/10/15 17:04	CYG0117	CG51043
Dibromomethane	ND (0.0720)	0.0228	8260B		1	07/10/15 17:04	CYG0117	CG51043
Dichlorodifluoromethane	ND (0.0720)	0.0125	8260B		1	07/10/15 17:04	CYG0117	CG51043
Diethyl Ether	ND (0.0720)	0.0183	8260B		1	07/10/15 17:04	CYG0117	CG51043
Di-isopropyl ether	ND (0.0720)	0.0135	8260B		1	07/10/15 17:04	CYG0117	CG51043
Ethyl tertiary-butyl ether	ND (0.0720)	0.0181	8260B		1	07/10/15 17:04	CYG0117	CG51043
Ethylbenzene	**0.108** (0.0720)	0.0094	8260B		1	07/10/15 17:04	CYG0117	CG51043
Hexachlorobutadiene	ND (0.0720)	0.0240	8260B		1	07/10/15 17:04	CYG0117	CG51043
Isopropylbenzene	**0.0749** (0.0720)	0.0127	8260B		1	07/10/15 17:04	CYG0117	CG51043
Methyl tert-Butyl Ether	ND (0.0720)	0.0115	8260B		1	07/10/15 17:04	CYG0117	CG51043
Methylene Chloride	ND (0.360)	0.0189	8260B		1	07/10/15 17:04	CYG0117	CG51043
Naphthalene	**0.121** (0.0720)	0.0189	8260B		1	07/10/15 17:04	CYG0117	CG51043
n-Butylbenzene	ND (0.0720)	0.0177	8260B		1	07/10/15 17:04	CYG0117	CG51043
n-Propylbenzene	**0.0749** (0.0720)	0.0176	8260B		1	07/10/15 17:04	CYG0117	CG51043
sec-Butylbenzene	ND (0.0720)	0.0096	8260B		1	07/10/15 17:04	CYG0117	CG51043
Styrene	ND (0.0720)	0.0095	8260B		1	07/10/15 17:04	CYG0117	CG51043
tert-Butylbenzene	ND (0.0720)	0.0168	8260B		1	07/10/15 17:04	CYG0117	CG51043
Tertiary-amyl methyl ether	ND (0.0720)	0.0104	8260B		1	07/10/15 17:04	CYG0117	CG51043
Tetrachloroethene	ND (0.0720)	0.0240	8260B		1	07/10/15 17:04	CYG0117	CG51043
Tetrahydrofuran	ND (0.720)	0.186	8260B		1	07/10/15 17:04	CYG0117	CG51043

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring
Client Sample ID: TP-201
Date Sampled: 07/09/15 12:50
Percent Solids: 80
Initial Volume: 15.6
Final Volume: 15
Extraction Method: 5035

ESS Laboratory Work Order: 1507217
ESS Laboratory Sample ID: 1507217-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: MD

5035/8260B Volatile Organic Compounds / Methanol

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Toluene	**J 0.0576** (0.0720)	0.0183	8260B		1	07/10/15 17:04	CYG0117	CG51043
trans-1,2-Dichloroethene	ND (0.0720)	0.0236	8260B		1	07/10/15 17:04	CYG0117	CG51043
trans-1,3-Dichloropropene	ND (0.0720)	0.0222	8260B		1	07/10/15 17:04	CYG0117	CG51043
Trichloroethene	ND (0.0720)	0.0148	8260B		1	07/10/15 17:04	CYG0117	CG51043
Trichlorofluoromethane	ND (0.0720)	0.0190	8260B		1	07/10/15 17:04	CYG0117	CG51043
Vinyl Acetate	ND (0.360)	0.0148	8260B		1	07/10/15 17:04	CYG0117	CG51043
Vinyl Chloride	ND (0.0720)	0.0238	8260B		1	07/10/15 17:04	CYG0117	CG51043
Xylene O	**0.233** (0.0720)	0.0138	8260B		1	07/10/15 17:04	CYG0117	CG51043
Xylene P,M	**1.20** (0.144)	0.0279	8260B		1	07/10/15 17:04	CYG0117	CG51043
Xylenes (Total)	**1.43** (0.144)		8260B		1	07/10/15 17:04		[CALC]

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichloroethane-d4	*94 %*		*70-130*
Surrogate: 4-Bromofluorobenzene	*95 %*		*70-130*
Surrogate: Dibromofluoromethane	*99 %*		*70-130*
Surrogate: Toluene-d8	*90 %*		*70-130*

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring
Client Sample ID: TP-201
Date Sampled: 07/09/15 12:50
Percent Solids: 80
Initial Volume: 19.5
Final Volume: 1
Extraction Method: 3546

ESS Laboratory Work Order: 1507217
ESS Laboratory Sample ID: 1507217-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: DPS
Prepared: 7/10/15 13:44

8100M Total Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Total Petroleum Hydrocarbons	ND (47.8)		8100M		1	07/10/15 20:36	CYG0120	CG51027

	%Recovery	Qualifier	Limits
Surrogate: O-Terphenyl	*77 %*		*40-140*

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring
Client Sample ID: TP-201
Date Sampled: 07/09/15 12:50
Percent Solids: 80
Initial Volume: 15
Final Volume: 0.5
Extraction Method: 3546

ESS Laboratory Work Order: 1507217
ESS Laboratory Sample ID: 1507217-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: IBM
Prepared: 7/10/15 15:47

8270D Polynuclear Aromatic Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
2-Methylnaphthalene	ND (0.414)		8270D		1	07/11/15 4:42	CYG0123	CG51029
Acenaphthene	ND (0.414)		8270D		1	07/11/15 4:42	CYG0123	CG51029
Acenaphthylene	ND (0.414)		8270D		1	07/11/15 4:42	CYG0123	CG51029
Anthracene	ND (0.414)		8270D		1	07/11/15 4:42	CYG0123	CG51029
Benzo(a)anthracene	ND (0.414)		8270D		1	07/11/15 4:42	CYG0123	CG51029
Benzo(a)pyrene	ND (0.208)		8270D		1	07/11/15 4:42	CYG0123	CG51029
Benzo(b)fluoranthene	ND (0.414)		8270D		1	07/11/15 4:42	CYG0123	CG51029
Benzo(g,h,i)perylene	ND (0.414)		8270D		1	07/11/15 4:42	CYG0123	CG51029
Benzo(k)fluoranthene	ND (0.414)		8270D		1	07/11/15 4:42	CYG0123	CG51029
Chrysene	ND (0.208)		8270D		1	07/11/15 4:42	CYG0123	CG51029
Dibenzo(a,h)Anthracene	ND (0.208)		8270D		1	07/11/15 4:42	CYG0123	CG51029
Fluoranthene	ND (0.414)		8270D		1	07/11/15 4:42	CYG0123	CG51029
Fluorene	ND (0.414)		8270D		1	07/11/15 4:42	CYG0123	CG51029
Indeno(1,2,3-cd)Pyrene	ND (0.414)		8270D		1	07/11/15 4:42	CYG0123	CG51029
Naphthalene	ND (0.414)		8270D		1	07/11/15 4:42	CYG0123	CG51029
Phenanthrene	ND (0.414)		8270D		1	07/11/15 4:42	CYG0123	CG51029
Pyrene	ND (0.414)		8270D		1	07/11/15 4:42	CYG0123	CG51029

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichlorobenzene-d4	*86 %*		*30-130*
Surrogate: 2-Fluorobiphenyl	*85 %*		*30-130*
Surrogate: Nitrobenzene-d5	*84 %*		*30-130*
Surrogate: p-Terphenyl-d14	*85 %*		*30-130*

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring
Client Sample ID: TP-201
Date Sampled: 07/09/15 12:50
Percent Solids: 80
Initial Volume: 15.6
Final Volume: 15
Extraction Method: 5035

ESS Laboratory Work Order: 1507217
ESS Laboratory Sample ID: 1507217-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: MD
Prepared: 7/10/15 8:00

Volatile Organics Tentatively Identified Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
dimethoxy benzene	**1** (N/A)		8260B		1	07/10/15 17:04		CG51043
ethyl-methyl-benzene isomer	**1** (N/A)		8260B		1	07/10/15 17:04		CG51043
methyl-(methylethyl)-benzene i	**1** (N/A)		8260B		1	07/10/15 17:04		CG51043
tetramethyl-benzene isomer	**0.4** (N/A)		8260B		1	07/10/15 17:04		CG51043

A forward library search of the NBS Mass Spectral Library was performed on this sample using the McLafferty Probability Base Matching (PBM) Algorithm. An estimated concentration of non-TCL compounds tentatively identified is quantified by the internal standard method. The nearest internal standard free of interferences was used to quantify. A response factor of one was assumed. This search was inclusive of the ten largest peaks greater than ten percent of the nearest internal standard.

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring
Client Sample ID: TP-202
Date Sampled: 07/09/15 13:00
Percent Solids: 79
Initial Volume: 17.1
Final Volume: 15
Extraction Method: 5035

ESS Laboratory Work Order: 1507217
ESS Laboratory Sample ID: 1507217-02
Sample Matrix: Soil
Units: mg/kg dry
Analyst: MD

5035/8260B Volatile Organic Compounds / Methanol

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
1,1,1,2-Tetrachloroethane	ND (0.137)	0.0119	8260B		1	07/10/15 17:32	CYG0117	CG51043
1,1,1-Trichloroethane	ND (0.0683)	0.0120	8260B		1	07/10/15 17:32	CYG0117	CG51043
1,1,2,2-Tetrachloroethane	ND (0.0683)	0.0186	8260B		1	07/10/15 17:32	CYG0117	CG51043
1,1,2-Trichloroethane	ND (0.0683)	0.0171	8260B		1	07/10/15 17:32	CYG0117	CG51043
1,1-Dichloroethane	ND (0.0683)	0.0109	8260B		1	07/10/15 17:32	CYG0117	CG51043
1,1-Dichloroethene	ND (0.0683)	0.0168	8260B		1	07/10/15 17:32	CYG0117	CG51043
1,1-Dichloropropene	ND (0.0683)	0.0105	8260B		1	07/10/15 17:32	CYG0117	CG51043
1,2,3-Trichlorobenzene	ND (0.0683)	0.0228	8260B		1	07/10/15 17:32	CYG0117	CG51043
1,2,3-Trichloropropane	ND (0.0683)	0.0169	8260B		1	07/10/15 17:32	CYG0117	CG51043
1,2,4-Trichlorobenzene	ND (0.0683)	0.0150	8260B		1	07/10/15 17:32	CYG0117	CG51043
1,2,4-Trimethylbenzene	**1.05** (0.0683)	0.0131	8260B		1	07/10/15 17:32	CYG0117	CG51043
1,2-Dibromo-3-Chloropropane	ND (0.410)	0.137	8260B		1	07/10/15 17:32	CYG0117	CG51043
1,2-Dibromoethane	ND (0.0683)	0.0174	8260B		1	07/10/15 17:32	CYG0117	CG51043
1,2-Dichlorobenzene	ND (0.0683)	0.0097	8260B		1	07/10/15 17:32	CYG0117	CG51043
1,2-Dichloroethane	ND (0.0683)	0.0183	8260B		1	07/10/15 17:32	CYG0117	CG51043
1,2-Dichloropropane	ND (0.0683)	0.0179	8260B		1	07/10/15 17:32	CYG0117	CG51043
1,3,5-Trimethylbenzene	**5.15** (0.0683)	0.0120	8260B		1	07/10/15 17:32	CYG0117	CG51043
1,3-Dichlorobenzene	ND (0.0683)	0.0086	8260B		1	07/10/15 17:32	CYG0117	CG51043
1,3-Dichloropropane	ND (0.0683)	0.0153	8260B		1	07/10/15 17:32	CYG0117	CG51043
1,4-Dichlorobenzene	ND (0.0683)	0.0182	8260B		1	07/10/15 17:32	CYG0117	CG51043
1,4-Dioxane - Screen	ND (6.83)	2.28	8260B		1	07/10/15 17:32	CYG0117	CG51043
1-Chlorohexane	ND (0.0683)	0.0130	8260B		1	07/10/15 17:32	CYG0117	CG51043
2,2-Dichloropropane	ND (0.137)	0.0234	8260B		1	07/10/15 17:32	CYG0117	CG51043
2-Butanone	ND (1.71)	0.395	8260B		1	07/10/15 17:32	CYG0117	CG51043
2-Chlorotoluene	ND (0.0683)	0.0193	8260B		1	07/10/15 17:32	CYG0117	CG51043
2-Hexanone	ND (0.683)	0.118	8260B		1	07/10/15 17:32	CYG0117	CG51043
4-Chlorotoluene	ND (0.0683)	0.0089	8260B		1	07/10/15 17:32	CYG0117	CG51043
4-Isopropyltoluene	**0.0792** (0.0683)	0.0122	8260B		1	07/10/15 17:32	CYG0117	CG51043
4-Methyl-2-Pentanone	ND (0.683)	0.0823	8260B		1	07/10/15 17:32	CYG0117	CG51043
Acetone	ND (1.71)	0.506	8260B		1	07/10/15 17:32	CYG0117	CG51043
Benzene	**J 0.0615** (0.0683)	0.0111	8260B		1	07/10/15 17:32	CYG0117	CG51043
Bromobenzene	ND (0.0683)	0.0187	8260B		1	07/10/15 17:32	CYG0117	CG51043

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring
Client Sample ID: TP-202
Date Sampled: 07/09/15 13:00
Percent Solids: 79
Initial Volume: 17.1
Final Volume: 15
Extraction Method: 5035

ESS Laboratory Work Order: 1507217
ESS Laboratory Sample ID: 1507217-02
Sample Matrix: Soil
Units: mg/kg dry
Analyst: MD

5035/8260B Volatile Organic Compounds / Methanol

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Bromochloromethane	ND (0.0683)	0.0221	8260B		1	07/10/15 17:32	CYG0117	CG51043
Bromodichloromethane	ND (0.0683)	0.0094	8260B		1	07/10/15 17:32	CYG0117	CG51043
Bromoform	ND (0.0683)	0.0197	8260B		1	07/10/15 17:32	CYG0117	CG51043
Bromomethane	ND (0.137)	0.0456	8260B		1	07/10/15 17:32	CYG0117	CG51043
Carbon Disulfide	ND (0.0683)	0.0101	8260B		1	07/10/15 17:32	CYG0117	CG51043
Carbon Tetrachloride	ND (0.0683)	0.0119	8260B		1	07/10/15 17:32	CYG0117	CG51043
Chlorobenzene	ND (0.0683)	0.0108	8260B		1	07/10/15 17:32	CYG0117	CG51043
Chloroethane	ND (0.137)	0.0455	8260B		1	07/10/15 17:32	CYG0117	CG51043
Chloroform	ND (0.0683)	0.0141	8260B		1	07/10/15 17:32	CYG0117	CG51043
Chloromethane	ND (0.137)	0.0174	8260B		1	07/10/15 17:32	CYG0117	CG51043
cis-1,2-Dichloroethene	ND (0.0683)	0.0169	8260B		1	07/10/15 17:32	CYG0117	CG51043
cis-1,3-Dichloropropene	ND (0.0683)	0.0154	8260B		1	07/10/15 17:32	CYG0117	CG51043
Dibromochloromethane	ND (0.0683)	0.0172	8260B		1	07/10/15 17:32	CYG0117	CG51043
Dibromomethane	ND (0.0683)	0.0216	8260B		1	07/10/15 17:32	CYG0117	CG51043
Dichlorodifluoromethane	ND (0.0683)	0.0119	8260B		1	07/10/15 17:32	CYG0117	CG51043
Diethyl Ether	ND (0.0683)	0.0174	8260B		1	07/10/15 17:32	CYG0117	CG51043
Di-isopropyl ether	ND (0.0683)	0.0128	8260B		1	07/10/15 17:32	CYG0117	CG51043
Ethyl tertiary-butyl ether	ND (0.0683)	0.0172	8260B		1	07/10/15 17:32	CYG0117	CG51043
Ethylbenzene	**0.105** (0.0683)	0.0089	8260B		1	07/10/15 17:32	CYG0117	CG51043
Hexachlorobutadiene	ND (0.0683)	0.0228	8260B		1	07/10/15 17:32	CYG0117	CG51043
Isopropylbenzene	**0.0724** (0.0683)	0.0120	8260B		1	07/10/15 17:32	CYG0117	CG51043
Methyl tert-Butyl Ether	ND (0.0683)	0.0109	8260B		1	07/10/15 17:32	CYG0117	CG51043
Methylene Chloride	ND (0.342)	0.0179	8260B		1	07/10/15 17:32	CYG0117	CG51043
Naphthalene	**0.0861** (0.0683)	0.0179	8260B		1	07/10/15 17:32	CYG0117	CG51043
n-Butylbenzene	ND (0.0683)	0.0168	8260B		1	07/10/15 17:32	CYG0117	CG51043
n-Propylbenzene	**0.0779** (0.0683)	0.0167	8260B		1	07/10/15 17:32	CYG0117	CG51043
sec-Butylbenzene	ND (0.0683)	0.0092	8260B		1	07/10/15 17:32	CYG0117	CG51043
Styrene	ND (0.0683)	0.0090	8260B		1	07/10/15 17:32	CYG0117	CG51043
tert-Butylbenzene	ND (0.0683)	0.0160	8260B		1	07/10/15 17:32	CYG0117	CG51043
Tertiary-amyl methyl ether	ND (0.0683)	0.0098	8260B		1	07/10/15 17:32	CYG0117	CG51043
Tetrachloroethene	ND (0.0683)	0.0228	8260B		1	07/10/15 17:32	CYG0117	CG51043
Tetrahydrofuran	ND (0.683)	0.176	8260B		1	07/10/15 17:32	CYG0117	CG51043

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring
Client Sample ID: TP-202
Date Sampled: 07/09/15 13:00
Percent Solids: 79
Initial Volume: 17.1
Final Volume: 15
Extraction Method: 5035

ESS Laboratory Work Order: 1507217
ESS Laboratory Sample ID: 1507217-02
Sample Matrix: Soil
Units: mg/kg dry
Analyst: MD

5035/8260B Volatile Organic Compounds / Methanol

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Toluene	**J 0.0588** (0.0683)	0.0174	8260B		1	07/10/15 17:32	CYG0117	CG51043
trans-1,2-Dichloroethene	ND (0.0683)	0.0224	8260B		1	07/10/15 17:32	CYG0117	CG51043
trans-1,3-Dichloropropene	ND (0.0683)	0.0210	8260B		1	07/10/15 17:32	CYG0117	CG51043
Trichloroethene	ND (0.0683)	0.0141	8260B		1	07/10/15 17:32	CYG0117	CG51043
Trichlorofluoromethane	ND (0.0683)	0.0180	8260B		1	07/10/15 17:32	CYG0117	CG51043
Vinyl Acetate	ND (0.342)	0.0141	8260B		1	07/10/15 17:32	CYG0117	CG51043
Vinyl Chloride	ND (0.0683)	0.0225	8260B		1	07/10/15 17:32	CYG0117	CG51043
Xylene O	**0.220** (0.0683)	0.0131	8260B		1	07/10/15 17:32	CYG0117	CG51043
Xylene P,M	**1.16** (0.137)	0.0265	8260B		1	07/10/15 17:32	CYG0117	CG51043
Xylenes (Total)	**1.38** (0.137)		8260B		1	07/10/15 17:32		[CALC]

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichloroethane-d4	*101 %*		*70-130*
Surrogate: 4-Bromofluorobenzene	*96 %*		*70-130*
Surrogate: Dibromofluoromethane	*107 %*		*70-130*
Surrogate: Toluene-d8	*94 %*		*70-130*

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring
Client Sample ID: TP-202
Date Sampled: 07/09/15 13:00
Percent Solids: 79
Initial Volume: 19.8
Final Volume: 1
Extraction Method: 3546

ESS Laboratory Work Order: 1507217
ESS Laboratory Sample ID: 1507217-02
Sample Matrix: Soil
Units: mg/kg dry
Analyst: DPS
Prepared: 7/10/15 13:44

8100M Total Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Total Petroleum Hydrocarbons	**240** (47.7)		8100M		1	07/10/15 21:15	CYG0120	CG51027

	%Recovery	Qualifier	Limits
Surrogate: O-Terphenyl	*92 %*		*40-140*

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring
Client Sample ID: TP-202
Date Sampled: 07/09/15 13:00
Percent Solids: 79
Initial Volume: 14.4
Final Volume: 0.5
Extraction Method: 3546

ESS Laboratory Work Order: 1507217
ESS Laboratory Sample ID: 1507217-02
Sample Matrix: Soil
Units: mg/kg dry
Analyst: IBM
Prepared: 7/10/15 15:47

8270D Polynuclear Aromatic Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
2-Methylnaphthalene	ND (0.437)		8270D		1	07/11/15 5:17	CYG0123	CG51029
Acenaphthene	ND (0.437)		8270D		1	07/11/15 5:17	CYG0123	CG51029
Acenaphthylene	ND (0.437)		8270D		1	07/11/15 5:17	CYG0123	CG51029
Anthracene	ND (0.437)		8270D		1	07/11/15 5:17	CYG0123	CG51029
Benzo(a)anthracene	ND (0.437)		8270D		1	07/11/15 5:17	CYG0123	CG51029
Benzo(a)pyrene	ND (0.219)		8270D		1	07/11/15 5:17	CYG0123	CG51029
Benzo(b)fluoranthene	ND (0.437)		8270D		1	07/11/15 5:17	CYG0123	CG51029
Benzo(g,h,i)perylene	ND (0.437)		8270D		1	07/11/15 5:17	CYG0123	CG51029
Benzo(k)fluoranthene	ND (0.437)		8270D		1	07/11/15 5:17	CYG0123	CG51029
Chrysene	ND (0.219)		8270D		1	07/11/15 5:17	CYG0123	CG51029
Dibenzo(a,h)Anthracene	ND (0.219)		8270D		1	07/11/15 5:17	CYG0123	CG51029
Fluoranthene	ND (0.437)		8270D		1	07/11/15 5:17	CYG0123	CG51029
Fluorene	ND (0.437)		8270D		1	07/11/15 5:17	CYG0123	CG51029
Indeno(1,2,3-cd)Pyrene	ND (0.437)		8270D		1	07/11/15 5:17	CYG0123	CG51029
Naphthalene	ND (0.437)		8270D		1	07/11/15 5:17	CYG0123	CG51029
Phenanthrene	ND (0.437)		8270D		1	07/11/15 5:17	CYG0123	CG51029
Pyrene	ND (0.437)		8270D		1	07/11/15 5:17	CYG0123	CG51029

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichlorobenzene-d4	*70 %*		*30-130*
Surrogate: 2-Fluorobiphenyl	*78 %*		*30-130*
Surrogate: Nitrobenzene-d5	*76 %*		*30-130*
Surrogate: p-Terphenyl-d14	*82 %*		*30-130*

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring
Client Sample ID: TP-202
Date Sampled: 07/09/15 13:00
Percent Solids: 79
Initial Volume: 17.1
Final Volume: 15
Extraction Method: 5035

ESS Laboratory Work Order: 1507217
ESS Laboratory Sample ID: 1507217-02
Sample Matrix: Soil
Units: mg/kg dry
Analyst: MD
Prepared: 7/10/15 8:00

Volatile Organics Tentatively Identified Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
dimethoxy benzene	**1** (N/A)		8260B		1	07/10/15 17:32		CG51043
ethyl-dimethyl-benzene isomer	**0.5** (N/A)		8260B		1	07/10/15 17:32		CG51043
ethyl-methyl-benzene isomer	**1** (N/A)		8260B		1	07/10/15 17:32		CG51043
methyl-(methylethyl)-benzene i	**1** (N/A)		8260B		1	07/10/15 17:32		CG51043

A forward library search of the NBS Mass Spectral Library was performed on this sample using the McLafferty Probability Base Matching (PBM) Algorithm. An estimated concentration of non-TCL compounds tentatively identified is quantified by the internal standard method. The nearest internal standard free of interferences was used to quantify. A response factor of one was assumed. This search was inclusive of the ten largest peaks greater than ten percent of the nearest internal standard.

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring
Client Sample ID: TP-203
Date Sampled: 07/09/15 09:00
Percent Solids: 78

ESS Laboratory Work Order: 1507217
ESS Laboratory Sample ID: 1507217-03
Sample Matrix: Soil
Units: mg/kg dry

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Arsenic	**3.17** (3.09)		6010C		1	KJK	07/10/15 21:55	2.08	100	CG51024
Barium	**34.6** (3.09)		6010C		1	KJK	07/10/15 21:55	2.08	100	CG51024
Cadmium	ND (0.62)		6010C		1	KJK	07/10/15 21:55	2.08	100	CG51024
Chromium	**6.38** (1.24)		6010C		1	KJK	07/10/15 21:55	2.08	100	CG51024
Lead	**47.7** (6.18)		6010C		1	KJK	07/10/15 21:55	2.08	100	CG51024
Mercury	**0.313** (0.039)		7471B		1	BJV	07/14/15 12:24	0.66	40	CG51023
Selenium	ND (6.18)		6010C		1	KJK	07/10/15 21:55	2.08	100	CG51024
Silver	ND (0.62)		6010C		1	KJK	07/10/15 21:55	2.08	100	CG51024

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring
Client Sample ID: TP-203
Date Sampled: 07/09/15 09:00
Percent Solids: 78
Initial Volume: 20.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1507217
ESS Laboratory Sample ID: 1507217-03
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TJ
Prepared: 7/10/15 18:20

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0627)		8082A		1	07/14/15 1:42		CG50917
Aroclor 1221	ND (0.0627)		8082A		1	07/14/15 1:42		CG50917
Aroclor 1232	ND (0.0627)		8082A		1	07/14/15 1:42		CG50917
Aroclor 1242	ND (0.0627)		8082A		1	07/14/15 1:42		CG50917
Aroclor 1248	ND (0.0627)		8082A		1	07/14/15 1:42		CG50917
Aroclor 1254	ND (0.0627)		8082A		1	07/14/15 1:42		CG50917
Aroclor 1260	ND (0.0627)		8082A		1	07/14/15 1:42		CG50917
Aroclor 1262	ND (0.0627)		8082A		1	07/14/15 1:42		CG50917
Aroclor 1268	ND (0.0627)		8082A		1	07/14/15 1:42		CG50917

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*94 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*103 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*96 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*94 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring
Client Sample ID: TP-203
Date Sampled: 07/09/15 09:00
Percent Solids: 78
Initial Volume: 19.5
Final Volume: 1
Extraction Method: 3546

ESS Laboratory Work Order: 1507217
ESS Laboratory Sample ID: 1507217-03
Sample Matrix: Soil
Units: mg/kg dry
Analyst: DPS
Prepared: 7/10/15 13:44

8100M Total Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Total Petroleum Hydrocarbons	**323** (49.5)		8100M		1	07/10/15 23:52	CYG0120	CG51027

	%Recovery	Qualifier	Limits
Surrogate: O-Terphenyl	*89 %*		*40-140*

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring
Client Sample ID: TP-204
Date Sampled: 07/09/15 09:20
Percent Solids: 82

ESS Laboratory Work Order: 1507217
ESS Laboratory Sample ID: 1507217-04
Sample Matrix: Soil
Units: mg/kg dry

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Arsenic	**34.5** (2.59)		6010C		1	KJK	07/10/15 21:59	2.36	100	CG51024
Barium	**33.4** (2.59)		6010C		1	KJK	07/10/15 21:59	2.36	100	CG51024
Cadmium	**0.56** (0.52)		6010C		1	KJK	07/10/15 21:59	2.36	100	CG51024
Chromium	**6.51** (1.04)		6010C		1	KJK	07/10/15 21:59	2.36	100	CG51024
Lead	**38.7** (5.18)		6010C		1	KJK	07/10/15 21:59	2.36	100	CG51024
Mercury	**0.473** (0.034)		7471B		1	BJV	07/14/15 12:29	0.72	40	CG51023
Selenium	ND (5.18)		6010C		1	KJK	07/10/15 21:59	2.36	100	CG51024
Silver	ND (0.52)		6010C		1	KJK	07/10/15 21:59	2.36	100	CG51024

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring
Client Sample ID: TP-204
Date Sampled: 07/09/15 09:20
Percent Solids: 82
Initial Volume: 19.9
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1507217
ESS Laboratory Sample ID: 1507217-04
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TJ
Prepared: 7/10/15 18:20

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0614)		8082A		1	07/14/15 2:01		CG50917
Aroclor 1221	ND (0.0614)		8082A		1	07/14/15 2:01		CG50917
Aroclor 1232	ND (0.0614)		8082A		1	07/14/15 2:01		CG50917
Aroclor 1242	ND (0.0614)		8082A		1	07/14/15 2:01		CG50917
Aroclor 1248	ND (0.0614)		8082A		1	07/14/15 2:01		CG50917
Aroclor 1254	ND (0.0614)		8082A		1	07/14/15 2:01		CG50917
Aroclor 1260	ND (0.0614)		8082A		1	07/14/15 2:01		CG50917
Aroclor 1262	ND (0.0614)		8082A		1	07/14/15 2:01		CG50917
Aroclor 1268	ND (0.0614)		8082A		1	07/14/15 2:01		CG50917

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*108 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*120 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*111 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*107 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring
Client Sample ID: TP-204
Date Sampled: 07/09/15 09:20
Percent Solids: 82
Initial Volume: 20
Final Volume: 1
Extraction Method: 3546

ESS Laboratory Work Order: 1507217
ESS Laboratory Sample ID: 1507217-04
Sample Matrix: Soil
Units: mg/kg dry
Analyst: DPS
Prepared: 7/10/15 13:44

8100M Total Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Total Petroleum Hydrocarbons	**153** (45.8)		8100M		1	07/11/15 0:30	CYG0120	CG51027

	%Recovery	Qualifier	Limits
Surrogate: O-Terphenyl	*90 %*		*40-140*

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring
Client Sample ID: TP-205
Date Sampled: 07/09/15 11:45
Percent Solids: 86

ESS Laboratory Work Order: 1507217
ESS Laboratory Sample ID: 1507217-05
Sample Matrix: Soil
Units: mg/kg dry

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Arsenic	ND (2.53)		6010C		1	KJK	07/10/15 22:03	2.29	100	CG51024
Barium	**5.06** (2.53)		6010C		1	KJK	07/10/15 22:03	2.29	100	CG51024
Cadmium	ND (0.51)		6010C		1	KJK	07/10/15 22:03	2.29	100	CG51024
Chromium	**7.61** (1.01)		6010C		1	KJK	07/10/15 22:03	2.29	100	CG51024
Lead	ND (5.06)		6010C		1	KJK	07/10/15 22:03	2.29	100	CG51024
Mercury	ND (0.038)		7471B		1	BJV	07/14/15 12:30	0.6	40	CG51023
Selenium	ND (5.06)		6010C		1	KJK	07/10/15 22:03	2.29	100	CG51024
Silver	ND (0.51)		6010C		1	KJK	07/10/15 22:03	2.29	100	CG51024

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring
Client Sample ID: TP-205
Date Sampled: 07/09/15 11:45
Percent Solids: 86
Initial Volume: 19.7
Final Volume: 1
Extraction Method: 3546

ESS Laboratory Work Order: 1507217
ESS Laboratory Sample ID: 1507217-05
Sample Matrix: Soil
Units: mg/kg dry
Analyst: DPS
Prepared: 7/10/15 13:44

8100M Total Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Total Petroleum Hydrocarbons	**217** (44.2)		8100M		1	07/10/15 21:54	CYG0120	CG51027

	%Recovery	Qualifier	Limits
Surrogate: O-Terphenyl	*103 %*		*40-140*

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring
Client Sample ID: TP-205
Date Sampled: 07/09/15 11:45
Percent Solids: 86
Initial Volume: 14.9
Final Volume: 0.5
Extraction Method: 3546

ESS Laboratory Work Order: 1507217
ESS Laboratory Sample ID: 1507217-05
Sample Matrix: Soil
Units: mg/kg dry
Analyst: IBM
Prepared: 7/10/15 13:44

8270D Polynuclear Aromatic Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
2-Methylnaphthalene	ND (0.389)		8270D		1	07/11/15 2:56	CYG0123	CG51029
Acenaphthene	ND (0.389)		8270D		1	07/11/15 2:56	CYG0123	CG51029
Acenaphthylene	ND (0.389)		8270D		1	07/11/15 2:56	CYG0123	CG51029
Anthracene	ND (0.389)		8270D		1	07/11/15 2:56	CYG0123	CG51029
Benzo(a)anthracene	ND (0.389)		8270D		1	07/11/15 2:56	CYG0123	CG51029
Benzo(a)pyrene	ND (0.195)		8270D		1	07/11/15 2:56	CYG0123	CG51029
Benzo(b)fluoranthene	ND (0.389)		8270D		1	07/11/15 2:56	CYG0123	CG51029
Benzo(g,h,i)perylene	ND (0.389)		8270D		1	07/11/15 2:56	CYG0123	CG51029
Benzo(k)fluoranthene	ND (0.389)		8270D		1	07/11/15 2:56	CYG0123	CG51029
Chrysene	ND (0.195)		8270D		1	07/11/15 2:56	CYG0123	CG51029
Dibenzo(a,h)Anthracene	ND (0.195)		8270D		1	07/11/15 2:56	CYG0123	CG51029
Fluoranthene	ND (0.389)		8270D		1	07/11/15 2:56	CYG0123	CG51029
Fluorene	ND (0.389)		8270D		1	07/11/15 2:56	CYG0123	CG51029
Indeno(1,2,3-cd)Pyrene	ND (0.389)		8270D		1	07/11/15 2:56	CYG0123	CG51029
Naphthalene	ND (0.389)		8270D		1	07/11/15 2:56	CYG0123	CG51029
Phenanthrene	ND (0.389)		8270D		1	07/11/15 2:56	CYG0123	CG51029
Pyrene	ND (0.389)		8270D		1	07/11/15 2:56	CYG0123	CG51029

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichlorobenzene-d4	*98 %*		*30-130*
Surrogate: 2-Fluorobiphenyl	*98 %*		*30-130*
Surrogate: Nitrobenzene-d5	*115 %*		*30-130*
Surrogate: p-Terphenyl-d14	*91 %*		*30-130*

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring
Client Sample ID: TP-206
Date Sampled: 07/09/15 12:00
Percent Solids: 92

ESS Laboratory Work Order: 1507217
ESS Laboratory Sample ID: 1507217-06
Sample Matrix: Soil
Units: mg/kg dry

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Arsenic	ND (2.35)		6010C		1	KJK	07/10/15 22:20	2.32	100	CG51024
Barium	**7.90** (2.35)		6010C		1	KJK	07/10/15 22:20	2.32	100	CG51024
Cadmium	ND (0.47)		6010C		1	KJK	07/10/15 22:20	2.32	100	CG51024
Chromium	**4.65** (0.94)		6010C		1	KJK	07/10/15 22:20	2.32	100	CG51024
Lead	ND (4.70)		6010C		1	KJK	07/10/15 22:20	2.32	100	CG51024
Mercury	ND (0.034)		7471B		1	BJV	07/14/15 12:32	0.63	40	CG51023
Selenium	ND (4.70)		6010C		1	KJK	07/10/15 22:20	2.32	100	CG51024
Silver	ND (0.47)		6010C		1	KJK	07/10/15 22:20	2.32	100	CG51024

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring
Client Sample ID: TP-206
Date Sampled: 07/09/15 12:00
Percent Solids: 92
Initial Volume: 19.2
Final Volume: 1
Extraction Method: 3546

ESS Laboratory Work Order: 1507217
ESS Laboratory Sample ID: 1507217-06
Sample Matrix: Soil
Units: mg/kg dry
Analyst: DPS
Prepared: 7/10/15 13:44

8100M Total Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Total Petroleum Hydrocarbons	ND (42.6)		8100M		1	07/10/15 22:33	CYG0120	CG51027

	%Recovery	Qualifier	Limits
Surrogate: O-Terphenyl	*91 %*		*40-140*

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring
Client Sample ID: TP-206
Date Sampled: 07/09/15 12:00
Percent Solids: 92
Initial Volume: 14.6
Final Volume: 0.5
Extraction Method: 3546

ESS Laboratory Work Order: 1507217
ESS Laboratory Sample ID: 1507217-06
Sample Matrix: Soil
Units: mg/kg dry
Analyst: IBM
Prepared: 7/10/15 13:44

8270D Polynuclear Aromatic Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
2-Methylnaphthalene	ND (0.373)		8270D		1	07/11/15 3:32	CYG0123	CG51029
Acenaphthene	ND (0.373)		8270D		1	07/11/15 3:32	CYG0123	CG51029
Acenaphthylene	ND (0.373)		8270D		1	07/11/15 3:32	CYG0123	CG51029
Anthracene	ND (0.373)		8270D		1	07/11/15 3:32	CYG0123	CG51029
Benzo(a)anthracene	ND (0.373)		8270D		1	07/11/15 3:32	CYG0123	CG51029
Benzo(a)pyrene	ND (0.187)		8270D		1	07/11/15 3:32	CYG0123	CG51029
Benzo(b)fluoranthene	ND (0.373)		8270D		1	07/11/15 3:32	CYG0123	CG51029
Benzo(g,h,i)perylene	ND (0.373)		8270D		1	07/11/15 3:32	CYG0123	CG51029
Benzo(k)fluoranthene	ND (0.373)		8270D		1	07/11/15 3:32	CYG0123	CG51029
Chrysene	ND (0.187)		8270D		1	07/11/15 3:32	CYG0123	CG51029
Dibenzo(a,h)Anthracene	ND (0.187)		8270D		1	07/11/15 3:32	CYG0123	CG51029
Fluoranthene	ND (0.373)		8270D		1	07/11/15 3:32	CYG0123	CG51029
Fluorene	ND (0.373)		8270D		1	07/11/15 3:32	CYG0123	CG51029
Indeno(1,2,3-cd)Pyrene	ND (0.373)		8270D		1	07/11/15 3:32	CYG0123	CG51029
Naphthalene	ND (0.373)		8270D		1	07/11/15 3:32	CYG0123	CG51029
Phenanthrene	ND (0.373)		8270D		1	07/11/15 3:32	CYG0123	CG51029
Pyrene	ND (0.373)		8270D		1	07/11/15 3:32	CYG0123	CG51029

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichlorobenzene-d4	*83 %*		*30-130*
Surrogate: 2-Fluorobiphenyl	*80 %*		*30-130*
Surrogate: Nitrobenzene-d5	*76 %*		*30-130*
Surrogate: p-Terphenyl-d14	*85 %*		*30-130*

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring

ESS Laboratory Work Order: 1507217

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Total Metals										
Batch CG51023 - 7471A										
Blank										
Mercury	ND	0.033	mg/kg wet							
LCS										
Mercury	23.3	3.60	mg/kg wet	24.90		93	80-120			
LCS Dup										
Mercury	23.9	3.81	mg/kg wet	24.90		96	80-120	3	20	
Batch CG51024 - 3050B										
Blank										
Arsenic	ND	2.50	mg/kg wet							
Barium	ND	2.50	mg/kg wet							
Cadmium	ND	0.50	mg/kg wet							
Chromium	ND	1.00	mg/kg wet							
Lead	ND	5.00	mg/kg wet							
Selenium	ND	5.00	mg/kg wet							
Silver	ND	0.50	mg/kg wet							
LCS										
Arsenic	125	8.62	mg/kg wet	133.0		94	80-120			
Barium	208	8.62	mg/kg wet	229.0		91	80-120			
Cadmium	107	1.72	mg/kg wet	123.0		87	80-120			
Chromium	57.5	3.45	mg/kg wet	63.20		91	80-120			
Lead	101	17.2	mg/kg wet	108.0		93	80-120			
Selenium	68.6	17.2	mg/kg wet	81.40		84	80-120			
Silver	73.5	1.72	mg/kg wet	74.80		98	80-120			
LCS Dup										
Arsenic	131	9.09	mg/kg wet	133.0		98	80-120	4	20	
Barium	217	9.09	mg/kg wet	229.0		95	80-120	4	20	
Cadmium	109	1.82	mg/kg wet	123.0		88	80-120	2	20	
Chromium	58.7	3.64	mg/kg wet	63.20		93	80-120	2	20	
Lead	103	18.2	mg/kg wet	108.0		95	80-120	2	20	
Selenium	73.9	18.2	mg/kg wet	81.40		91	80-120	7	20	
Silver	75.0	1.82	mg/kg wet	74.80		100	80-120	2	20	
5035/8260B Volatile Organic Compounds / Methanol										
Batch CG51043 - 5035										
Blank										
1,1,1,2-Tetrachloroethane	ND	0.100	mg/kg wet							
1,1,1-Trichloroethane	ND	0.0500	mg/kg wet							
1,1,2,2-Tetrachloroethane	ND	0.0500	mg/kg wet							
1,1,2-Trichloroethane	ND	0.0500	mg/kg wet							
1,1-Dichloroethane	ND	0.0500	mg/kg wet							
1,1-Dichloroethene	ND	0.0500	mg/kg wet							
1,1-Dichloropropene	ND	0.0500	mg/kg wet							
1,2,3-Trichlorobenzene	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring

ESS Laboratory Work Order: 1507217

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
5035/8260B Volatile Organic Compounds / Methanol										
Batch CG51043 - 5035										
1,2,3-Trichloropropane	ND	0.0500	mg/kg wet							
1,2,4-Trichlorobenzene	ND	0.0500	mg/kg wet							
1,2,4-Trimethylbenzene	ND	0.0500	mg/kg wet							
1,2-Dibromo-3-Chloropropane	ND	0.300	mg/kg wet							
1,2-Dibromoethane	ND	0.0500	mg/kg wet							
1,2-Dichlorobenzene	ND	0.0500	mg/kg wet							
1,2-Dichloroethane	ND	0.0500	mg/kg wet							
1,2-Dichloropropane	ND	0.0500	mg/kg wet							
1,3,5-Trimethylbenzene	ND	0.0500	mg/kg wet							
1,3-Dichlorobenzene	ND	0.0500	mg/kg wet							
1,3-Dichloropropane	ND	0.0500	mg/kg wet							
1,4-Dichlorobenzene	ND	0.0500	mg/kg wet							
1,4-Dioxane - Screen	ND	5.00	mg/kg wet							
1-Chlorohexane	ND	0.0500	mg/kg wet							
2,2-Dichloropropane	ND	0.100	mg/kg wet							
2-Butanone	ND	1.25	mg/kg wet							
2-Chlorotoluene	ND	0.0500	mg/kg wet							
2-Hexanone	ND	0.500	mg/kg wet							
4-Chlorotoluene	ND	0.0500	mg/kg wet							
4-Isopropyltoluene	ND	0.0500	mg/kg wet							
4-Methyl-2-Pentanone	ND	0.500	mg/kg wet							
Acetone	ND	1.25	mg/kg wet							
Benzene	ND	0.0500	mg/kg wet							
Bromobenzene	ND	0.0500	mg/kg wet							
Bromochloromethane	ND	0.0500	mg/kg wet							
Bromodichloromethane	ND	0.0500	mg/kg wet							
Bromoform	ND	0.0500	mg/kg wet							
Bromomethane	ND	0.100	mg/kg wet							
Carbon Disulfide	ND	0.0500	mg/kg wet							
Carbon Tetrachloride	ND	0.0500	mg/kg wet							
Chlorobenzene	ND	0.0500	mg/kg wet							
Chloroethane	ND	0.100	mg/kg wet							
Chloroform	ND	0.0500	mg/kg wet							
Chloromethane	ND	0.100	mg/kg wet							
cis-1,2-Dichloroethene	ND	0.0500	mg/kg wet							
cis-1,3-Dichloropropene	ND	0.0500	mg/kg wet							
Dibromochloromethane	ND	0.0500	mg/kg wet							
Dibromomethane	ND	0.0500	mg/kg wet							
Dichlorodifluoromethane	ND	0.0500	mg/kg wet							
Diethyl Ether	ND	0.0500	mg/kg wet							
Di-isopropyl ether	ND	0.0500	mg/kg wet							
Ethyl tertiary-butyl ether	ND	0.0500	mg/kg wet							
Ethylbenzene	ND	0.0500	mg/kg wet							
Hexachlorobutadiene	ND	0.0500	mg/kg wet							
Isopropylbenzene	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring

ESS Laboratory Work Order: 1507217

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
5035/8260B Volatile Organic Compounds / Methanol										
Batch CG51043 - 5035										
Methyl tert-Butyl Ether	ND	0.0500	mg/kg wet							
Methylene Chloride	ND	0.250	mg/kg wet							
Naphthalene	ND	0.0500	mg/kg wet							
n-Butylbenzene	ND	0.0500	mg/kg wet							
n-Propylbenzene	ND	0.0500	mg/kg wet							
sec-Butylbenzene	ND	0.0500	mg/kg wet							
Styrene	ND	0.0500	mg/kg wet							
tert-Butylbenzene	ND	0.0500	mg/kg wet							
Tertiary-amyl methyl ether	ND	0.0500	mg/kg wet							
Tetrachloroethene	ND	0.0500	mg/kg wet							
Tetrahydrofuran	ND	0.500	mg/kg wet							
Toluene	ND	0.0500	mg/kg wet							
trans-1,2-Dichloroethene	ND	0.0500	mg/kg wet							
trans-1,3-Dichloropropene	ND	0.0500	mg/kg wet							
Trichloroethene	ND	0.0500	mg/kg wet							
Vinyl Acetate	ND	0.250	mg/kg wet							
Vinyl Chloride	ND	0.0500	mg/kg wet							
Xylene O	ND	0.0500	mg/kg wet							
Xylene P,M	ND	0.100	mg/kg wet							
Xylenes (Total)	ND	0.100	mg/kg wet							
Surrogate: 1,2-Dichloroethane-d4	*2.42*		mg/kg wet	*2.500*		*97*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*2.37*		mg/kg wet	*2.500*		*95*	*70-130*			
Surrogate: Dibromofluoromethane	*2.58*		mg/kg wet	*2.500*		*103*	*70-130*			
Surrogate: Toluene-d8	*2.22*		mg/kg wet	*2.500*		*89*	*70-130*			
LCS										
1,1,1,2-Tetrachloroethane	2.50	0.100	mg/kg wet	2.500		100	70-130			
1,1,1-Trichloroethane	2.40	0.0500	mg/kg wet	2.500		96	70-130			
1,1,2,2-Tetrachloroethane	2.19	0.0500	mg/kg wet	2.500		87	70-130			
1,1,2-Trichloroethane	2.17	0.0500	mg/kg wet	2.500		87	70-130			
1,1-Dichloroethane	2.30	0.0500	mg/kg wet	2.500		92	70-130			
1,1-Dichloroethene	2.29	0.0500	mg/kg wet	2.500		92	70-130			
1,1-Dichloropropene	2.38	0.0500	mg/kg wet	2.500		95	70-130			
1,2,3-Trichlorobenzene	2.37	0.0500	mg/kg wet	2.500		95	70-130			
1,2,3-Trichloropropane	2.42	0.0500	mg/kg wet	2.500		97	70-130			
1,2,4-Trichlorobenzene	2.54	0.0500	mg/kg wet	2.500		102	70-130			
1,2,4-Trimethylbenzene	2.21	0.0500	mg/kg wet	2.500		88	70-130			
1,2-Dibromo-3-Chloropropane	2.21	0.300	mg/kg wet	2.500		88	70-130			
1,2-Dibromoethane	2.30	0.0500	mg/kg wet	2.500		92	70-130			
1,2-Dichlorobenzene	2.32	0.0500	mg/kg wet	2.500		93	70-130			
1,2-Dichloroethane	2.46	0.0500	mg/kg wet	2.500		98	70-130			
1,2-Dichloropropane	2.34	0.0500	mg/kg wet	2.500		93	70-130			
1,3,5-Trimethylbenzene	2.28	0.0500	mg/kg wet	2.500		91	70-130			
1,3-Dichlorobenzene	2.36	0.0500	mg/kg wet	2.500		94	70-130			
1,3-Dichloropropane	2.42	0.0500	mg/kg wet	2.500		97	70-130			
1,4-Dichlorobenzene	2.33	0.0500	mg/kg wet	2.500		93	70-130			

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring

ESS Laboratory Work Order: 1507217

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
5035/8260B Volatile Organic Compounds / Methanol										
Batch CG51043 - 5035										
1,4-Dioxane - Screen	54.7	5.00	mg/kg wet	50.00		109	44-241			
1-Chlorohexane	2.43	0.0500	mg/kg wet	2.500		97	70-130			
2,2-Dichloropropane	2.65	0.100	mg/kg wet	2.500		106	70-130			
2-Butanone	12.8	1.25	mg/kg wet	12.50		102	70-130			
2-Chlorotoluene	2.21	0.0500	mg/kg wet	2.500		88	70-130			
2-Hexanone	12.0	0.500	mg/kg wet	12.50		96	70-130			
4-Chlorotoluene	2.22	0.0500	mg/kg wet	2.500		89	70-130			
4-Isopropyltoluene	2.34	0.0500	mg/kg wet	2.500		93	70-130			
4-Methyl-2-Pentanone	10.9	0.500	mg/kg wet	12.50		87	70-130			
Acetone	14.9	1.25	mg/kg wet	12.50		119	70-130			
Benzene	2.24	0.0500	mg/kg wet	2.500		90	70-130			
Bromobenzene	2.36	0.0500	mg/kg wet	2.500		94	70-130			
Bromochloromethane	2.76	0.0500	mg/kg wet	2.500		111	70-130			
Bromodichloromethane	2.24	0.0500	mg/kg wet	2.500		90	70-130			
Bromoform	2.42	0.0500	mg/kg wet	2.500		97	70-130			
Bromomethane	2.47	0.100	mg/kg wet	2.500		99	70-130			
Carbon Disulfide	2.19	0.0500	mg/kg wet	2.500		88	70-130			
Carbon Tetrachloride	2.67	0.0500	mg/kg wet	2.500		107	70-130			
Chlorobenzene	2.35	0.0500	mg/kg wet	2.500		94	70-130			
Chloroethane	2.06	0.100	mg/kg wet	2.500		82	70-130			
Chloroform	2.36	0.0500	mg/kg wet	2.500		94	70-130			
Chloromethane	2.16	0.100	mg/kg wet	2.500		87	70-130			
cis-1,2-Dichloroethene	2.37	0.0500	mg/kg wet	2.500		95	70-130			
cis-1,3-Dichloropropene	2.35	0.0500	mg/kg wet	2.500		94	70-130			
Dibromochloromethane	2.29	0.0500	mg/kg wet	2.500		92	70-130			
Dibromomethane	2.38	0.0500	mg/kg wet	2.500		95	70-130			
Dichlorodifluoromethane	2.10	0.0500	mg/kg wet	2.500		84	70-130			
Diethyl Ether	2.55	0.0500	mg/kg wet	2.500		102	70-130			
Di-isopropyl ether	2.56	0.0500	mg/kg wet	2.500		102	70-130			
Ethyl tertiary-butyl ether	2.51	0.0500	mg/kg wet	2.500		100	70-130			
Ethylbenzene	2.30	0.0500	mg/kg wet	2.500		92	70-130			
Hexachlorobutadiene	2.70	0.0500	mg/kg wet	2.500		108	70-130			
Isopropylbenzene	2.21	0.0500	mg/kg wet	2.500		88	70-130			
Methyl tert-Butyl Ether	2.47	0.0500	mg/kg wet	2.500		99	70-130			
Methylene Chloride	2.31	0.250	mg/kg wet	2.500		92	70-130			
Naphthalene	2.34	0.0500	mg/kg wet	2.500		94	70-130			
n-Butylbenzene	2.36	0.0500	mg/kg wet	2.500		94	70-130			
n-Propylbenzene	2.21	0.0500	mg/kg wet	2.500		88	70-130			
sec-Butylbenzene	2.28	0.0500	mg/kg wet	2.500		91	70-130			
Styrene	2.29	0.0500	mg/kg wet	2.500		92	70-130			
tert-Butylbenzene	2.50	0.0500	mg/kg wet	2.500		100	70-130			
Tertiary-amyl methyl ether	2.51	0.0500	mg/kg wet	2.500		100	70-130			
Tetrachloroethene	1.92	0.0500	mg/kg wet	2.500		77	70-130			
Tetrahydrofuran	2.42	0.500	mg/kg wet	2.500		97	70-130			
Toluene	2.22	0.0500	mg/kg wet	2.500		89	70-130			

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
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Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
5035/8260B Volatile Organic Compounds / Methanol										
Batch CG51043 - 5035										
trans-1,2-Dichloroethene	2.21	0.0500	mg/kg wet	2.500		88	70-130			
trans-1,3-Dichloropropene	2.21	0.0500	mg/kg wet	2.500		88	70-130			
Trichloroethene	2.30	0.0500	mg/kg wet	2.500		92	70-130			
Vinyl Acetate	2.88	0.250	mg/kg wet	2.500		115	70-130			
Vinyl Chloride	2.29	0.0500	mg/kg wet	2.500		92	70-130			
Xylene O	2.28	0.0500	mg/kg wet	2.500		91	70-130			
Xylene P,M	4.59	0.100	mg/kg wet	5.000		92	70-130			
Xylenes (Total)	6.87	0.100	mg/kg wet							
Surrogate: 1,2-Dichloroethane-d4	*2.49*		mg/kg wet	*2.500*		*100*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*2.34*		mg/kg wet	*2.500*		*94*	*70-130*			
Surrogate: Dibromofluoromethane	*2.45*		mg/kg wet	*2.500*		*98*	*70-130*			
Surrogate: Toluene-d8	*2.30*		mg/kg wet	*2.500*		*92*	*70-130*			
LCS Dup										
1,1,1,2-Tetrachloroethane	2.42	0.100	mg/kg wet	2.500		97	70-130	3	25	
1,1,1-Trichloroethane	2.33	0.0500	mg/kg wet	2.500		93	70-130	3	25	
1,1,2,2-Tetrachloroethane	2.16	0.0500	mg/kg wet	2.500		86	70-130	1	25	
1,1,2-Trichloroethane	2.16	0.0500	mg/kg wet	2.500		86	70-130	0.3	25	
1,1-Dichloroethane	2.25	0.0500	mg/kg wet	2.500		90	70-130	2	25	
1,1-Dichloroethene	2.22	0.0500	mg/kg wet	2.500		89	70-130	3	25	
1,1-Dichloropropene	2.24	0.0500	mg/kg wet	2.500		89	70-130	6	25	
1,2,3-Trichlorobenzene	2.38	0.0500	mg/kg wet	2.500		95	70-130	0.3	25	
1,2,3-Trichloropropane	2.41	0.0500	mg/kg wet	2.500		96	70-130	0.4	25	
1,2,4-Trichlorobenzene	2.55	0.0500	mg/kg wet	2.500		102	70-130	0.5	25	
1,2,4-Trimethylbenzene	2.15	0.0500	mg/kg wet	2.500		86	70-130	3	25	
1,2-Dibromo-3-Chloropropane	2.18	0.300	mg/kg wet	2.500		87	70-130	1	25	
1,2-Dibromoethane	2.24	0.0500	mg/kg wet	2.500		89	70-130	3	25	
1,2-Dichlorobenzene	2.28	0.0500	mg/kg wet	2.500		91	70-130	2	25	
1,2-Dichloroethane	2.43	0.0500	mg/kg wet	2.500		97	70-130	1	25	
1,2-Dichloropropane	2.32	0.0500	mg/kg wet	2.500		93	70-130	0.8	25	
1,3,5-Trimethylbenzene	2.25	0.0500	mg/kg wet	2.500		90	70-130	2	25	
1,3-Dichlorobenzene	2.26	0.0500	mg/kg wet	2.500		90	70-130	4	25	
1,3-Dichloropropane	2.36	0.0500	mg/kg wet	2.500		94	70-130	3	25	
1,4-Dichlorobenzene	2.32	0.0500	mg/kg wet	2.500		93	70-130	0.4	25	
1,4-Dioxane - Screen	52.4	5.00	mg/kg wet	50.00		105	44-241	4	200	
1-Chlorohexane	2.34	0.0500	mg/kg wet	2.500		94	70-130	4	25	
2,2-Dichloropropane	2.54	0.100	mg/kg wet	2.500		102	70-130	4	25	
2-Butanone	18.9	1.25	mg/kg wet	12.50		151	70-130	39	25	B+, D+
2-Chlorotoluene	2.12	0.0500	mg/kg wet	2.500		85	70-130	4	25	
2-Hexanone	16.9	0.500	mg/kg wet	12.50		135	70-130	34	25	B+, D+
4-Chlorotoluene	2.19	0.0500	mg/kg wet	2.500		88	70-130	1	25	
4-Isopropyltoluene	2.25	0.0500	mg/kg wet	2.500		90	70-130	4	25	
4-Methyl-2-Pentanone	11.2	0.500	mg/kg wet	12.50		90	70-130	3	25	
Acetone	27.2	1.25	mg/kg wet	12.50		218	70-130	58	25	B+, D+
Benzene	2.21	0.0500	mg/kg wet	2.500		89	70-130	1	25	
Bromobenzene	2.31	0.0500	mg/kg wet	2.500		92	70-130	2	25	

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
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Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
5035/8260B Volatile Organic Compounds / Methanol										
Batch CG51043 - 5035										
Bromochloromethane	2.63	0.0500	mg/kg wet	2.500		105	70-130	5	25	
Bromodichloromethane	2.20	0.0500	mg/kg wet	2.500		88	70-130	2	25	
Bromoform	2.31	0.0500	mg/kg wet	2.500		93	70-130	4	25	
Bromomethane	2.42	0.100	mg/kg wet	2.500		97	70-130	2	25	
Carbon Disulfide	2.26	0.0500	mg/kg wet	2.500		90	70-130	3	25	
Carbon Tetrachloride	2.53	0.0500	mg/kg wet	2.500		101	70-130	5	25	
Chlorobenzene	2.28	0.0500	mg/kg wet	2.500		91	70-130	3	25	
Chloroethane	2.00	0.100	mg/kg wet	2.500		80	70-130	3	25	
Chloroform	2.30	0.0500	mg/kg wet	2.500		92	70-130	2	25	
Chloromethane	2.16	0.100	mg/kg wet	2.500		86	70-130	0.2	25	
cis-1,2-Dichloroethene	2.31	0.0500	mg/kg wet	2.500		92	70-130	3	25	
cis-1,3-Dichloropropene	2.32	0.0500	mg/kg wet	2.500		93	70-130	1	25	
Dibromochloromethane	2.22	0.0500	mg/kg wet	2.500		89	70-130	3	25	
Dibromomethane	2.36	0.0500	mg/kg wet	2.500		94	70-130	1	25	
Dichlorodifluoromethane	2.03	0.0500	mg/kg wet	2.500		81	70-130	3	25	
Diethyl Ether	2.47	0.0500	mg/kg wet	2.500		99	70-130	3	25	
Di-isopropyl ether	2.51	0.0500	mg/kg wet	2.500		101	70-130	2	25	
Ethyl tertiary-butyl ether	2.47	0.0500	mg/kg wet	2.500		99	70-130	2	25	
Ethylbenzene	2.21	0.0500	mg/kg wet	2.500		89	70-130	4	25	
Hexachlorobutadiene	2.77	0.0500	mg/kg wet	2.500		111	70-130	2	25	
Isopropylbenzene	2.16	0.0500	mg/kg wet	2.500		86	70-130	2	25	
Methyl tert-Butyl Ether	2.42	0.0500	mg/kg wet	2.500		97	70-130	2	25	
Methylene Chloride	2.28	0.250	mg/kg wet	2.500		91	70-130	2	25	
Naphthalene	2.31	0.0500	mg/kg wet	2.500		92	70-130	1	25	
n-Butylbenzene	2.28	0.0500	mg/kg wet	2.500		91	70-130	3	25	
n-Propylbenzene	2.18	0.0500	mg/kg wet	2.500		87	70-130	1	25	
sec-Butylbenzene	2.19	0.0500	mg/kg wet	2.500		87	70-130	4	25	
Styrene	2.25	0.0500	mg/kg wet	2.500		90	70-130	2	25	
tert-Butylbenzene	2.40	0.0500	mg/kg wet	2.500		96	70-130	4	25	
Tertiary-amyl methyl ether	2.47	0.0500	mg/kg wet	2.500		99	70-130	2	25	
Tetrachloroethene	1.90	0.0500	mg/kg wet	2.500		76	70-130	1	25	
Tetrahydrofuran	2.44	0.500	mg/kg wet	2.500		98	70-130	0.6	25	
Toluene	2.21	0.0500	mg/kg wet	2.500		88	70-130	0.7	25	
trans-1,2-Dichloroethene	2.19	0.0500	mg/kg wet	2.500		88	70-130	1	25	
trans-1,3-Dichloropropene	2.18	0.0500	mg/kg wet	2.500		87	70-130	1	25	
Trichloroethene	2.26	0.0500	mg/kg wet	2.500		90	70-130	2	25	
Vinyl Acetate	2.83	0.250	mg/kg wet	2.500		113	70-130	2	25	
Vinyl Chloride	2.23	0.0500	mg/kg wet	2.500		89	70-130	3	25	
Xylene O	2.19	0.0500	mg/kg wet	2.500		88	70-130	4	25	
Xylene P,M	4.42	0.100	mg/kg wet	5.000		88	70-130	4	25	
Xylenes (Total)	6.62	0.100	mg/kg wet							
Surrogate: 1,2-Dichloroethane-d4	*2.44*		mg/kg wet	*2.500*		*97*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*2.27*		mg/kg wet	*2.500*		*91*	*70-130*			
Surrogate: Dibromofluoromethane	*2.40*		mg/kg wet	*2.500*		*96*	*70-130*			
Surrogate: Toluene-d8	*2.24*		mg/kg wet	*2.500*		*90*	*70-130*			

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
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Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CG50917 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0276*		mg/kg wet	*0.02500*		*110*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0259*		mg/kg wet	*0.02500*		*104*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0221*		mg/kg wet	*0.02500*		*88*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0246*		mg/kg wet	*0.02500*		*98*	*30-150*			
LCS										
Aroclor 1016	0.510	0.0500	mg/kg wet	0.5000		102	40-140			
Aroclor 1260	0.565	0.0500	mg/kg wet	0.5000		113	40-140			
Surrogate: Decachlorobiphenyl	*0.0283*		mg/kg wet	*0.02500*		*113*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0265*		mg/kg wet	*0.02500*		*106*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0227*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0244*		mg/kg wet	*0.02500*		*97*	*30-150*			
LCS Dup										
Aroclor 1016	0.492	0.0500	mg/kg wet	0.5000		98	40-140	4	30	
Aroclor 1260	0.540	0.0500	mg/kg wet	0.5000		108	40-140	4	30	
Surrogate: Decachlorobiphenyl	*0.0273*		mg/kg wet	*0.02500*		*109*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0254*		mg/kg wet	*0.02500*		*102*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0214*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0228*		mg/kg wet	*0.02500*		*91*	*30-150*			
8100M Total Petroleum Hydrocarbons										
Batch CG51027 - 3546										
Blank										
Decane (C10)	ND	0.2	mg/kg wet							
Docosane (C22)	ND	0.2	mg/kg wet							
Dodecane (C12)	ND	0.2	mg/kg wet							
Eicosane (C20)	ND	0.2	mg/kg wet							
Hexacosane (C26)	ND	0.2	mg/kg wet							
Hexadecane (C16)	ND	0.2	mg/kg wet							
Nonadecane (C19)	ND	0.2	mg/kg wet							
Nonane (C9)	ND	0.2	mg/kg wet							
Octacosane (C28)	ND	0.2	mg/kg wet							
Octadecane (C18)	ND	0.2	mg/kg wet							

CERTIFICATE OF ANALYSIS

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Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8100M Total Petroleum Hydrocarbons										
Batch CG51027 - 3546										
Tetracosane (C24)	ND	0.2	mg/kg wet							
Tetradecane (C14)	ND	0.2	mg/kg wet							
Total Petroleum Hydrocarbons	ND	37.5	mg/kg wet							
Triacontane (C30)	ND	0.2	mg/kg wet							
Surrogate: O-Terphenyl	*4.51*		mg/kg wet	*5.000*		*90*	*40-140*			
LCS										
Decane (C10)	2.0	0.2	mg/kg wet	2.500		78	40-140			
Docosane (C22)	2.3	0.2	mg/kg wet	2.500		92	40-140			
Dodecane (C12)	2.0	0.2	mg/kg wet	2.500		82	40-140			
Eicosane (C20)	2.3	0.2	mg/kg wet	2.500		91	40-140			
Hexacosane (C26)	2.4	0.2	mg/kg wet	2.500		96	40-140			
Hexadecane (C16)	2.2	0.2	mg/kg wet	2.500		88	40-140			
Nonadecane (C19)	2.2	0.2	mg/kg wet	2.500		89	40-140			
Nonane (C9)	1.7	0.2	mg/kg wet	2.500		68	30-140			
Octacosane (C28)	2.4	0.2	mg/kg wet	2.500		94	40-140			
Octadecane (C18)	2.2	0.2	mg/kg wet	2.500		88	40-140			
Tetracosane (C24)	2.2	0.2	mg/kg wet	2.500		88	40-140			
Tetradecane (C14)	2.1	0.2	mg/kg wet	2.500		83	40-140			
Total Petroleum Hydrocarbons	29.8	37.5	mg/kg wet	35.00		85	40-140			
Triacontane (C30)	2.3	0.2	mg/kg wet	2.500		94	40-140			
Surrogate: O-Terphenyl	*4.63*		mg/kg wet	*5.000*		*93*	*40-140*			
LCS Dup										
Decane (C10)	2.0	0.2	mg/kg wet	2.500		80	40-140	2	25	
Docosane (C22)	2.4	0.2	mg/kg wet	2.500		94	40-140	3	25	
Dodecane (C12)	2.1	0.2	mg/kg wet	2.500		84	40-140	3	25	
Eicosane (C20)	2.3	0.2	mg/kg wet	2.500		93	40-140	3	25	
Hexacosane (C26)	2.5	0.2	mg/kg wet	2.500		99	40-140	3	25	
Hexadecane (C16)	2.3	0.2	mg/kg wet	2.500		91	40-140	4	25	
Nonadecane (C19)	2.3	0.2	mg/kg wet	2.500		92	40-140	3	25	
Nonane (C9)	1.7	0.2	mg/kg wet	2.500		69	30-140	2	25	
Octacosane (C28)	2.4	0.2	mg/kg wet	2.500		97	40-140	3	25	
Octadecane (C18)	2.3	0.2	mg/kg wet	2.500		91	40-140	4	25	
Tetracosane (C24)	2.3	0.2	mg/kg wet	2.500		90	40-140	3	25	
Tetradecane (C14)	2.2	0.2	mg/kg wet	2.500		87	40-140	4	25	
Total Petroleum Hydrocarbons	30.7	37.5	mg/kg wet	35.00		88	40-140	3	25	
Triacontane (C30)	2.4	0.2	mg/kg wet	2.500		97	40-140	3	25	
Surrogate: O-Terphenyl	*4.73*		mg/kg wet	*5.000*		*95*	*40-140*			
8270D Polynuclear Aromatic Hydrocarbons										
Batch CG51029 - 3546										
Blank										
2-Methylnaphthalene	ND	0.333	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring

ESS Laboratory Work Order: 1507217

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8270D Polynuclear Aromatic Hydrocarbons										
Batch CG51029 - 3546										
Acenaphthene	ND	0.333	mg/kg wet							
Acenaphthylene	ND	0.333	mg/kg wet							
Anthracene	ND	0.333	mg/kg wet							
Benzo(a)anthracene	ND	0.333	mg/kg wet							
Benzo(a)pyrene	ND	0.167	mg/kg wet							
Benzo(b)fluoranthene	ND	0.333	mg/kg wet							
Benzo(g,h,i)perylene	ND	0.333	mg/kg wet							
Benzo(k)fluoranthene	ND	0.333	mg/kg wet							
Chrysene	ND	0.167	mg/kg wet							
Dibenzo(a,h)Anthracene	ND	0.167	mg/kg wet							
Fluoranthene	ND	0.333	mg/kg wet							
Fluorene	ND	0.333	mg/kg wet							
Indeno(1,2,3-cd)Pyrene	ND	0.333	mg/kg wet							
Naphthalene	ND	0.333	mg/kg wet							
Phenanthrene	ND	0.333	mg/kg wet							
Pyrene	ND	0.333	mg/kg wet							
Surrogate: 1,2-Dichlorobenzene-d4	*3.00*		mg/kg wet	*6.667*		*45*	*30-130*			
Surrogate: 2-Fluorobiphenyl	*2.99*		mg/kg wet	*6.667*		*45*	*30-130*			
Surrogate: Nitrobenzene-d5	*2.79*		mg/kg wet	*6.667*		*42*	*30-130*			
Surrogate: p-Terphenyl-d14	*2.98*		mg/kg wet	*6.667*		*45*	*30-130*			
LCS										
2-Methylnaphthalene	2.69	0.333	mg/kg wet	3.333		81	40-140			
Acenaphthene	2.85	0.333	mg/kg wet	3.333		85	40-140			
Acenaphthylene	2.98	0.333	mg/kg wet	3.333		89	40-140			
Anthracene	2.98	0.333	mg/kg wet	3.333		89	40-140			
Benzo(a)anthracene	3.08	0.333	mg/kg wet	3.333		92	40-140			
Benzo(a)pyrene	3.20	0.167	mg/kg wet	3.333		96	40-140			
Benzo(b)fluoranthene	3.09	0.333	mg/kg wet	3.333		93	40-140			
Benzo(g,h,i)perylene	3.35	0.333	mg/kg wet	3.333		100	40-140			
Benzo(k)fluoranthene	2.92	0.333	mg/kg wet	3.333		88	40-140			
Chrysene	3.15	0.167	mg/kg wet	3.333		94	40-140			
Dibenzo(a,h)Anthracene	3.47	0.167	mg/kg wet	3.333		104	40-140			
Fluoranthene	3.31	0.333	mg/kg wet	3.333		99	40-140			
Fluorene	2.83	0.333	mg/kg wet	3.333		85	40-140			
Indeno(1,2,3-cd)Pyrene	3.55	0.333	mg/kg wet	3.333		106	40-140			
Naphthalene	2.87	0.333	mg/kg wet	3.333		86	40-140			
Phenanthrene	2.98	0.333	mg/kg wet	3.333		89	40-140			
Pyrene	3.13	0.333	mg/kg wet	3.333		94	40-140			
Surrogate: 1,2-Dichlorobenzene-d4	*2.98*		mg/kg wet	*6.667*		*45*	*30-130*			
Surrogate: 2-Fluorobiphenyl	*2.94*		mg/kg wet	*6.667*		*44*	*30-130*			
Surrogate: Nitrobenzene-d5	*3.01*		mg/kg wet	*6.667*		*45*	*30-130*			
Surrogate: p-Terphenyl-d14	*3.47*		mg/kg wet	*6.667*		*52*	*30-130*			
LCS Dup										
2-Methylnaphthalene	2.85	0.333	mg/kg wet	3.333		85	40-140	6	30	
Acenaphthene	3.08	0.333	mg/kg wet	3.333		92	40-140	8	30	

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring

ESS Laboratory Work Order: 1507217

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8270D Polynuclear Aromatic Hydrocarbons										
Batch CG51029 - 3546										
Acenaphthylene	3.20	0.333	mg/kg wet	3.333		96	40-140	7	30	
Anthracene	3.17	0.333	mg/kg wet	3.333		95	40-140	6	30	
Benzo(a)anthracene	3.28	0.333	mg/kg wet	3.333		98	40-140	6	30	
Benzo(a)pyrene	3.42	0.167	mg/kg wet	3.333		103	40-140	6	30	
Benzo(b)fluoranthene	3.25	0.333	mg/kg wet	3.333		97	40-140	5	30	
Benzo(g,h,i)perylene	3.57	0.333	mg/kg wet	3.333		107	40-140	6	30	
Benzo(k)fluoranthene	3.17	0.333	mg/kg wet	3.333		95	40-140	8	30	
Chrysene	3.36	0.167	mg/kg wet	3.333		101	40-140	6	30	
Dibenzo(a,h)Anthracene	3.71	0.167	mg/kg wet	3.333		111	40-140	7	30	
Fluoranthene	3.52	0.333	mg/kg wet	3.333		106	40-140	6	30	
Fluorene	3.01	0.333	mg/kg wet	3.333		90	40-140	6	30	
Indeno(1,2,3-cd)Pyrene	3.80	0.333	mg/kg wet	3.333		114	40-140	7	30	
Naphthalene	3.05	0.333	mg/kg wet	3.333		92	40-140	6	30	
Phenanthrene	3.16	0.333	mg/kg wet	3.333		95	40-140	6	30	
Pyrene	3.31	0.333	mg/kg wet	3.333		99	40-140	6	30	
Surrogate: 1,2-Dichlorobenzene-d4	*3.22*		mg/kg wet	*6.667*		*48*	*30-130*			
Surrogate: 2-Fluorobiphenyl	*3.04*		mg/kg wet	*6.667*		*46*	*30-130*			
Surrogate: Nitrobenzene-d5	*3.09*		mg/kg wet	*6.667*		*46*	*30-130*			
Surrogate: p-Terphenyl-d14	*3.52*		mg/kg wet	*6.667*		*53*	*30-130*			
Volatile Organics Tentatively Identified Compounds										
Batch CG51043 - 5035										
Blank										
Tentatively Identified Compound	ND	0.1	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring

ESS Laboratory Work Order: 1507217

Notes and Definitions

U	Analyte included in the analysis, but not detected
J	Reported between MDL and MRL
D+	Relative percent difference for duplicate is outside of criteria (D+).
D	Diluted.
B+	Blank Spike recovery is above upper control limit (B+).
ND	Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DL	Detection Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
[CALC]	Calculated Analyte
SUB	Subcontracted analysis; see attached report

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring

ESS Laboratory Work Order: 1507217

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/find/labs/analytical/ESS.pdf

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/documents/AllLabs.xls

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/Labcert/Labcert.aspx

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424
http://des.nh.gov/organization/divisions/water/dwgb/nhelap/index.htm

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/DEP_OPRA/OpraMain/pi_main?mode=pi_by_site&sort_order=PI_NAMEA&Select+a+Site:=58715

United States Department of Agriculture Soil Permit: P330-12-00139

Pennsylvania: 68-01752
http://www.depweb.state.pa.us/portal/server.pt/community/labs/13780/laboratory_accreditation_program/590095

Sample and Cooler Receipt Checklist

Client: Resource Controls
Client Project ID: _____
Shipped/Delivered Via: Client

ESS Project ID: 15070217
Date Project Due: 7/16/15
Days For Project: 5 Day

Items to be checked upon receipt:

1. Air Bill Manifest Present?	* No	10. Are the samples properly preserved?	Yes
Air No.:		11. Proper sample containers used?	Yes
2. Were Custody Seals Present?	No	12. Any air bubbles in the VOA vials?	N/A
3. Were Custody Seals Intact?	N/A	13. Holding times exceeded?	No
4. Is Radiation count < 100 CPM?	Yes	14. Sufficient sample volumes?	Yes
5. Is a cooler present?	Yes	15. Any Subcontracting needed?	No
Cooler Temp: **13.2**		16. Are ESS labels on correct containers?	Yes No
Iced With: **Icepacks**		17. Were samples received intact?	Yes No
6. Was COC included with samples?	Yes	ESS Sample IDs: _____	
7. Was COC signed and dated by client?	Yes	Sub Lab: _____	
8. Does the COC match the sample	Yes	Analysis: _____	
9. Is COC complete and correct?	Yes	TAT: _____	

18. Was there need to call project manager to discuss status? If yes, please explain.

LL VOA Frozen 7/9/15 1537 ZH 7/9/15

Who was called?:_____ By whom? _____

Sample Number	Properly Preserved	Container Type	# of Containers	Preservative
1	Yes	4 oz Soil Jar	1	NP
1	Yes	40 ml - VOA	1	MeOH
1	Yes	40 ml - VOA	2	other
2	Yes	4 oz Soil Jar	1	NP
2	Yes	40 ml - VOA	1	MeOH
2	Yes	40 ml - VOA	2	other
3	Yes	8 oz Soil Jar	1	NP
4	Yes	8 oz Soil Jar	1	NP
5	Yes	8 oz Soil Jar	1	NP
6	Yes	8 oz Soil Jar	1	NP

Completed By: _____ Date/Time: 7/9/15 1526
Reviewed By: _____ Date/Time: 7/9/15 1528

Samples Submitted on 7/9

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

ESS Lab #

Turn Time 5-Day Standard Other_____

Regulatory State: MA (RI) CT NH NJ NY ME Other_____

Reporting Limits - RI Residential Direct Exposure

Is this project for any of the following:(please circle)
MA-MCP Navy USACE CT DEP Other_____

Electonic Deliverables (*Excel) Access (PDF)

Co. Name	Project #	Project Name
Resource Controls	7131	Bay Spring

Contact Person	Proj. Location
Mark House	Barrington

Address	City , State	Zip	PO #
474 Broadway ~~Pawtucket RI~~	Pawtucket RI	02860	7131A-14

Tel. 401-728-6860 email: MHOUSE@RESOURCECONTROLS.COM

ESS Lab ID	Date	Collection Time	Grab -G Composite-C	Matrix	Sample ID	Pres Code	# of Containers	Type of Container	Vol of Container	Analysis: VOCs x 8260B	TPH	Metals (RCRA 8)	PCBs	PAHs				
	7/9	12:50	G	S	TP-201	6/9/1	4	V/G		X	X			X	please add PAH for samples TP-201 TP-202 (NP)			
		13:00	G	S	TP-202	6/9/1	4	V/G		X	X			X				
		9:00	G	S	TP-203	1	1	G			X	X	X					
		9:20	G	S	TP-204	1	1	G			X	X	X					
		11:45	G	S	TP-205	1	1	G			X	X		X				
		12:00	G	S	TP-206	1	1	G			X	X		X				

Container Type: P-Poly G-Glass AG-Amber Glass S-Sterile V-VOA

Matrix: S-Soil SD-Solid D-Sludge WW-Wastewater GW-Groundwater SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filter

Cooler Present _____Yes _____No

Seals Intact ____ Yes _____No NA:____

Cooler Temperature: 13.2 Ice present

Internal Use Only

[ ] Pickup DL

[ ] Technician____

Preservation Code: 1-NP, 2-HCl, 3-H2SO4, 4-HNO3, 5-NaOH, 6-MeOH, 7-Asorbic Acid, 8-ZnAct, 9-NaSO4

Sampled by : Nick Haase

Comments:

Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)	Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)
7/9 14:45	7/9/15 1445		
Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)	Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)

* By circling MA-MCP, client acknowledges sampels were collected in accordance with MADEP CAM VIIA

Please fax to the laboratory all changes to Chain of Custody

Report Method Blank & Laboratory Control Sample Results

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

ESS Lab # 1507217

Turn Time 5-Day Standard Other_____

Regulatory State: MA (RI) CT NH NJ NY ME Other_____

Is this project for any of the following:(please circle)
MA-MCP Navy USACE CT DEP Other_____

Reporting Limits - RI Residential Direct Exposure

Electonic Deliverables (*Excel) Access (PDF)

Co. Name	Project #	Project Name
Resource Controls	7131	Bay Spring

Contact Person	Proj. Location
Mark House	Barrington

Address	City, State	Zip	PO #
474 Broadway ~~Pawtucket RI~~	Pawtucket RI	02860	7131A-14

Tel. 401-728-6860 email: MHOUSE@RESOURCECONTROLS.COM

ESS Lab ID	Date	Collection Time	Grab -G Composite-C	Matrix	Sample ID	Pres Code	# of Containers	Type of Container	Vol of Container	Analysis: VOCs x 8260B	TPH	Metals (RCRA 8)	PCBs	PAHs				
1	7/9	12:50	G	S	TP-201	6/9/15	4	V/G		X	X							
2	"	13:00	G	S	TP-202	6/9/15	4	V/G		X	X							
3	"	9:00	G	S	TP-203	1	1	G			X	X	X					
4	"	9:20	G	S	TP-204	1	1	G			X	X	X					
5	"	11:45	G	S	TP-205	1	1	G			X	X		X				
6	"	12:00	G	S	TP-206	1	1	G			X	X		X				

Container Type: P-Poly G-Glass ~~AG-Amber Glass~~ S-Sterile V-VOA

Matrix: S-Soil SD-Solid D-Sludge WW-Wastewater GW-Groundwater SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filter

Cooler Present _____Yes _____No

Seals Intact ____ Yes _____No NA:____

Cooler Temperature: 13.2 Ice present

Internal Use Only

[ ] Pickup DL

[ ] Technician____

Preservation Code: 1-NP, 2-HCl, 3-H2SO4, 4-HNO3, 5-NaOH, 6-MeOH, 7-Asorbic Acid, 8-ZnAct, 9-Na_2SO_4

Sampled by: Nick Haase

Comments:

Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)	Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)
7/9 14:45	7/9/15 1445		

* By circling MA-MCP, client acknowledges sampels were collected in accordance with MADEP CAM VIIA

Please fax to the laboratory all changes to Chain of Custody

Report Method Blank & Laboratory Control Sample Results

CERTIFICATE OF ANALYSIS

Mark House
Resource Controls
474 Broadway
Pawtucket, RI 02860-1377

RE: Bay Spring (7131A)
ESS Laboratory Work Order Number: 1507218

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

REVIEWED
By ESS Laboratory at 5:33 pm, Sep 08, 2015

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with NELAC Standards, A2LA and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibrations, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring

ESS Laboratory Work Order: 1507218

SAMPLE RECEIPT

The following samples were received on July 09, 2015 for the analyses specified on the enclosed Chain of Custody Record.

The cooler temperature was not within the acceptance limit of <6°C, however, samples were delivered on ice.

Revision 1 September 8, 2015: This report has been revised to include VOA TICs.

Lab Number	Sample Name	Matrix	Analysis
1507218-01	MW-105	Ground Water	8260B
1507218-02	MW-104	Ground Water	6010C, 7010, 7470A, 8260B
1507218-03	MW-3	Ground Water	6010C, 7010, 7470A, 8260B
1507218-04	MW-106	Ground Water	6010C, 7010, 7470A
1507218-05	MW-101	Ground Water	6010C, 7010, 7470A

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring

ESS Laboratory Work Order: 1507218

PROJECT NARRATIVE

8260B Volatile Organic Compounds

CG51036-BS1	**Blank Spike recovery is above upper control limit (B+).**
	2-Hexanone (132% @ 70-130%), Acetone (148% @ 70-130%), Bromoform (160% @ 70-130%)
CG51036-BS1	**Blank Spike recovery is below lower control limit (B-).**
	Chloroethane (62% @ 70-130%), Chloromethane (42% @ 70-130%), Di-isopropyl ether (68% @ 70-130%), Methylene Chloride (50% @ 70-130%), Tetrahydrofuran (63% @ 70-130%), Trichlorofluoromethane (65% @ 70-130%), Vinyl Chloride (65% @ 70-130%)
CG51036-BSD1	**Blank Spike recovery is above upper control limit (B+).**
	1,2,4-Trichlorobenzene (131% @ 70-130%), 1,2-Dibromo-3-Chloropropane (134% @ 70-130%), 2-Butanone (159% @ 70-130%), 2-Hexanone (152% @ 70-130%), Acetone (197% @ 70-130%), Bromobenzene (135% @ 70-130%), Hexachlorobutadiene (131% @ 70-130%)
CG51036-BSD1	**Blank Spike recovery is below lower control limit (B-).**
	Chloromethane (67% @ 70-130%), Dichlorodifluoromethane (65% @ 70-130%)
CG51036-BSD1	**Relative percent difference for duplicate is outside of criteria (D+).**
	1,2,4-Trimethylbenzene (30% @ 25%), 1,2-Dibromo-3-Chloropropane (26% @ 25%), 1,2-Dichlorobenzene (28% @ 25%), 1,2-Dichloropropane (26% @ 25%), 1,3,5-Trimethylbenzene (36% @ 25%), 1,3-Dichlorobenzene (27% @ 25%), 2-Butanone (37% @ 25%), 2-Chlorotoluene (32% @ 25%), 4-Chlorotoluene (30% @ 25%), 4-Isopropyltoluene (35% @ 25%), 4-Methyl-2-Pentanone (39% @ 25%), Acetone (29% @ 25%), Bromoform (46% @ 25%), Diethyl Ether (28% @ 25%), Di-isopropyl ether (38% @ 25%), Ethyl tertiary-butyl ether (30% @ 25%), Isopropylbenzene (32% @ 25%), Methylene Chloride (58% @ 25%), Naphthalene (30% @ 25%), n-Butylbenzene (30% @ 25%), n-Propylbenzene (29% @ 25%), sec-Butylbenzene (33% @ 25%), tert-Butylbenzene (34% @ 25%), Tetrahydrofuran (45% @ 25%)
CYG0110-CCV1	**Continuing Calibration recovery is below lower control limit (C-).**
	Methylene Chloride (65% @ 70-130%)

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring

ESS Laboratory Work Order: 1507218

CURRENT SW-846 METHODOLOGY VERSIONS

Analytical Methods

1010A - Flashpoint
6010C - ICP
6020A - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015D - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260B - VOA
8270D - SVOA
8270D SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 04-1.1 - EPH / VPH

Prep Methods

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3541 - Automated Soxhlet Extraction
3546 - Microwave Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5030C - Aqueous Purge and Trap
5035 - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring
Client Sample ID: MW-105
Date Sampled: 07/09/15 11:05
Percent Solids: N/A
Initial Volume: 5
Final Volume: 5
Extraction Method: 5030B

ESS Laboratory Work Order: 1507218
ESS Laboratory Sample ID: 1507218-01
Sample Matrix: Ground Water
Units: mg/L
Analyst: ZLC

8260B Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
1,1,1,2-Tetrachloroethane	ND (0.0010)		8260B		1	07/10/15 13:41	CYG0110	CG51036
1,1,1-Trichloroethane	**0.0198** (0.0010)		8260B		1	07/10/15 13:41	CYG0110	CG51036
1,1,2,2-Tetrachloroethane	ND (0.0005)		8260B		1	07/10/15 13:41	CYG0110	CG51036
1,1,2-Trichloroethane	ND (0.0010)		8260B		1	07/10/15 13:41	CYG0110	CG51036
1,1-Dichloroethane	**0.0034** (0.0010)		8260B		1	07/10/15 13:41	CYG0110	CG51036
1,1-Dichloroethene	ND (0.0010)		8260B		1	07/10/15 13:41	CYG0110	CG51036
1,1-Dichloropropene	ND (0.0020)		8260B		1	07/10/15 13:41	CYG0110	CG51036
1,2,3-Trichlorobenzene	ND (0.0010)		8260B		1	07/10/15 13:41	CYG0110	CG51036
1,2,3-Trichloropropane	ND (0.0010)		8260B		1	07/10/15 13:41	CYG0110	CG51036
1,2,4-Trichlorobenzene	ND (0.0010)		8260B		1	07/10/15 13:41	CYG0110	CG51036
1,2,4-Trimethylbenzene	ND (0.0010)		8260B		1	07/10/15 13:41	CYG0110	CG51036
1,2-Dibromo-3-Chloropropane	ND (0.0050)		8260B		1	07/10/15 13:41	CYG0110	CG51036
1,2-Dibromoethane	ND (0.0010)		8260B		1	07/10/15 13:41	CYG0110	CG51036
1,2-Dichlorobenzene	ND (0.0010)		8260B		1	07/10/15 13:41	CYG0110	CG51036
1,2-Dichloroethane	ND (0.0010)		8260B		1	07/10/15 13:41	CYG0110	CG51036
1,2-Dichloropropane	ND (0.0010)		8260B		1	07/10/15 13:41	CYG0110	CG51036
1,3,5-Trimethylbenzene	ND (0.0010)		8260B		1	07/10/15 13:41	CYG0110	CG51036
1,3-Dichlorobenzene	ND (0.0010)		8260B		1	07/10/15 13:41	CYG0110	CG51036
1,3-Dichloropropane	ND (0.0010)		8260B		1	07/10/15 13:41	CYG0110	CG51036
1,4-Dichlorobenzene	ND (0.0010)		8260B		1	07/10/15 13:41	CYG0110	CG51036
1,4-Dioxane - Screen	ND (0.500)		8260B		1	07/10/15 13:41	CYG0110	CG51036
1-Chlorohexane	ND (0.0010)		8260B		1	07/10/15 13:41	CYG0110	CG51036
2,2-Dichloropropane	ND (0.0010)		8260B		1	07/10/15 13:41	CYG0110	CG51036
2-Butanone	ND (0.0100)		8260B		1	07/10/15 13:41	CYG0110	CG51036
2-Chlorotoluene	ND (0.0010)		8260B		1	07/10/15 13:41	CYG0110	CG51036
2-Hexanone	ND (0.0100)		8260B		1	07/10/15 13:41	CYG0110	CG51036
4-Chlorotoluene	ND (0.0010)		8260B		1	07/10/15 13:41	CYG0110	CG51036
4-Isopropyltoluene	ND (0.0010)		8260B		1	07/10/15 13:41	CYG0110	CG51036
4-Methyl-2-Pentanone	ND (0.0250)		8260B		1	07/10/15 13:41	CYG0110	CG51036
Acetone	ND (0.0100)		8260B		1	07/10/15 13:41	CYG0110	CG51036
Benzene	ND (0.0010)		8260B		1	07/10/15 13:41	CYG0110	CG51036
Bromobenzene	ND (0.0020)		8260B		1	07/10/15 13:41	CYG0110	CG51036

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring
Client Sample ID: MW-105
Date Sampled: 07/09/15 11:05
Percent Solids: N/A
Initial Volume: 5
Final Volume: 5
Extraction Method: 5030B

ESS Laboratory Work Order: 1507218
ESS Laboratory Sample ID: 1507218-01
Sample Matrix: Ground Water
Units: mg/L
Analyst: ZLC

8260B Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Bromochloromethane	ND (0.0010)		8260B		1	07/10/15 13:41	CYG0110	CG51036
Bromodichloromethane	ND (0.0006)		8260B		1	07/10/15 13:41	CYG0110	CG51036
Bromoform	ND (0.0010)		8260B		1	07/10/15 13:41	CYG0110	CG51036
Bromomethane	ND (0.0020)		8260B		1	07/10/15 13:41	CYG0110	CG51036
Carbon Disulfide	ND (0.0010)		8260B		1	07/10/15 13:41	CYG0110	CG51036
Carbon Tetrachloride	ND (0.0010)		8260B		1	07/10/15 13:41	CYG0110	CG51036
Chlorobenzene	ND (0.0010)		8260B		1	07/10/15 13:41	CYG0110	CG51036
Chloroethane	ND (0.0020)		8260B		1	07/10/15 13:41	CYG0110	CG51036
Chloroform	ND (0.0010)		8260B		1	07/10/15 13:41	CYG0110	CG51036
Chloromethane	ND (0.0020)		8260B		1	07/10/15 13:41	CYG0110	CG51036
cis-1,2-Dichloroethene	ND (0.0010)		8260B		1	07/10/15 13:41	CYG0110	CG51036
cis-1,3-Dichloropropene	ND (0.0004)		8260B		1	07/10/15 13:41	CYG0110	CG51036
Dibromochloromethane	ND (0.0010)		8260B		1	07/10/15 13:41	CYG0110	CG51036
Dibromomethane	ND (0.0010)		8260B		1	07/10/15 13:41	CYG0110	CG51036
Dichlorodifluoromethane	ND (0.0020)		8260B		1	07/10/15 13:41	CYG0110	CG51036
Diethyl Ether	ND (0.0010)		8260B		1	07/10/15 13:41	CYG0110	CG51036
Di-isopropyl ether	ND (0.0010)		8260B		1	07/10/15 13:41	CYG0110	CG51036
Ethyl tertiary-butyl ether	ND (0.0010)		8260B		1	07/10/15 13:41	CYG0110	CG51036
Ethylbenzene	ND (0.0010)		8260B		1	07/10/15 13:41	CYG0110	CG51036
Hexachlorobutadiene	ND (0.0006)		8260B		1	07/10/15 13:41	CYG0110	CG51036
Hexachloroethane	ND (0.0010)		8260B		1	07/10/15 13:41	CYG0110	CG51036
Isopropylbenzene	ND (0.0010)		8260B		1	07/10/15 13:41	CYG0110	CG51036
Methyl tert-Butyl Ether	ND (0.0010)		8260B		1	07/10/15 13:41	CYG0110	CG51036
Methylene Chloride	ND (0.0020)		8260B		1	07/10/15 13:41	CYG0110	CG51036
Naphthalene	ND (0.0010)		8260B		1	07/10/15 13:41	CYG0110	CG51036
n-Butylbenzene	ND (0.0010)		8260B		1	07/10/15 13:41	CYG0110	CG51036
n-Propylbenzene	ND (0.0010)		8260B		1	07/10/15 13:41	CYG0110	CG51036
sec-Butylbenzene	ND (0.0010)		8260B		1	07/10/15 13:41	CYG0110	CG51036
Styrene	ND (0.0010)		8260B		1	07/10/15 13:41	CYG0110	CG51036
tert-Butylbenzene	ND (0.0010)		8260B		1	07/10/15 13:41	CYG0110	CG51036
Tertiary-amyl methyl ether	ND (0.0010)		8260B		1	07/10/15 13:41	CYG0110	CG51036
Tetrachloroethene	ND (0.0010)		8260B		1	07/10/15 13:41	CYG0110	CG51036

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring
Client Sample ID: MW-105
Date Sampled: 07/09/15 11:05
Percent Solids: N/A
Initial Volume: 5
Final Volume: 5
Extraction Method: 5030B

ESS Laboratory Work Order: 1507218
ESS Laboratory Sample ID: 1507218-01
Sample Matrix: Ground Water
Units: mg/L
Analyst: ZLC

8260B Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Tetrahydrofuran	ND (0.0050)		8260B		1	07/10/15 13:41	CYG0110	CG51036
Toluene	ND (0.0010)		8260B		1	07/10/15 13:41	CYG0110	CG51036
trans-1,2-Dichloroethene	ND (0.0010)		8260B		1	07/10/15 13:41	CYG0110	CG51036
trans-1,3-Dichloropropene	ND (0.0004)		8260B		1	07/10/15 13:41	CYG0110	CG51036
Trichloroethene	**0.0082** (0.0010)		8260B		1	07/10/15 13:41	CYG0110	CG51036
Trichlorofluoromethane	ND (0.0010)		8260B		1	07/10/15 13:41	CYG0110	CG51036
Vinyl Acetate	ND (0.0050)		8260B		1	07/10/15 13:41	CYG0110	CG51036
Vinyl Chloride	ND (0.0010)		8260B		1	07/10/15 13:41	CYG0110	CG51036
Xylene O	ND (0.0010)		8260B		1	07/10/15 13:41	CYG0110	CG51036
Xylene P,M	ND (0.0020)		8260B		1	07/10/15 13:41	CYG0110	CG51036
Xylenes (Total)	ND (0.0020)		8260B		1	07/10/15 13:41		[CALC]
Trihalomethanes (Total)	ND (0.0010)		8260B			07/10/15 13:41		[CALC]

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichloroethane-d4	*87 %*		*70-130*
Surrogate: 4-Bromofluorobenzene	*91 %*		*70-130*
Surrogate: Dibromofluoromethane	*86 %*		*70-130*
Surrogate: Toluene-d8	*96 %*		*70-130*

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring
Client Sample ID: MW-105
Date Sampled: 07/09/15 11:05
Percent Solids: N/A
Initial Volume: 5
Final Volume: 5
Extraction Method: 5030B

ESS Laboratory Work Order: 1507218
ESS Laboratory Sample ID: 1507218-01
Sample Matrix: Ground Water
Units: mg/L
Analyst: ZLC
Prepared: 7/10/15 8:00

Volatile Organics Tentatively Identified Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Tentatively Identified Compound	ND (0.001)		8260B		1	07/10/15 13:41		CG51036

A forward library search of the NBS Mass Spectral Library was performed on this sample using the McLafferty Probability Base Matching (PBM) Algorithm. An estimated concentration of non-TCL compounds tentatively identified is quantified by the internal standard method. The nearest internal standard free of interferences was used to quantify. A response factor of one was assumed. This search was inclusive of the ten largest peaks greater than ten percent of the nearest internal standard.

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring
Client Sample ID: MW-104
Date Sampled: 07/09/15 14:00
Percent Solids: N/A

ESS Laboratory Work Order: 1507218
ESS Laboratory Sample ID: 1507218-02
Sample Matrix: Ground Water
Units: mg/L

Extraction Method: 3005A

Dissolved Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Arsenic	ND (0.002)		7010		1	KJK	07/14/15 23:40	50	25	CG51004
Barium	ND (0.025)		6010C		1	KJK	07/10/15 15:57	50	25	CG51004
Cadmium	ND (0.0025)		6010C		1	KJK	07/10/15 15:57	50	25	CG51004
Chromium	ND (0.010)		6010C		1	KJK	07/10/15 15:57	50	25	CG51004
Lead	ND (0.010)		6010C		1	KJK	07/10/15 15:57	50	25	CG51004
Mercury	ND (0.00020)		7470A		1	BJV	07/13/15 12:10	20	40	CG51005
Selenium	ND (0.025)		6010C		1	KJK	07/10/15 15:57	50	25	CG51004
Silver	ND (0.005)		6010C		1	KJK	07/10/15 15:57	50	25	CG51004

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring
Client Sample ID: MW-104
Date Sampled: 07/09/15 14:00
Percent Solids: N/A

ESS Laboratory Work Order: 1507218
ESS Laboratory Sample ID: 1507218-02
Sample Matrix: Ground Water
Units: mg/L

Extraction Method: 3005A

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Arsenic	**0.003** (0.002)		7010		1	KJK	07/15/15 0:20	50	25	CG51004
Barium	ND (0.025)		6010C		1	KJK	07/10/15 16:26	50	25	CG51004
Cadmium	ND (0.0025)		6010C		1	KJK	07/10/15 16:26	50	25	CG51004
Chromium	ND (0.010)		6010C		1	KJK	07/10/15 16:26	50	25	CG51004
Lead	ND (0.010)		6010C		1	KJK	07/10/15 16:26	50	25	CG51004
Mercury	ND (0.00020)		7470A		1	BJV	07/13/15 12:01	20	40	CG51005
Selenium	ND (0.025)		6010C		1	KJK	07/10/15 16:26	50	25	CG51004
Silver	ND (0.005)		6010C		1	KJK	07/10/15 16:26	50	25	CG51004

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring
Client Sample ID: MW-104
Date Sampled: 07/09/15 14:00
Percent Solids: N/A
Initial Volume: 5
Final Volume: 5
Extraction Method: 5030B

ESS Laboratory Work Order: 1507218
ESS Laboratory Sample ID: 1507218-02
Sample Matrix: Ground Water
Units: mg/L
Analyst: ZLC

8260B Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
1,1,1,2-Tetrachloroethane	ND (0.0010)		8260B		1	07/10/15 14:13	CYG0110	CG51036
1,1,1-Trichloroethane	**0.0027** (0.0010)		8260B		1	07/10/15 14:13	CYG0110	CG51036
1,1,2,2-Tetrachloroethane	**0.0022** (0.0005)		8260B		1	07/10/15 14:13	CYG0110	CG51036
1,1,2-Trichloroethane	ND (0.0010)		8260B		1	07/10/15 14:13	CYG0110	CG51036
1,1-Dichloroethane	**0.0040** (0.0010)		8260B		1	07/10/15 14:13	CYG0110	CG51036
1,1-Dichloroethene	ND (0.0010)		8260B		1	07/10/15 14:13	CYG0110	CG51036
1,1-Dichloropropene	ND (0.0020)		8260B		1	07/10/15 14:13	CYG0110	CG51036
1,2,3-Trichlorobenzene	ND (0.0010)		8260B		1	07/10/15 14:13	CYG0110	CG51036
1,2,3-Trichloropropane	ND (0.0010)		8260B		1	07/10/15 14:13	CYG0110	CG51036
1,2,4-Trichlorobenzene	ND (0.0010)		8260B		1	07/10/15 14:13	CYG0110	CG51036
1,2,4-Trimethylbenzene	**0.0484** (0.0010)		8260B		1	07/10/15 14:13	CYG0110	CG51036
1,2-Dibromo-3-Chloropropane	ND (0.0050)		8260B		1	07/10/15 14:13	CYG0110	CG51036
1,2-Dibromoethane	ND (0.0010)		8260B		1	07/10/15 14:13	CYG0110	CG51036
1,2-Dichlorobenzene	ND (0.0010)		8260B		1	07/10/15 14:13	CYG0110	CG51036
1,2-Dichloroethane	ND (0.0010)		8260B		1	07/10/15 14:13	CYG0110	CG51036
1,2-Dichloropropane	ND (0.0010)		8260B		1	07/10/15 14:13	CYG0110	CG51036
1,3,5-Trimethylbenzene	**0.0846** (0.0010)		8260B		1	07/10/15 14:13	CYG0110	CG51036
1,3-Dichlorobenzene	ND (0.0010)		8260B		1	07/10/15 14:13	CYG0110	CG51036
1,3-Dichloropropane	ND (0.0010)		8260B		1	07/10/15 14:13	CYG0110	CG51036
1,4-Dichlorobenzene	ND (0.0010)		8260B		1	07/10/15 14:13	CYG0110	CG51036
1,4-Dioxane - Screen	ND (0.500)		8260B		1	07/10/15 14:13	CYG0110	CG51036
1-Chlorohexane	ND (0.0010)		8260B		1	07/10/15 14:13	CYG0110	CG51036
2,2-Dichloropropane	ND (0.0010)		8260B		1	07/10/15 14:13	CYG0110	CG51036
2-Butanone	ND (0.0100)		8260B		1	07/10/15 14:13	CYG0110	CG51036
2-Chlorotoluene	ND (0.0010)		8260B		1	07/10/15 14:13	CYG0110	CG51036
2-Hexanone	ND (0.0100)		8260B		1	07/10/15 14:13	CYG0110	CG51036
4-Chlorotoluene	ND (0.0010)		8260B		1	07/10/15 14:13	CYG0110	CG51036
4-Isopropyltoluene	**0.0052** (0.0010)		8260B		1	07/10/15 14:13	CYG0110	CG51036
4-Methyl-2-Pentanone	ND (0.0250)		8260B		1	07/10/15 14:13	CYG0110	CG51036
Acetone	ND (0.0100)		8260B		1	07/10/15 14:13	CYG0110	CG51036
Benzene	ND (0.0010)		8260B		1	07/10/15 14:13	CYG0110	CG51036
Bromobenzene	ND (0.0020)		8260B		1	07/10/15 14:13	CYG0110	CG51036

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring
Client Sample ID: MW-104
Date Sampled: 07/09/15 14:00
Percent Solids: N/A
Initial Volume: 5
Final Volume: 5
Extraction Method: 5030B

ESS Laboratory Work Order: 1507218
ESS Laboratory Sample ID: 1507218-02
Sample Matrix: Ground Water
Units: mg/L
Analyst: ZLC

8260B Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Bromochloromethane	ND (0.0010)		8260B		1	07/10/15 14:13	CYG0110	CG51036
Bromodichloromethane	ND (0.0006)		8260B		1	07/10/15 14:13	CYG0110	CG51036
Bromoform	ND (0.0010)		8260B		1	07/10/15 14:13	CYG0110	CG51036
Bromomethane	ND (0.0020)		8260B		1	07/10/15 14:13	CYG0110	CG51036
Carbon Disulfide	ND (0.0010)		8260B		1	07/10/15 14:13	CYG0110	CG51036
Carbon Tetrachloride	ND (0.0010)		8260B		1	07/10/15 14:13	CYG0110	CG51036
Chlorobenzene	ND (0.0010)		8260B		1	07/10/15 14:13	CYG0110	CG51036
Chloroethane	ND (0.0020)		8260B		1	07/10/15 14:13	CYG0110	CG51036
Chloroform	ND (0.0010)		8260B		1	07/10/15 14:13	CYG0110	CG51036
Chloromethane	ND (0.0020)		8260B		1	07/10/15 14:13	CYG0110	CG51036
cis-1,2-Dichloroethene	ND (0.0010)		8260B		1	07/10/15 14:13	CYG0110	CG51036
cis-1,3-Dichloropropene	ND (0.0004)		8260B		1	07/10/15 14:13	CYG0110	CG51036
Dibromochloromethane	ND (0.0010)		8260B		1	07/10/15 14:13	CYG0110	CG51036
Dibromomethane	ND (0.0010)		8260B		1	07/10/15 14:13	CYG0110	CG51036
Dichlorodifluoromethane	ND (0.0020)		8260B		1	07/10/15 14:13	CYG0110	CG51036
Diethyl Ether	ND (0.0010)		8260B		1	07/10/15 14:13	CYG0110	CG51036
Di-isopropyl ether	ND (0.0010)		8260B		1	07/10/15 14:13	CYG0110	CG51036
Ethyl tertiary-butyl ether	ND (0.0010)		8260B		1	07/10/15 14:13	CYG0110	CG51036
Ethylbenzene	**0.0060** (0.0010)		8260B		1	07/10/15 14:13	CYG0110	CG51036
Hexachlorobutadiene	ND (0.0006)		8260B		1	07/10/15 14:13	CYG0110	CG51036
Hexachloroethane	ND (0.0010)		8260B		1	07/10/15 14:13	CYG0110	CG51036
Isopropylbenzene	**0.0030** (0.0010)		8260B		1	07/10/15 14:13	CYG0110	CG51036
Methyl tert-Butyl Ether	ND (0.0010)		8260B		1	07/10/15 14:13	CYG0110	CG51036
Methylene Chloride	ND (0.0020)		8260B		1	07/10/15 14:13	CYG0110	CG51036
Naphthalene	**0.0024** (0.0010)		8260B		1	07/10/15 14:13	CYG0110	CG51036
n-Butylbenzene	**0.0047** (0.0010)		8260B		1	07/10/15 14:13	CYG0110	CG51036
n-Propylbenzene	**0.0023** (0.0010)		8260B		1	07/10/15 14:13	CYG0110	CG51036
sec-Butylbenzene	ND (0.0010)		8260B		1	07/10/15 14:13	CYG0110	CG51036
Styrene	ND (0.0010)		8260B		1	07/10/15 14:13	CYG0110	CG51036
tert-Butylbenzene	ND (0.0010)		8260B		1	07/10/15 14:13	CYG0110	CG51036
Tertiary-amyl methyl ether	ND (0.0010)		8260B		1	07/10/15 14:13	CYG0110	CG51036
Tetrachloroethene	ND (0.0010)		8260B		1	07/10/15 14:13	CYG0110	CG51036

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring
Client Sample ID: MW-104
Date Sampled: 07/09/15 14:00
Percent Solids: N/A
Initial Volume: 5
Final Volume: 5
Extraction Method: 5030B

ESS Laboratory Work Order: 1507218
ESS Laboratory Sample ID: 1507218-02
Sample Matrix: Ground Water
Units: mg/L
Analyst: ZLC

8260B Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Tetrahydrofuran	ND (0.0050)		8260B		1	07/10/15 14:13	CYG0110	CG51036
Toluene	**0.0013** (0.0010)		8260B		1	07/10/15 14:13	CYG0110	CG51036
trans-1,2-Dichloroethene	ND (0.0010)		8260B		1	07/10/15 14:13	CYG0110	CG51036
trans-1,3-Dichloropropene	ND (0.0004)		8260B		1	07/10/15 14:13	CYG0110	CG51036
Trichloroethene	ND (0.0010)		8260B		1	07/10/15 14:13	CYG0110	CG51036
Trichlorofluoromethane	ND (0.0010)		8260B		1	07/10/15 14:13	CYG0110	CG51036
Vinyl Acetate	ND (0.0050)		8260B		1	07/10/15 14:13	CYG0110	CG51036
Vinyl Chloride	ND (0.0010)		8260B		1	07/10/15 14:13	CYG0110	CG51036
Xylene O	**0.0059** (0.0010)		8260B		1	07/10/15 14:13	CYG0110	CG51036
Xylene P,M	**0.0276** (0.0020)		8260B		1	07/10/15 14:13	CYG0110	CG51036
Xylenes (Total)	**0.0335** (0.0020)		8260B		1	07/10/15 14:13		[CALC]
Trihalomethanes (Total)	ND (0.0010)		8260B			07/10/15 14:13		[CALC]

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichloroethane-d4	*89 %*		*70-130*
Surrogate: 4-Bromofluorobenzene	*109 %*		*70-130*
Surrogate: Dibromofluoromethane	*89 %*		*70-130*
Surrogate: Toluene-d8	*95 %*		*70-130*

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring
Client Sample ID: MW-104
Date Sampled: 07/09/15 14:00
Percent Solids: N/A
Initial Volume: 5
Final Volume: 5
Extraction Method: 5030B

ESS Laboratory Work Order: 1507218
ESS Laboratory Sample ID: 1507218-02
Sample Matrix: Ground Water
Units: mg/L
Analyst: ZLC
Prepared: 7/10/15 8:00

Volatile Organics Tentatively Identified Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
3-Penten-2-one	**0.01** (N/A)		8260B		1	07/10/15 14:13		CG51036
diethyl-benzene isomer	**0.01** (N/A)		8260B		1	07/10/15 14:13		CG51036
ethyl methyl benzene isomer	**0.02** (N/A)		8260B		1	07/10/15 14:13		CG51036
ethyl-dimethyl-benzene isomer (01)	**0.01** (N/A)		8260B		1	07/10/15 14:13		CG51036
ethyl-dimethyl-benzene isomer (02)	**0.01** (N/A)		8260B		1	07/10/15 14:13		CG51036
ethyl-dimethyl-benzene isomer (03)	**0.03** (N/A)		8260B		1	07/10/15 14:13		CG51036
ethyl-dimethyl-benzene isomer (04)	**0.009** (N/A)		8260B		1	07/10/15 14:13		CG51036
methyl-propenyl-benzene isomer	**0.01** (N/A)		8260B		1	07/10/15 14:13		CG51036
methyl-propyl-benzene isomer	**0.01** (N/A)		8260B		1	07/10/15 14:13		CG51036
tetramethyl-benzene isomer	**0.009** (N/A)		8260B		1	07/10/15 14:13		CG51036
tetramethyl-benzene isomer 2	**0.04** (N/A)		8260B		1	07/10/15 14:13		CG51036
trimethyl-benzene isomer	**0.009** (N/A)		8260B		1	07/10/15 14:13		CG51036

A forward library search of the NBS Mass Spectral Library was performed on this sample using the McLafferty Probability Base Matching (PBM) Algorithm. An estimated concentration of non-TCL compounds tentatively identified is quantified by the internal standard method. The nearest internal standard free of interferences was used to quantify. A response factor of one was assumed. This search was inclusive of the ten largest peaks greater than ten percent of the nearest internal standard.

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring
Client Sample ID: MW-3
Date Sampled: 07/09/15 12:25
Percent Solids: N/A

ESS Laboratory Work Order: 1507218
ESS Laboratory Sample ID: 1507218-03
Sample Matrix: Ground Water
Units: mg/L

Extraction Method: 3005A

Dissolved Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Arsenic	ND (0.002)		7010		1	KJK	07/14/15 23:46	50	25	CG51004
Barium	**0.041** (0.025)		6010C		1	KJK	07/10/15 16:01	50	25	CG51004
Cadmium	ND (0.0025)		6010C		1	KJK	07/10/15 16:01	50	25	CG51004
Chromium	ND (0.010)		6010C		1	KJK	07/10/15 16:01	50	25	CG51004
Lead	ND (0.010)		6010C		1	KJK	07/10/15 16:01	50	25	CG51004
Mercury	ND (0.00020)		7470A		1	BJV	07/13/15 12:12	20	40	CG51005
Selenium	ND (0.025)		6010C		1	KJK	07/10/15 16:01	50	25	CG51004
Silver	ND (0.005)		6010C		1	KJK	07/10/15 16:01	50	25	CG51004

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring
Client Sample ID: MW-3
Date Sampled: 07/09/15 12:25
Percent Solids: N/A

ESS Laboratory Work Order: 1507218
ESS Laboratory Sample ID: 1507218-03
Sample Matrix: Ground Water
Units: mg/L

Extraction Method: 3005A

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Arsenic	**0.003** (0.002)		7010		1	KJK	07/15/15 0:38	50	25	CG51004
Barium	**0.049** (0.025)		6010C		1	KJK	07/10/15 16:31	50	25	CG51004
Cadmium	ND (0.0025)		6010C		1	KJK	07/10/15 16:31	50	25	CG51004
Chromium	ND (0.010)		6010C		1	KJK	07/10/15 16:31	50	25	CG51004
Lead	**0.010** (0.010)		6010C		1	KJK	07/10/15 16:31	50	25	CG51004
Mercury	**0.00021** (0.00020)		7470A		1	BJV	07/13/15 12:03	20	40	CG51005
Selenium	ND (0.025)		6010C		1	KJK	07/10/15 16:31	50	25	CG51004
Silver	ND (0.005)		6010C		1	KJK	07/10/15 16:31	50	25	CG51004

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring
Client Sample ID: MW-3
Date Sampled: 07/09/15 12:25
Percent Solids: N/A
Initial Volume: 5
Final Volume: 5
Extraction Method: 5030B

ESS Laboratory Work Order: 1507218
ESS Laboratory Sample ID: 1507218-03
Sample Matrix: Ground Water
Units: mg/L
Analyst: ZLC

8260B Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
1,1,1,2-Tetrachloroethane	ND (0.0010)		8260B		1	07/10/15 14:46	CYG0110	CG51036
1,1,1-Trichloroethane	**0.0021** (0.0010)		8260B		1	07/10/15 14:46	CYG0110	CG51036
1,1,2,2-Tetrachloroethane	ND (0.0005)		8260B		1	07/10/15 14:46	CYG0110	CG51036
1,1,2-Trichloroethane	ND (0.0010)		8260B		1	07/10/15 14:46	CYG0110	CG51036
1,1-Dichloroethane	**0.0017** (0.0010)		8260B		1	07/10/15 14:46	CYG0110	CG51036
1,1-Dichloroethene	ND (0.0010)		8260B		1	07/10/15 14:46	CYG0110	CG51036
1,1-Dichloropropene	ND (0.0020)		8260B		1	07/10/15 14:46	CYG0110	CG51036
1,2,3-Trichlorobenzene	ND (0.0010)		8260B		1	07/10/15 14:46	CYG0110	CG51036
1,2,3-Trichloropropane	ND (0.0010)		8260B		1	07/10/15 14:46	CYG0110	CG51036
1,2,4-Trichlorobenzene	ND (0.0010)		8260B		1	07/10/15 14:46	CYG0110	CG51036
1,2,4-Trimethylbenzene	**0.0023** (0.0010)		8260B		1	07/10/15 14:46	CYG0110	CG51036
1,2-Dibromo-3-Chloropropane	ND (0.0050)		8260B		1	07/10/15 14:46	CYG0110	CG51036
1,2-Dibromoethane	ND (0.0010)		8260B		1	07/10/15 14:46	CYG0110	CG51036
1,2-Dichlorobenzene	ND (0.0010)		8260B		1	07/10/15 14:46	CYG0110	CG51036
1,2-Dichloroethane	ND (0.0010)		8260B		1	07/10/15 14:46	CYG0110	CG51036
1,2-Dichloropropane	ND (0.0010)		8260B		1	07/10/15 14:46	CYG0110	CG51036
1,3,5-Trimethylbenzene	ND (0.0010)		8260B		1	07/10/15 14:46	CYG0110	CG51036
1,3-Dichlorobenzene	ND (0.0010)		8260B		1	07/10/15 14:46	CYG0110	CG51036
1,3-Dichloropropane	ND (0.0010)		8260B		1	07/10/15 14:46	CYG0110	CG51036
1,4-Dichlorobenzene	ND (0.0010)		8260B		1	07/10/15 14:46	CYG0110	CG51036
1,4-Dioxane - Screen	ND (0.500)		8260B		1	07/10/15 14:46	CYG0110	CG51036
1-Chlorohexane	ND (0.0010)		8260B		1	07/10/15 14:46	CYG0110	CG51036
2,2-Dichloropropane	ND (0.0010)		8260B		1	07/10/15 14:46	CYG0110	CG51036
2-Butanone	ND (0.0100)		8260B		1	07/10/15 14:46	CYG0110	CG51036
2-Chlorotoluene	ND (0.0010)		8260B		1	07/10/15 14:46	CYG0110	CG51036
2-Hexanone	ND (0.0100)		8260B		1	07/10/15 14:46	CYG0110	CG51036
4-Chlorotoluene	ND (0.0010)		8260B		1	07/10/15 14:46	CYG0110	CG51036
4-Isopropyltoluene	ND (0.0010)		8260B		1	07/10/15 14:46	CYG0110	CG51036
4-Methyl-2-Pentanone	ND (0.0250)		8260B		1	07/10/15 14:46	CYG0110	CG51036
Acetone	ND (0.0100)		8260B		1	07/10/15 14:46	CYG0110	CG51036
Benzene	ND (0.0010)		8260B		1	07/10/15 14:46	CYG0110	CG51036
Bromobenzene	ND (0.0020)		8260B		1	07/10/15 14:46	CYG0110	CG51036

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring
Client Sample ID: MW-3
Date Sampled: 07/09/15 12:25
Percent Solids: N/A
Initial Volume: 5
Final Volume: 5
Extraction Method: 5030B

ESS Laboratory Work Order: 1507218
ESS Laboratory Sample ID: 1507218-03
Sample Matrix: Ground Water
Units: mg/L
Analyst: ZLC

8260B Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Bromochloromethane	ND (0.0010)		8260B		1	07/10/15 14:46	CYG0110	CG51036
Bromodichloromethane	ND (0.0006)		8260B		1	07/10/15 14:46	CYG0110	CG51036
Bromoform	ND (0.0010)		8260B		1	07/10/15 14:46	CYG0110	CG51036
Bromomethane	ND (0.0020)		8260B		1	07/10/15 14:46	CYG0110	CG51036
Carbon Disulfide	ND (0.0010)		8260B		1	07/10/15 14:46	CYG0110	CG51036
Carbon Tetrachloride	ND (0.0010)		8260B		1	07/10/15 14:46	CYG0110	CG51036
Chlorobenzene	ND (0.0010)		8260B		1	07/10/15 14:46	CYG0110	CG51036
Chloroethane	ND (0.0020)		8260B		1	07/10/15 14:46	CYG0110	CG51036
Chloroform	ND (0.0010)		8260B		1	07/10/15 14:46	CYG0110	CG51036
Chloromethane	ND (0.0020)		8260B		1	07/10/15 14:46	CYG0110	CG51036
cis-1,2-Dichloroethene	ND (0.0010)		8260B		1	07/10/15 14:46	CYG0110	CG51036
cis-1,3-Dichloropropene	ND (0.0004)		8260B		1	07/10/15 14:46	CYG0110	CG51036
Dibromochloromethane	ND (0.0010)		8260B		1	07/10/15 14:46	CYG0110	CG51036
Dibromomethane	ND (0.0010)		8260B		1	07/10/15 14:46	CYG0110	CG51036
Dichlorodifluoromethane	ND (0.0020)		8260B		1	07/10/15 14:46	CYG0110	CG51036
Diethyl Ether	ND (0.0010)		8260B		1	07/10/15 14:46	CYG0110	CG51036
Di-isopropyl ether	ND (0.0010)		8260B		1	07/10/15 14:46	CYG0110	CG51036
Ethyl tertiary-butyl ether	ND (0.0010)		8260B		1	07/10/15 14:46	CYG0110	CG51036
Ethylbenzene	ND (0.0010)		8260B		1	07/10/15 14:46	CYG0110	CG51036
Hexachlorobutadiene	ND (0.0006)		8260B		1	07/10/15 14:46	CYG0110	CG51036
Hexachloroethane	ND (0.0010)		8260B		1	07/10/15 14:46	CYG0110	CG51036
Isopropylbenzene	ND (0.0010)		8260B		1	07/10/15 14:46	CYG0110	CG51036
Methyl tert-Butyl Ether	ND (0.0010)		8260B		1	07/10/15 14:46	CYG0110	CG51036
Methylene Chloride	ND (0.0020)		8260B		1	07/10/15 14:46	CYG0110	CG51036
Naphthalene	**0.0013** (0.0010)		8260B		1	07/10/15 14:46	CYG0110	CG51036
n-Butylbenzene	ND (0.0010)		8260B		1	07/10/15 14:46	CYG0110	CG51036
n-Propylbenzene	ND (0.0010)		8260B		1	07/10/15 14:46	CYG0110	CG51036
sec-Butylbenzene	ND (0.0010)		8260B		1	07/10/15 14:46	CYG0110	CG51036
Styrene	ND (0.0010)		8260B		1	07/10/15 14:46	CYG0110	CG51036
tert-Butylbenzene	ND (0.0010)		8260B		1	07/10/15 14:46	CYG0110	CG51036
Tertiary-amyl methyl ether	ND (0.0010)		8260B		1	07/10/15 14:46	CYG0110	CG51036
Tetrachloroethene	ND (0.0010)		8260B		1	07/10/15 14:46	CYG0110	CG51036

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring
Client Sample ID: MW-3
Date Sampled: 07/09/15 12:25
Percent Solids: N/A
Initial Volume: 5
Final Volume: 5
Extraction Method: 5030B

ESS Laboratory Work Order: 1507218
ESS Laboratory Sample ID: 1507218-03
Sample Matrix: Ground Water
Units: mg/L
Analyst: ZLC

8260B Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Tetrahydrofuran	ND (0.0050)		8260B		1	07/10/15 14:46	CYG0110	CG51036
Toluene	ND (0.0010)		8260B		1	07/10/15 14:46	CYG0110	CG51036
trans-1,2-Dichloroethene	ND (0.0010)		8260B		1	07/10/15 14:46	CYG0110	CG51036
trans-1,3-Dichloropropene	ND (0.0004)		8260B		1	07/10/15 14:46	CYG0110	CG51036
Trichloroethene	ND (0.0010)		8260B		1	07/10/15 14:46	CYG0110	CG51036
Trichlorofluoromethane	ND (0.0010)		8260B		1	07/10/15 14:46	CYG0110	CG51036
Vinyl Acetate	ND (0.0050)		8260B		1	07/10/15 14:46	CYG0110	CG51036
Vinyl Chloride	ND (0.0010)		8260B		1	07/10/15 14:46	CYG0110	CG51036
Xylene O	ND (0.0010)		8260B		1	07/10/15 14:46	CYG0110	CG51036
Xylene P,M	ND (0.0020)		8260B		1	07/10/15 14:46	CYG0110	CG51036
Xylenes (Total)	ND (0.0020)		8260B		1	07/10/15 14:46		[CALC]
Trihalomethanes (Total)	ND (0.0010)		8260B			07/10/15 14:46		[CALC]

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichloroethane-d4	*87 %*		*70-130*
Surrogate: 4-Bromofluorobenzene	*96 %*		*70-130*
Surrogate: Dibromofluoromethane	*89 %*		*70-130*
Surrogate: Toluene-d8	*96 %*		*70-130*

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring
Client Sample ID: MW-3
Date Sampled: 07/09/15 12:25
Percent Solids: N/A
Initial Volume: 5
Final Volume: 5
Extraction Method: 5030B

ESS Laboratory Work Order: 1507218
ESS Laboratory Sample ID: 1507218-03
Sample Matrix: Ground Water
Units: mg/L
Analyst: ZLC
Prepared: 7/10/15 8:00

Volatile Organics Tentatively Identified Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
3-Penten-2-one	**0.006** (N/A)		8260B		1	07/10/15 14:46		CG51036
aliphatic substituted benzene (01)	**0.01** (N/A)		8260B		1	07/10/15 14:46		CG51036
aliphatic substituted benzene (02)	**0.01** (N/A)		8260B		1	07/10/15 14:46		CG51036
aliphatic substituted benzene (03)	**0.008** (N/A)		8260B		1	07/10/15 14:46		CG51036
diethyl-benzene isomer	**0.005** (N/A)		8260B		1	07/10/15 14:46		CG51036
ethenyl-ethyl-benzene isomer	**0.009** (N/A)		8260B		1	07/10/15 14:46		CG51036
ethyl-dimethyl-benzene isomer (01)	**0.005** (N/A)		8260B		1	07/10/15 14:46		CG51036
ethyl-dimethyl-benzene isomer (02)	**0.02** (N/A)		8260B		1	07/10/15 14:46		CG51036
methyl(methylethyl)-benzene is	**0.006** (N/A)		8260B		1	07/10/15 14:46		CG51036
tetramethyl-benzene isomer	**0.02** (N/A)		8260B		1	07/10/15 14:46		CG51036
tetramethyl-benzene isomer 2	**0.009** (N/A)		8260B		1	07/10/15 14:46		CG51036
trimethyl-benzene isomer	**0.005** (N/A)		8260B		1	07/10/15 14:46		CG51036

A forward library search of the NBS Mass Spectral Library was performed on this sample using the McLafferty Probability Base Matching (PBM) Algorithm. An estimated concentration of non-TCL compounds tentatively identified is quantified by the internal standard method. The nearest internal standard free of interferences was used to quantify. A response factor of one was assumed. This search was inclusive of the ten largest peaks greater than ten percent of the nearest internal standard.

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring
Client Sample ID: MW-106
Date Sampled: 07/09/15 09:40
Percent Solids: N/A

ESS Laboratory Work Order: 1507218
ESS Laboratory Sample ID: 1507218-04
Sample Matrix: Ground Water
Units: mg/L

Extraction Method: 3005A

Dissolved Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Arsenic	ND (0.002)		7010		1	KJK	07/14/15 23:52	50	25	CG51004
Barium	**0.027** (0.025)		6010C		1	KJK	07/10/15 16:05	50	25	CG51004
Cadmium	ND (0.0025)		6010C		1	KJK	07/10/15 16:05	50	25	CG51004
Chromium	ND (0.010)		6010C		1	KJK	07/10/15 16:05	50	25	CG51004
Lead	ND (0.010)		6010C		1	KJK	07/10/15 16:05	50	25	CG51004
Mercury	ND (0.00020)		7470A		1	BJV	07/13/15 12:15	20	40	CG51005
Selenium	ND (0.025)		6010C		1	KJK	07/10/15 16:05	50	25	CG51004
Silver	ND (0.005)		6010C		1	KJK	07/10/15 16:05	50	25	CG51004

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring
Client Sample ID: MW-106
Date Sampled: 07/09/15 09:40
Percent Solids: N/A

ESS Laboratory Work Order: 1507218
ESS Laboratory Sample ID: 1507218-04
Sample Matrix: Ground Water
Units: mg/L

Extraction Method: 3005A

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Arsenic	ND (0.002)		7010		1	KJK	07/15/15 0:43	50	25	CG51004
Barium	**0.032** (0.025)		6010C		1	KJK	07/10/15 16:35	50	25	CG51004
Cadmium	ND (0.0025)		6010C		1	KJK	07/10/15 16:35	50	25	CG51004
Chromium	ND (0.010)		6010C		1	KJK	07/10/15 16:35	50	25	CG51004
Lead	ND (0.010)		6010C		1	KJK	07/10/15 16:35	50	25	CG51004
Mercury	ND (0.00020)		7470A		1	BJV	07/13/15 12:05	20	40	CG51005
Selenium	ND (0.025)		6010C		1	KJK	07/10/15 16:35	50	25	CG51004
Silver	ND (0.005)		6010C		1	KJK	07/10/15 16:35	50	25	CG51004

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring
Client Sample ID: MW-101
Date Sampled: 07/09/15 12:45
Percent Solids: N/A

ESS Laboratory Work Order: 1507218
ESS Laboratory Sample ID: 1507218-05
Sample Matrix: Ground Water
Units: mg/L

Extraction Method: 3005A

Dissolved Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Arsenic	**0.059** (0.012)		7010		5	KJK	07/15/15 0:03	50	25	CG51004
Barium	ND (0.025)		6010C		1	KJK	07/10/15 16:22	50	25	CG51004
Cadmium	ND (0.0025)		6010C		1	KJK	07/10/15 16:22	50	25	CG51004
Chromium	ND (0.010)		6010C		1	KJK	07/10/15 16:22	50	25	CG51004
Lead	ND (0.010)		6010C		1	KJK	07/10/15 16:22	50	25	CG51004
Mercury	ND (0.00020)		7470A		1	BJV	07/13/15 12:17	20	40	CG51005
Selenium	ND (0.025)		6010C		1	KJK	07/10/15 16:22	50	25	CG51004
Silver	ND (0.005)		6010C		1	KJK	07/10/15 16:22	50	25	CG51004

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring
Client Sample ID: MW-101
Date Sampled: 07/09/15 12:45
Percent Solids: N/A

ESS Laboratory Work Order: 1507218
ESS Laboratory Sample ID: 1507218-05
Sample Matrix: Ground Water
Units: mg/L

Extraction Method: 3005A

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Arsenic	**0.102** (0.012)		7010		5	KJK	07/15/15 0:55	50	25	CG51004
Barium	**0.030** (0.025)		6010C		1	KJK	07/10/15 16:39	50	25	CG51004
Cadmium	ND (0.0025)		6010C		1	KJK	07/10/15 16:39	50	25	CG51004
Chromium	ND (0.010)		6010C		1	KJK	07/10/15 16:39	50	25	CG51004
Lead	ND (0.010)		6010C		1	KJK	07/10/15 16:39	50	25	CG51004
Mercury	ND (0.00020)		7470A		1	BJV	07/13/15 12:08	20	40	CG51005
Selenium	ND (0.025)		6010C		1	KJK	07/10/15 16:39	50	25	CG51004
Silver	ND (0.005)		6010C		1	KJK	07/10/15 16:39	50	25	CG51004

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring

ESS Laboratory Work Order: 1507218

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Dissolved Metals										
Batch CG51004 - 3005A										
Blank										
Arsenic	ND	0.002	mg/L							
Barium	ND	0.025	mg/L							
Cadmium	ND	0.0025	mg/L							
Chromium	ND	0.010	mg/L							
Lead	ND	0.010	mg/L							
Selenium	ND	0.025	mg/L							
Silver	ND	0.005	mg/L							
LCS										
Arsenic	0.242	0.050	mg/L	0.2500		97	80-120			
Barium	0.238	0.025	mg/L	0.2500		95	80-120			
Cadmium	0.113	0.0025	mg/L	0.1250		90	80-120			
Chromium	0.237	0.010	mg/L	0.2500		95	80-120			
Lead	0.236	0.010	mg/L	0.2500		94	80-120			
Selenium	0.470	0.025	mg/L	0.5000		94	80-120			
Silver	0.120	0.005	mg/L	0.1250		96	80-120			
LCS Dup										
Arsenic	0.237	0.050	mg/L	0.2500		95	80-120	2	20	
Barium	0.229	0.025	mg/L	0.2500		92	80-120	4	20	
Cadmium	0.108	0.0025	mg/L	0.1250		87	80-120	4	20	
Chromium	0.228	0.010	mg/L	0.2500		91	80-120	3	20	
Lead	0.227	0.010	mg/L	0.2500		91	80-120	4	20	
Selenium	0.454	0.025	mg/L	0.5000		91	80-120	3	20	
Silver	0.115	0.005	mg/L	0.1250		92	80-120	4	20	
Batch CG51005 - 245.1/7470A										
Blank										
Mercury	ND	0.00020	mg/L							
Blank										
Mercury	ND	0.00020	mg/L							
LCS										
Mercury	0.00577	0.00020	mg/L	0.006000		96	80-120			
LCS Dup										
Mercury	0.00575	0.00020	mg/L	0.006000		96	80-120	0.4	20	
Total Metals										
Batch CG51004 - 3005A										
Blank										
Arsenic	ND	0.002	mg/L							
Barium	ND	0.025	mg/L							
Cadmium	ND	0.0025	mg/L							
Chromium	ND	0.010	mg/L							
Lead	ND	0.010	mg/L							
Selenium	ND	0.025	mg/L							

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring

ESS Laboratory Work Order: 1507218

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Total Metals										
Batch CG51004 - 3005A										
Silver	ND	0.005	mg/L							
LCS										
Arsenic	0.242	0.050	mg/L	0.2500		97	80-120			
Barium	0.238	0.025	mg/L	0.2500		95	80-120			
Cadmium	0.113	0.0025	mg/L	0.1250		90	80-120			
Chromium	0.237	0.010	mg/L	0.2500		95	80-120			
Lead	0.236	0.010	mg/L	0.2500		94	80-120			
Selenium	0.470	0.025	mg/L	0.5000		94	80-120			
Silver	0.120	0.005	mg/L	0.1250		96	80-120			
LCS Dup										
Arsenic	0.237	0.050	mg/L	0.2500		95	80-120	2	20	
Barium	0.229	0.025	mg/L	0.2500		92	80-120	4	20	
Cadmium	0.108	0.0025	mg/L	0.1250		87	80-120	4	20	
Chromium	0.228	0.010	mg/L	0.2500		91	80-120	3	20	
Lead	0.227	0.010	mg/L	0.2500		91	80-120	4	20	
Selenium	0.454	0.025	mg/L	0.5000		91	80-120	3	20	
Silver	0.115	0.005	mg/L	0.1250		92	80-120	4	20	
Batch CG51005 - 245.1/7470A										
Blank										
Mercury	ND	0.00020	mg/L							
Blank										
Mercury	ND	0.00020	mg/L							
LCS										
Mercury	0.00577	0.00020	mg/L	0.006000		96	80-120			
LCS Dup										
Mercury	0.00575	0.00020	mg/L	0.006000		96	80-120	0.4	20	
8260B Volatile Organic Compounds										
Batch CG51036 - 5030B										
Blank										
1,1,1,2-Tetrachloroethane	ND	0.0010	mg/L							
1,1,1-Trichloroethane	ND	0.0010	mg/L							
1,1,2,2-Tetrachloroethane	ND	0.0005	mg/L							
1,1,2-Trichloroethane	ND	0.0010	mg/L							
1,1-Dichloroethane	ND	0.0010	mg/L							
1,1-Dichloroethene	ND	0.0010	mg/L							
1,1-Dichloropropene	ND	0.0020	mg/L							
1,2,3-Trichlorobenzene	ND	0.0010	mg/L							
1,2,3-Trichloropropane	ND	0.0010	mg/L							
1,2,4-Trichlorobenzene	ND	0.0010	mg/L							
1,2,4-Trimethylbenzene	ND	0.0010	mg/L							
1,2-Dibromo-3-Chloropropane	ND	0.0050	mg/L							
1,2-Dibromoethane	ND	0.0010	mg/L							

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring

ESS Laboratory Work Order: 1507218

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8260B Volatile Organic Compounds										
Batch CG51036 - 5030B										
1,2-Dichlorobenzene	ND	0.0010	mg/L							
1,2-Dichloroethane	ND	0.0010	mg/L							
1,2-Dichloropropane	ND	0.0010	mg/L							
1,3,5-Trimethylbenzene	ND	0.0010	mg/L							
1,3-Dichlorobenzene	ND	0.0010	mg/L							
1,3-Dichloropropane	ND	0.0010	mg/L							
1,4-Dichlorobenzene	ND	0.0010	mg/L							
1,4-Dioxane - Screen	ND	0.500	mg/L							
1-Chlorohexane	ND	0.0010	mg/L							
2,2-Dichloropropane	ND	0.0010	mg/L							
2-Butanone	ND	0.0100	mg/L							
2-Chlorotoluene	ND	0.0010	mg/L							
2-Hexanone	ND	0.0100	mg/L							
4-Chlorotoluene	ND	0.0010	mg/L							
4-Isopropyltoluene	ND	0.0010	mg/L							
4-Methyl-2-Pentanone	ND	0.0250	mg/L							
Acetone	ND	0.0100	mg/L							
Benzene	ND	0.0010	mg/L							
Bromobenzene	ND	0.0020	mg/L							
Bromochloromethane	ND	0.0010	mg/L							
Bromodichloromethane	ND	0.0006	mg/L							
Bromoform	ND	0.0010	mg/L							
Bromomethane	ND	0.0020	mg/L							
Carbon Disulfide	ND	0.0010	mg/L							
Carbon Tetrachloride	ND	0.0010	mg/L							
Chlorobenzene	ND	0.0010	mg/L							
Chloroethane	ND	0.0020	mg/L							
Chloroform	ND	0.0010	mg/L							
Chloromethane	ND	0.0020	mg/L							
cis-1,2-Dichloroethene	ND	0.0010	mg/L							
cis-1,3-Dichloropropene	ND	0.0004	mg/L							
Dibromochloromethane	ND	0.0010	mg/L							
Dibromomethane	ND	0.0010	mg/L							
Dichlorodifluoromethane	ND	0.0020	mg/L							
Diethyl Ether	ND	0.0010	mg/L							
Di-isopropyl ether	ND	0.0010	mg/L							
Ethyl tertiary-butyl ether	ND	0.0010	mg/L							
Ethylbenzene	ND	0.0010	mg/L							
Hexachlorobutadiene	ND	0.0006	mg/L							
Hexachloroethane	ND	0.0010	mg/L							
Isopropylbenzene	ND	0.0010	mg/L							
Methyl tert-Butyl Ether	ND	0.0010	mg/L							
Methylene Chloride	ND	0.0020	mg/L							
Naphthalene	ND	0.0010	mg/L							
n-Butylbenzene	ND	0.0010	mg/L							

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring

ESS Laboratory Work Order: 1507218

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8260B Volatile Organic Compounds										
Batch CG51036 - 5030B										
n-Propylbenzene	ND	0.0010	mg/L							
sec-Butylbenzene	ND	0.0010	mg/L							
Styrene	ND	0.0010	mg/L							
tert-Butylbenzene	ND	0.0010	mg/L							
Tertiary-amyl methyl ether	ND	0.0010	mg/L							
Tetrachloroethene	ND	0.0010	mg/L							
Tetrahydrofuran	ND	0.0050	mg/L							
Toluene	ND	0.0010	mg/L							
trans-1,2-Dichloroethene	ND	0.0010	mg/L							
trans-1,3-Dichloropropene	ND	0.0004	mg/L							
Trichloroethene	ND	0.0010	mg/L							
Trichlorofluoromethane	ND	0.0010	mg/L							
Trihalomethanes (Total)	ND	0.0010	mg/L							
Vinyl Acetate	ND	0.0050	mg/L							
Vinyl Chloride	ND	0.0010	mg/L							
Xylene O	ND	0.0010	mg/L							
Xylene P,M	ND	0.0020	mg/L							
Xylenes (Total)	ND	0.0020	mg/L							
Surrogate: 1,2-Dichloroethane-d4	*0.0227*		mg/L	*0.02500*		*91*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*0.0229*		mg/L	*0.02500*		*92*	*70-130*			
Surrogate: Dibromofluoromethane	*0.0218*		mg/L	*0.02500*		*87*	*70-130*			
Surrogate: Toluene-d8	*0.0233*		mg/L	*0.02500*		*93*	*70-130*			
LCS										
1,1,1,2-Tetrachloroethane	10.6		ug/L	10.00		106	70-130			
1,1,1-Trichloroethane	8.41		ug/L	10.00		84	70-130			
1,1,2,2-Tetrachloroethane	12.3		ug/L	10.00		123	70-130			
1,1,2-Trichloroethane	9.35		ug/L	10.00		94	70-130			
1,1-Dichloroethane	7.86		ug/L	10.00		79	70-130			
1,1-Dichloroethene	7.20		ug/L	10.00		72	70-130			
1,1-Dichloropropene	8.28		ug/L	10.00		83	70-130			
1,2,3-Trichlorobenzene	12.2		ug/L	10.00		122	70-130			
1,2,3-Trichloropropane	10.4		ug/L	10.00		104	70-130			
1,2,4-Trichlorobenzene	11.6		ug/L	10.00		116	70-130			
1,2,4-Trimethylbenzene	8.61		ug/L	10.00		86	70-130			
1,2-Dibromo-3-Chloropropane	10.3		ug/L	10.00		103	70-130			
1,2-Dibromoethane	11.5		ug/L	10.00		115	70-130			
1,2-Dichlorobenzene	9.66		ug/L	10.00		97	70-130			
1,2-Dichloroethane	8.18		ug/L	10.00		82	70-130			
1,2-Dichloropropane	7.69		ug/L	10.00		77	70-130			
1,3,5-Trimethylbenzene	8.70		ug/L	10.00		87	70-130			
1,3-Dichlorobenzene	9.52		ug/L	10.00		95	70-130			
1,3-Dichloropropane	11.5		ug/L	10.00		115	70-130			
1,4-Dichlorobenzene	9.45		ug/L	10.00		94	70-130			
1,4-Dioxane - Screen	202		ug/L	200.0		101	0-332			
1-Chlorohexane	8.97		ug/L	10.00		90	70-130			

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring

ESS Laboratory Work Order: 1507218

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8260B Volatile Organic Compounds										
Batch CG51036 - 5030B										
2,2-Dichloropropane	8.47		ug/L	10.00		85	70-130			
2-Butanone	54.5		ug/L	50.00		109	70-130			
2-Chlorotoluene	9.04		ug/L	10.00		90	70-130			
2-Hexanone	66.0		ug/L	50.00		132	70-130			B+
4-Chlorotoluene	9.01		ug/L	10.00		90	70-130			
4-Isopropyltoluene	8.37		ug/L	10.00		84	70-130			
4-Methyl-2-Pentanone	35.0		ug/L	50.00		70	70-130			
Acetone	73.8		ug/L	50.00		148	70-130			B+
Benzene	8.50		ug/L	10.00		85	70-130			
Bromobenzene	11.7		ug/L	10.00		117	70-130			
Bromochloromethane	8.50		ug/L	10.00		85	70-130			
Bromodichloromethane	9.29		ug/L	10.00		93	70-130			
Bromoform	16.0		ug/L	10.00		160	70-130			B+
Bromomethane	7.56		ug/L	10.00		76	70-130			
Carbon Disulfide	8.12		ug/L	10.00		81	70-130			
Carbon Tetrachloride	8.65		ug/L	10.00		86	70-130			
Chlorobenzene	9.31		ug/L	10.00		93	70-130			
Chloroethane	6.23		ug/L	10.00		62	70-130			B-
Chloroform	9.18		ug/L	10.00		92	70-130			
Chloromethane	4.24		ug/L	10.00		42	70-130			B-
cis-1,2-Dichloroethene	9.25		ug/L	10.00		92	70-130			
cis-1,3-Dichloropropene	9.36		ug/L	10.00		94	70-130			
Dibromochloromethane	11.8		ug/L	10.00		118	70-130			
Dibromomethane	8.65		ug/L	10.00		86	70-130			
Dichlorodifluoromethane	6.98		ug/L	10.00		70	70-130			
Diethyl Ether	7.51		ug/L	10.00		75	70-130			
Di-isopropyl ether	6.75		ug/L	10.00		68	70-130			B-
Ethyl tertiary-butyl ether	7.30		ug/L	10.00		73	70-130			
Ethylbenzene	9.34		ug/L	10.00		93	70-130			
Hexachlorobutadiene	9.31		ug/L	10.00		93	70-130			
Hexachloroethane	12.3		ug/L	10.00		123	70-130			
Isopropylbenzene	9.10		ug/L	10.00		91	70-130			
Methyl tert-Butyl Ether	8.55		ug/L	10.00		86	70-130			
Methylene Chloride	4.95		ug/L	10.00		50	70-130			B-
Naphthalene	8.71		ug/L	10.00		87	70-130			
n-Butylbenzene	8.83		ug/L	10.00		88	70-130			
n-Propylbenzene	9.04		ug/L	10.00		90	70-130			
sec-Butylbenzene	8.61		ug/L	10.00		86	70-130			
Styrene	8.62		ug/L	10.00		86	70-130			
tert-Butylbenzene	8.71		ug/L	10.00		87	70-130			
Tertiary-amyl methyl ether	7.37		ug/L	10.00		74	70-130			
Tetrachloroethene	8.27		ug/L	10.00		83	70-130			
Tetrahydrofuran	6.27		ug/L	10.00		63	70-130			B-
Toluene	7.83		ug/L	10.00		78	70-130			
trans-1,2-Dichloroethene	8.21		ug/L	10.00		82	70-130			

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring

ESS Laboratory Work Order: 1507218

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8260B Volatile Organic Compounds										
Batch CG51036 - 5030B										
trans-1,3-Dichloropropene	8.98		ug/L	10.00		90	70-130			
Trichloroethene	8.51		ug/L	10.00		85	70-130			
Trichlorofluoromethane	6.50		ug/L	10.00		65	70-130			B-
Trihalomethanes (Total)	46.3		mg/L							
Vinyl Acetate	10.7		ug/L	10.00		107	70-130			
Vinyl Chloride	6.50		ug/L	10.00		65	70-130			B-
Xylene O	8.65		ug/L	10.00		86	70-130			
Xylene P,M	17.4		ug/L	20.00		87	70-130			
Xylenes (Total)	26.1		mg/L							
Surrogate: 1,2-Dichloroethane-d4	*0.0238*		mg/L	*0.02500*		*95*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*0.0222*		mg/L	*0.02500*		*89*	*70-130*			
Surrogate: Dibromofluoromethane	*0.0214*		mg/L	*0.02500*		*86*	*70-130*			
Surrogate: Toluene-d8	*0.0254*		mg/L	*0.02500*		*102*	*70-130*			
LCS Dup										
1,1,1,2-Tetrachloroethane	9.43		ug/L	10.00		94	70-130	12	25	
1,1,1-Trichloroethane	8.55		ug/L	10.00		86	70-130	2	25	
1,1,2,2-Tetrachloroethane	12.6		ug/L	10.00		126	70-130	3	25	
1,1,2-Trichloroethane	9.38		ug/L	10.00		94	70-130	0.3	25	
1,1-Dichloroethane	9.36		ug/L	10.00		94	70-130	17	25	
1,1-Dichloroethene	8.26		ug/L	10.00		83	70-130	14	25	
1,1-Dichloropropene	9.15		ug/L	10.00		92	70-130	10	25	
1,2,3-Trichlorobenzene	12.9		ug/L	10.00		129	70-130	6	25	
1,2,3-Trichloropropane	12.8		ug/L	10.00		128	70-130	21	25	
1,2,4-Trichlorobenzene	13.1		ug/L	10.00		131	70-130	12	25	B+
1,2,4-Trimethylbenzene	11.7		ug/L	10.00		117	70-130	30	25	D+
1,2-Dibromo-3-Chloropropane	13.4		ug/L	10.00		134	70-130	26	25	B+, D+
1,2-Dibromoethane	9.51		ug/L	10.00		95	70-130	19	25	
1,2-Dichlorobenzene	12.8		ug/L	10.00		128	70-130	28	25	D+
1,2-Dichloroethane	9.26		ug/L	10.00		93	70-130	12	25	
1,2-Dichloropropane	9.95		ug/L	10.00		100	70-130	26	25	D+
1,3,5-Trimethylbenzene	12.6		ug/L	10.00		126	70-130	36	25	D+
1,3-Dichlorobenzene	12.5		ug/L	10.00		125	70-130	27	25	D+
1,3-Dichloropropane	10.6		ug/L	10.00		106	70-130	8	25	
1,4-Dichlorobenzene	11.7		ug/L	10.00		117	70-130	22	25	
1,4-Dioxane - Screen	253		ug/L	200.0		127	0-332	22	200	
1-Chlorohexane	9.03		ug/L	10.00		90	70-130	0.7	25	
2,2-Dichloropropane	8.39		ug/L	10.00		84	70-130	0.9	25	
2-Butanone	79.6		ug/L	50.00		159	70-130	37	25	B+, D+
2-Chlorotoluene	12.5		ug/L	10.00		125	70-130	32	25	D+
2-Hexanone	76.0		ug/L	50.00		152	70-130	14	25	B+
4-Chlorotoluene	12.2		ug/L	10.00		122	70-130	30	25	D+
4-Isopropyltoluene	11.9		ug/L	10.00		119	70-130	35	25	D+
4-Methyl-2-Pentanone	51.9		ug/L	50.00		104	70-130	39	25	D+
Acetone	98.4		ug/L	50.00		197	70-130	29	25	B+, D+
Benzene	9.32		ug/L	10.00		93	70-130	9	25	

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring

ESS Laboratory Work Order: 1507218

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8260B Volatile Organic Compounds										
Batch CG51036 - 5030B										
Bromobenzene	13.5		ug/L	10.00		135	70-130	14	25	B+
Bromochloromethane	9.46		ug/L	10.00		95	70-130	11	25	
Bromodichloromethane	8.92		ug/L	10.00		89	70-130	4	25	
Bromoform	10.0		ug/L	10.00		100	70-130	46	25	D+
Bromomethane	9.16		ug/L	10.00		92	70-130	19	25	
Carbon Disulfide	8.94		ug/L	10.00		89	70-130	10	25	
Carbon Tetrachloride	8.76		ug/L	10.00		88	70-130	1	25	
Chlorobenzene	9.26		ug/L	10.00		93	70-130	0.5	25	
Chloroethane	7.98		ug/L	10.00		80	70-130	25	25	
Chloroform	9.19		ug/L	10.00		92	70-130	0.1	25	
Chloromethane	6.71		ug/L	10.00		67	70-130	45	25	B-
cis-1,2-Dichloroethene	9.39		ug/L	10.00		94	70-130	2	25	
cis-1,3-Dichloropropene	9.92		ug/L	10.00		99	70-130	6	25	
Dibromochloromethane	9.41		ug/L	10.00		94	70-130	23	25	
Dibromomethane	9.11		ug/L	10.00		91	70-130	5	25	
Dichlorodifluoromethane	6.54		ug/L	10.00		65	70-130	7	25	B-
Diethyl Ether	9.94		ug/L	10.00		99	70-130	28	25	D+
Di-isopropyl ether	9.95		ug/L	10.00		100	70-130	38	25	D+
Ethyl tertiary-butyl ether	9.92		ug/L	10.00		99	70-130	30	25	D+
Ethylbenzene	9.47		ug/L	10.00		95	70-130	1	25	
Hexachlorobutadiene	13.1		ug/L	10.00		131	70-130	34	25	B+
Hexachloroethane	12.2		ug/L	10.00		122	70-130	0.7	25	
Isopropylbenzene	12.6		ug/L	10.00		126	70-130	32	25	D+
Methyl tert-Butyl Ether	9.49		ug/L	10.00		95	70-130	10	25	
Methylene Chloride	8.97		ug/L	10.00		90	70-130	58	25	D+
Naphthalene	11.8		ug/L	10.00		118	70-130	30	25	D+
n-Butylbenzene	11.9		ug/L	10.00		119	70-130	30	25	D+
n-Propylbenzene	12.2		ug/L	10.00		122	70-130	29	25	D+
sec-Butylbenzene	12.0		ug/L	10.00		120	70-130	33	25	D+
Styrene	9.41		ug/L	10.00		94	70-130	9	25	
tert-Butylbenzene	12.3		ug/L	10.00		123	70-130	34	25	D+
Tertiary-amyl methyl ether	8.96		ug/L	10.00		90	70-130	19	25	
Tetrachloroethene	9.19		ug/L	10.00		92	70-130	11	25	
Tetrahydrofuran	9.96		ug/L	10.00		100	70-130	45	25	D+
Toluene	9.23		ug/L	10.00		92	70-130	16	25	
trans-1,2-Dichloroethene	8.44		ug/L	10.00		84	70-130	3	25	
trans-1,3-Dichloropropene	8.97		ug/L	10.00		90	70-130	0.1	25	
Trichloroethene	8.93		ug/L	10.00		89	70-130	5	25	
Trichlorofluoromethane	7.07		ug/L	10.00		71	70-130	8	25	
Trihalomethanes (Total)	37.5		mg/L							
Vinyl Acetate	12.8		ug/L	10.00		128	70-130	17	25	
Vinyl Chloride	8.20		ug/L	10.00		82	70-130	23	25	
Xylene O	9.15		ug/L	10.00		92	70-130	6	25	
Xylene P,M	19.1		ug/L	20.00		96	70-130	9	25	
Xylenes (Total)	28.3		mg/L							

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring

ESS Laboratory Work Order: 1507218

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8260B Volatile Organic Compounds										
Batch CG51036 - 5030B										
Surrogate: 1,2-Dichloroethane-d4	*0.0226*		mg/L	*0.02500*		*90*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*0.0223*		mg/L	*0.02500*		*89*	*70-130*			
Surrogate: Dibromofluoromethane	*0.0223*		mg/L	*0.02500*		*89*	*70-130*			
Surrogate: Toluene-d8	*0.0240*		mg/L	*0.02500*		*96*	*70-130*			
Volatile Organics Tentatively Identified Compounds										
Batch CG51036 - 5030B										
Blank										
Tentatively Identified Compound	ND	0.001	mg/L							

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring

ESS Laboratory Work Order: 1507218

Notes and Definitions

U	Analyte included in the analysis, but not detected
D+	Relative percent difference for duplicate is outside of criteria (D+).
D	Diluted.
C-	Continuing Calibration recovery is below lower control limit (C-).
B+	Blank Spike recovery is above upper control limit (B+).
B-	Blank Spike recovery is below lower control limit (B-).
ND	Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DL	Detection Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
[CALC]	Calculated Analyte
SUB	Subcontracted analysis; see attached report

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring

ESS Laboratory Work Order: 1507218

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/find/labs/analytical/ESS.pdf

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/documents/AllLabs.xls

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/Labcert/Labcert.aspx

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424
http://des.nh.gov/organization/divisions/water/dwgb/nhelap/index.htm

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/DEP_OPRA/OpraMain/pi_main?mode=pi_by_site&sort_order=PI_NAMEA&Select+a+Site:=58715

United States Department of Agriculture Soil Permit: P330-12-00139

Pennsylvania: 68-01752
http://www.depweb.state.pa.us/portal/server.pt/community/labs/13780/laboratory_accreditation_program/590095

Sample and Cooler Receipt Checklist

Client: Resource Controls
Client Project ID: _____
Shipped/Delivered Via: Client

ESS Project ID: 15070218
Date Project Due: 7/16/15
Days For Project: 5 Day

Items to be checked upon receipt:

1. Air Bill Manifest Present?	* No	10. Are the samples properly preserved?	Yes
Air No.:		11. Proper sample containers used?	Yes
2. Were Custody Seals Present?	No	12. Any air bubbles in the VOA vials?	No
3. Were Custody Seals Intact?	N/A	13. Holding times exceeded?	No
4. Is Radiation count < 100 CPM?	Yes	14. Sufficient sample volumes?	Yes
5. Is a cooler present?	Yes	15. Any Subcontracting needed?	No
Cooler Temp: **13.2**		16. Are ESS labels on correct containers?	**Yes|No**
Iced With: **Icepacks**		17. Were samples received intact?	**Yes|No**
6. Was COC included with samples?	Yes	ESS Sample IDs:	
7. Was COC signed and dated by client?	Yes	Sub Lab:	
8. Does the COC match the sample	Yes	Analysis:	
9. Is COC complete and correct?	Yes	TAT:	

EB 7/9/15

18. Was there need to call project manager to discuss status? If yes, please explain.

_____

_____

_____

Who was called?:_____ By whom? _____

Sample Number	Properly Preserved	Container Type	# of Containers	Preservative
1	Yes	40 ml - VOA	3	HCL
2	Yes	250 ml Plastic	1	HNO3
2	Yes	250 ml Plastic	1	NP
2	Yes	40 ml - VOA	3	HCL
3	Yes	250 ml Plastic	1	HNO3
3	Yes	250 ml Plastic	1	NP
3	Yes	40 ml - VOA	3	HCL
4	Yes	250 ml Plastic	1	HNO3
4	Yes	250 ml Plastic	1	NP
5	Yes	250 ml Plastic	1	HNO3
5	Yes	250 ml Plastic	1	NP

Completed By: _____ Date/Time: 7/9/15 1531
Reviewed By: _____ Date/Time: 7/9/15 1543

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

ESS Lab # 1507218

Turn Time 5-day Standard Other

Regulatory State: MA (RI) CT NH NJ NY ME Other

Is this project for any of the following: (please circle)
MA-MCP Navy USACE CT DEP Other

Reporting Limits - RI GA

Electonic Deliverables (Excel) Access (PDF)

Co. Name: Pressure Controls		Project #: 7131A	Project Name: Bay Spring
Contact Person: Mark House		Proj. Location: Barrington	
Address: 474 Broadway	City, State: Pawtucket, RI	Zip: 02446	PO #: 7131A-11
Tel. 401-726-1460	email: mhouse@pressurecontrols.com		

ESS Lab ID	Date	Collection Time	Grab-G Composite-C	Matrix	Sample ID	Pres Code	# of Containers	Type of Container	Vol of Container	Total RCRA 8 metals	VOC 8260B	Dissolved RCRA 4 metals
1	7/9/15	11:05	G	GW	MW-105	2/5	3	V			X	
2		1400	G	GW	MW-104	1/2/4	5	V/P		X	X	X
3		12:25	G	GW	MW-3	1/2/4	5	V/P		X	X	X
4		9:40	G	GW	MW-106	1/4	2	P		X		X
5		12:45	G	GW	MW-101	1/4	2	P		X		X

Container Type: P-Poly G-Glass AG-Amber Glass S-Sterile V-VOA

Matrix: S-Soil SD-Solid D-Sludge WW-Wastewater GW-Groundwater SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filter

Cooler Present ✓ Yes ___ No

Seals Intact ___ Yes ___ No NA: ✓

Cooler Temperature: 13.2 ice packs

Internal Use Only
[ ] Pickup 0
[ ] Technician ___

Preservation Code: 1-NP, 2-HCl, 3-H2SO4, 4-HNO3, 5-NaOH, 6-MeOH, 7-Asorbic Acid, 8-ZnAct, 9-___

Sampled by: BBC

Comments: Please filter Dissolved RCRA 4 samples

Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)	Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)
[signature] 7/9 14:45	M. Marid 7/9/15 1445		
Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)	Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)

* By circling MA-MCP, client acknowledges sampels were collected in accordance with MADEP CAM VIIA

Please fax to the laboratory all changes to Chain of Custody

Report Method Blank & Laboratory Control Sample Results

ATTACHMENT G

Stormwater Infiltration Diagram

FORMER O'BANNON CORPORATION
Manufacturers of Artificial Leather
90 Bay Spring Ave
Map 2/Lot 154

READ AVENUE

ADAMS AVENUE

BAY SPRING AVENUE

RCA-3 Excavation

RCA-1 Excavation

Location of Former Water Tower (100,000 Gal)

Laboratory

Coating Room

Storage

Area of Buried Trash

Suspect Cistern

Solvent Storage Tanks (5)

Acetone Tank

Former Pickle Building

Cotton Storage

Shed

Spent Acid Tanks (In Concrete Pits)

Alcohol Tank

Area of Buried Trash

Ice Ho.

Stock Ho. No. 2

Garage

Drown Cove

Annawamscutt Brook

FORMER PILLING CHAIN-CO MAIN BUILDING 90 BAY SPRING AVE

N

LEGEND

- Property Line
- Existing Building
- Former Building
- Former Tank(s)
- Beach
- Salt Marsh
- Extent of Excavation
- Approximate 50 ft Vegetated Buffer
- Approximate 75 ft CRMC Setback
- Approximate 200 ft CRMC Juristiction
- Hydrant
- Existing Monitoring Well
- Former Monitoring Well
- Test Pit
- Soil Sample
- Concentrated Hydraulic Loading Allowed

0 17.5 35 70 Feet

Approximate Scale: 1 inch = 70 feet

PREPARED BY:

Resource Controls
Engineering & Environmental Solutions

DRAWING DESCRIPTION:

STORMWATER INFILTRATION DIAGRAM

CLIENT:

Bay Spring Realty Co.

LOCATION:

**90 BAY SPRING AVENUE
BARRINGTON, RHODE ISLAND**

DESIGNED BY:	CHECKED BY:	APPROVED BY:
BPC	JVF	MJH

DRAWING DATE:	SHEET NUMBER:
07/10/2015	1 of 1

PROJECT NUMBER:	DRAWING NAME:
7131A	WTEC PLAN

FIGURE 3

Data Sources:

1. ESRI ArcGIS Bing Basemap Hybrid
2. 1921 Site Plan by Geisser Engineering
3. 1921 Sanborn Map
4. Barrington Online GIS Parcel Map
5. Rhode Island Geographic Information System (RIGIS)
6. Field activities conducted by Resource Controls

Note: Locations of property lines and site features are approximate.

Path: P:\7000\7131A.00 Bay Spring realty Co., Barrington, RI\Graphics\GIS\7131A_SW_Infiltration_Diagram.mxd

ATTACHMENT H

Additional Limitations

ADDITIONAL LIMITATIONS

1. The observations described in this Report were made under the conditions stated herein. The conclusions presented in the Report are based solely upon the services described therein and not on scientific tasks or procedures beyond the scope of described services or the time and budgetary constraints imposed by Client. The work described in the Report was carried out in accordance with our Proposal and Associated Statement of Standard Terms and Conditions.

2. In preparing the Report, Resource Controls has relied on certain information provided by state and local officials and other parties referenced therein and on information contained in the files of state and/or local agencies available to Resource Controls at the time of the site evaluation. Although there may have been some degree of overlap in the information provided by the various sources, Resource Controls did not attempt to independently verify the accuracy or completeness of all information reviewed or received during the course of this site assessment.

3. Observations and explorations were made of the site as indicated within the Report. Where access to portions of the site were unavailable or limited, Resource Controls renders no opinion as to the presence of hazardous materials, asbestos, lead paint or oil, or to the presence of indirect evidence relating to the same, in that portion of the site or structure. In addition, Resource Controls renders no opinion as to the presence of hazardous materials, lead paint, oil or asbestos or to the presence of indirect evidence relating to hazardous materials, oil, lead paint or asbestos, where direct observation of the interior walls, floor, or ceiling of a structure on a site was obstructed by objects or coverings on or over these structures.

4. The purpose of this Report was to assess the physical and chemical characteristics of the subject site with respect to the presence in the environment of hazardous materials, lead paint, asbestos or oil. No specific attempt was made to check the regulatory compliance of present or past owners or operators of the site with federal, state or local laws and regulations, environmental or otherwise.

5. Except as noted within the text of this Report, no quantitative laboratory testing was performed as part of this evaluation. Where such analyses have been conducted by an outside laboratory, Resource Controls has relied upon the data provided and has not conducted an independent third party evaluation of the reliability of this data.

6. Chemical analyses performed for specific parameters during the course of studies have been used, in part, as a basis for determining the areas of environmental concern. Additional chemical constituents not searched for may be present at the site. Defined areas of environmental concern do not cover the potential additional constituents.

7. Governmental agencies' interpretations, requirements and enforcement policies may impact the type and scope of any site remediation required for a site. In addition, statutes, rules and regulations may be legislatively changed and inter-agency and intra-agency policies may be changed from present practice. If such changes occur, it may be necessary to re-evaluate their impact on the scope of any site remediation required.

8. Any water level readings made in the test pits, borings and/or wells and were made under the conditions stated on the logs. This data may have been reviewed and interpretations have been made in the text of this Report. However, it must be noted that fluctuations in the level of groundwater may occur due to variations in rainfall, temperature and other factors different from those prevailing at the time measurements were made.

9. Any and all cost estimates or opinions presented are based on Resource Controls opinion of most probable costs and are based on information available at the time of the estimate. Such estimates may vary from actual contract values based on many market and engineering variables beyond the control of Resource Controls. No warranty or guarantee is offered on the accuracy or validity of the estimates provided.