MACTEC

engineering and constructing a better tomorrow

April 3, 2008

Mr. Joseph T. Martella II, Senior Engineer
RIDEM Office of Waste Management
Site Remediation Program
235 Providence Street
Providence, RI 02908

RE: Building N Underground Storage Tanks Closure Report
Former Gorham Manufacturing Facility
333 Adelaide Avenue, Providence, Rhode Island
MACTEC Project No. 3650050041.15

Dear Mr. Martella:

This letter summarizes the recent investigations and closure activities of the Building N Underground Storage Tanks (USTs) conducted at the Former Gorham Manufacturing Facility, 333 Adelaide Avenue, Providence, Rhode Island (the Site) in January 2008. This work was done in direct coordination with Rhode Island Department of Environmental Management (RIDEM) and as proposed in MACTEC Engineering and Consulting, Inc. (MACTEC) letter to RIDEM, dated January 8, 2008.

PREVIOUS WORK ACTIVITIES

Investigations conducted in December 2007 identified two USTs associated with former Building N, located approximately 20-25 feet below the ground surface (bgs), north of the existing retail building (Figure 1). During this investigation a sample was collected from the east UST and from soils adjacent to both USTs and analyzed for volatile organic compounds (VOCs). Analytical results for the water in the east UST identified low levels of VOCs below RIDEM Category GA groundwater standards (and U.S. Environmental Protection Agency (USEPA) Risk-Based Concentrations), which was consistent with 1995 investigation results of the eastern UST (Appendix C). Also, low levels of VOCs were detected in soil adjacent to the USTs below RIDEM residential direct exposure criteria.

WORK ACTIVITIES CONDUCTED

MACTEC and Clean Harbors Environmental Services (Clean Harbors) mobilized to the Site on January 14, 2008 and gained access to the work area by temporarily removing approximately 60

feet of chain link fencing installed by the City of Providence along the border of the Park Parcel and behind (north of) the retail buildings. Clean Harbors staked haybales downgradient of the USTs, small diameter trees and brush were cleared, and the two USTs were partially uncovered (approximately 5 linear feet of the USTs were exposed) with a PC-200 excavator.

A 2" diameter hole was drilled into the northern end of the west UST, and a water sample was collected. The water from the UST was under pressure since the UST was full and slightly lower at the north end. Thus, the water in the UST flowed out of the 2" hole and was collected in sample bottles. This hole was immediately plugged with a J-plug, which is commonly used to plug monitoring wells. The sample was labeled "West UST" and submitted under chain of custody to ESS Laboratory of Cranston, Rhode Island for 24 hour turn-around analysis of VOCs by EPA Method 8260 and semi-volatile organic compounds (SVOCs) by Method 8270C. The SVOC analysis was included in the analysis because the water from the west UST was discolored, and had a petroleum odor.

The analytical results for the water sample from the west UST are discussed further in the "Laboratory Analytical Results" section below; however, the results were similar to the east UST (detected concentrations were below RIDEM Category GA groundwater standards). Thus, Clean Harbors mobilized a vactor truck (3,000 gallon capacity) and frac tank (Baker Tank, 20,000 gallon capacity) to pump out and containerize the contents of the USTs (Appendix A). On January 17 and January 18, approximately 5,610 gallons of water were pumped out from the east UST, and approximately 8,745 gallons of water were pumped out from the west UST. The water from the USTs was transferred from the vactor truck to the frac tank on-site (Appendix A). Then, Clean Harbors transferred the water from the frac tank to a trailer on-site (Appendix A), and transported the water to the Clean Harbors disposal facility in South Portland, Maine. Bills of lading for this water are included in Appendix B.

Clean Harbors tested the air in the USTs for oxygen, lower explosion limit (LEL), hydrogen sulfide, and VOCs with a 5-gas meter. Once the concentration of oxygen was between 19.5% and 23.5% and the LEL was 0% inside the USTs, Clean Harbors cut 2 ft diameter holes at the north end of both USTs. Clean Harbors personnel entered the USTs with a full-face respirator to clean the inside of the USTs. Clean Harbors followed their site-specific confined space procedure.

The USTs were cleaned with a pressure washer, and a squeegee was used to push the solids and water into the suction line of the vactor truck for removal. The sidewalls of the west UST were covered with an oily film, and the sidewalls of the east UST had surface pitting/scaling. However, both USTs appeared to be in good condition, and no visual or olfactory evidence of impacted soil was detected in the soil around the USTs. Both USTs were cleaned on January 18, 2008. Both USTs were confirmed to be 7 ft diameter steel tanks, 3/8" thick, and 30 ft long (approximately 8,800 gallons each). Tank bottom sludge (617 gallons) from the cleaning of the two USTs was transported by trailer to the Clean Harbors disposal facility in Braintree, Massachusetts. The bill of lading is included in Appendix B.

CONFIRMATORY TESTING AT USTS AND WORK ACTIVITIES CONDUCTED AT BRICK STRUCTURE

On January 21, 2008, Clean Harbors excavated soil from the north side of both USTs, exposing the entire downgradient side of the USTs. MACTEC accessed the soil beneath the USTs using a hand core with extension rods to collect representative soil samples from the USTs, consistent with RIDEM UST regulations. Soil samples were collected 2' south of the north end of each UST immediately below the bottom of the USTs (Appendix A). The soil sample collected below the west UST was labeled "SBWest00" and the soil sample collected below the east UST was labeled "SBEast00". The soil samples were submitted under chain of custody to ESS Laboratory for 24 hour turn-around analysis for VOCs. There was no visual or olfactory evidence of impacted soil surrounding the USTs and below the USTs, and groundwater was not encountered in the excavation at the bottom of the USTs.

Clean Harbors contracted Consolidated Concrete Corporation of East Providence, Rhode Island to fill the USTs with flowable fill (concrete slurry) on January 22, 2008. In accordance with RIDEM UST Closure Regulations, approximately 80 cubic yards (CY) of flowable fill were placed in the USTs to fill both of them. An additional 10 CY of flowable fill were placed over the USTs to fully seal the access points of the USTs. On-site soil was placed over the flowable fill, and the area was graded (Appendix A).

On January 21, 2008, MACTEC directed Clean Harbors to conduct an additional excavation east of the eastern UST to investigate the manway identified during the December 2007 UST investigations. The brick structure was located and determined that it was not a manway to the USTs. This structure was found fully intact with a solid brick cover over the top and had a

concrete base. The brick structure appeared to be a former oil/water separator with piping and valves (Appendix A). There was soil inside the structure which had a petroleum odor and was stained black. MACTEC collected a soil sample from inside the brick structure (labeled "Brickpit"), and it was submitted under chain of custody to ESS Laboratory for 24 hour turn-around analysis for VOCs, SVOCs, and total petroleum hydrocarbons (TPH).

Based on the analytical results of the soil from within the brick structure, Clean Harbors excavated the soil from the brick structure, as well as most of the brick structure, on January 23, 2008 and loaded it into two 25 CY roll-offs on-site. The roll-offs were transported to ESMI, Loudon, New Hampshire, for recycling of 38.66 tons of soil (Appendix B).

The bottom of the brick structure was concrete, and it was intact. The bottom was broken by the excavator, and a confirmatory soil sample (labeled "Brickconfirm") was collected in the 2 ft thick soil layer below the bottom of the brick structure and above the groundwater table (approximately 30 ft bgs). The soil sample was submitted under chain of custody to ESS Laboratory for standard turn-around analysis for SVOCs and TPH. Soil outside of the brick structure did not appear to be impacted based on visual and olfactory evidence.

The remains of the brick structure, at the south end of the structure, could not be removed because it was supporting approximately 20 ft of the hillside immediately below the City of Providence chain link fence. The excavation was backfilled with on-site soil, and the entire disturbed area (including area above the USTs) was re-graded with on-site soil.

LABORATORY ANALYTICAL RESULTS

The laboratory report for the liquid sample (water) for the west UST (West UST) is included in Appendix C. These results were similar to the analytical results of the east UST – the sample was water, with trace levels of VOCs and SVOCs below RIDEM GA standards. The four VOCs detected in the water sample included naphthalene, O-xylene, and 1,2,4- and 1,3,5-trimethylbenzene. The detected concentrations and associated RIDEM Category GA Groundwater Standards (drinking-water standards) are shown in Table 1 for both USTs:

There are no drinking water standards for trimethylbenzene. However, the USEPA Region III tap water Risk-Based Concentration is 0.330 milligrams per liter (mg/L). It should also be noted that

the east UST water sample collected in December 2007 was in contact with surrounding soil and may explain the detection of tetrachloroethene.

SVOCs detected in the west UST were 2-methylnaphthalene (0.03 mg/L), acenaphthene (0.00032 mg/L), fluorene (0.00052 mg/L), naphthalene (0.00317 mg/L), and phenanthrene (0.00046 mg/L). Of these detected compounds, only naphthalene has a RIDEM Category GA Groundwater Standard (0.02 mg/L).

The laboratory results for the two soil samples collected below the USTs are included in Appendix C. The soil sample collected below the east UST (SBEast00) had a trace concentration of tetrachloroethene (0.0057 milligrams per kilogram (mg/kg)), which was below the RIDEM residential direct exposure criteria for tetrachloroethene (12 mg/kg). There were no detected VOCs in the soil sample collected below the west UST (SBWest00).

Lastly, the laboratory results for the soil sample collected from inside the brick structure and the confirmatory soil sample below the brick structure are also included in Appendix C. The analytical summary of the brick structure (Brickpit) is as follows: six VOCs were detected, and all compounds were below RIDEM residential direct exposure criteria; eighteen SVOCs were detected, eleven compounds were above RIDEM residential direct exposure criteria and four compounds were above RIDEM industrial/commercial direct exposure criteria; and TPH (3440 mg/kg) exceeded the RIDEM industrial/commercial direct exposure criteria (2500 mg/kg). This soil was removed from the site for recycling at ESMI in New Hampshire. The confirmatory soil sample collected below the brick structure (Brickconfirm) was non-detect for all SVOCs and TPH. Table 2 summarizes detected compounds in soil samples SBEast00, SBWest00, Brickpit, and Brickconfirm.

CONCLUSIONS

The USTs at the former Building N were closed consistent with RIDEM UST regulations. The water within both USTs met RIDEM GA standards and were pumped out and disposed off-site. Then, both USTs were filled with flowable fill. Based on the analytical results of the soil samples collected adjacent to and below the USTs, the soil met RIDEM residential direct exposure criteria and was not impacted. Soil from within a brick structure located to the east of the USTs was impacted, and the soil was removed and disposed off-site for recycling. Based on the analytical

results of the soil samples collected below the brick structure, the soil met RIDEM residential direct exposure criteria and was not impacted. The area has been re-graded.

PROPOSED ACTIONS

This area is located within the Phase I Cap for the Park Parcel; thus, no other restoration activities will be performed at this time. This site will receive additional soil cover and grading to support the final grades for the recreational use of the Park Parcel. The draft Remedial Action Work Plan (RAWP) for the Phase I Cap was submitted to RIDEM in July 2007. This RAWP will be finalized, and a public meeting held pending review comments from RIDEM. In addition, groundwater samples will be collected downgradient of the USTs as part of a site-wide groundwater investigation.

Please contact either Greg Simpson of Textron (401) 457-2635 or Dave Heislein at (781) 245-6606 with any questions on the investigation activities that were conducted in January 2008 or the planned Phase I Cap.

Sincerely,
MACTEC Engineering and Consulting, Inc.

Philip J. Muller
Project Engineer

David E. Heislein
Principal Engineer

Attachments: Tables
Figures
Appendix A – Photographs
Appendix B – Bills of Lading and Disposal Facility Weight Slips
Appendix C – ESS Laboratory Reports (March 1995 UST Report and 2008)

cc: T. Deller, City of Providence
P. Grivers, EA Engineering, Science, and Technology
T. Regan, EA Engineering, Science, and Technology
G. Simpson, Textron, Inc.
G. Wilson, Kimco Realty Corporation (including tenants)
J. Morgan, The Stop & Shop Supermarket Co. LLC
Knight Memorial Library Repository
MACTEC Project File [P:\TEXTRON\GORHAM\Building N USTs\Building N USTs completion letter.doc]

Tables

Table 1
Summary of Detected Compounds in UST Liquid Contents
Former Gorham Manufacturing Facility
333 Adelaide Avenue
Providence, Rhode Island

Compound	RIDEM GA Drinking Water Standard (mg/L)	West UST (1/15/08) Detected Conc. (mg/L)	East UST (12/17/07) Detected Conc. (mg/L)	East UST (2/24/95) Detected Conc. (mg/L)
Naphthalene	0.02	0.0079	0.0040	NOT ANALYZED
Tetrachloroethene	0.005	<0.0010	0.0014	<0.005
Xylene, O	10	0.0016	0.0017	NOT ANALYZED
Xylenes, Total	10	<0.0030	0.0053	<0.010
1,2,4-trimethylbenzene	0.330	0.0070	0.0043	NOT ANALYZED
1,3,5-trimethylbenzene	0.330	0.0012	0.0067	NOT ANALYZED

Prepared by: PJM
Checked by: ARM

Notes:
RIDEM - Rhode Island Department of Environmental Management
mg/L - Milligrams per Liter
UST - Underground Storage Tank

Table 2
Summary of Detected Compounds in Soil Analytical Results - Building N UST Closure January 2008
Former Gorham Manufacturing Facility
333 Adelaide Avenue
Providence, Rhode Island

	Rhode Island Direct Exposure Criteria		SBEast00 0801239-02	SBWest00 0801239-01	Brickpit1 0801239-03	Brick Confirm 0801264-01
	Residential	Industrial / Commercial	1/21/2008	1/21/2008	1/21/2008	1/23/2008
Volatile Organics by Low Level (mg/Kg)						
1,2,4-Trimethylbenzene			0.0042 U	0.0054 U	**0.0224**	
1,3,5-Trimethylbenzene			0.0042 U	0.0054 U	**0.0064**	
4-Isopropyltoluene			0.0042 U	0.0054 U	**0.0193**	
Isopropylbenzene	27	10000	0.0042 U	0.0054 U	**0.0064**	
Naphthalene	54	10000	0.0042 U	0.0054 U	**0.379 E**	
sec-Butylbenzene			0.0042 U	0.0054 U	**0.0077**	
Tetrachloroethene	12	110	**0.0057**	0.0054 U	0.006 U	
Volatile Organics (mg/Kg)						
1,2,4-Trimethylbenzene					**0.0932**	
1,3,5-Trimethylbenzene					**0.0392 J**	
4-Isopropyltoluene					**0.0719 J**	
Naphthalene	54	10000			**2.92**	
Semivolatile Organics (mg/Kg)						
2-Methylnaphthalene	123	10000			**4.41**	0.377 U
Acenaphthene	43	10000			**8.71**	0.377 U
Anthracene	35	10000			**14**	0.377 U
Benzo(a)anthracene	**0.9**	**7.8**			**34.7**	0.377 U
Benzo(a)pyrene	**0.4**	**0.8**			**23.7**	0.189 U
Benzo(b)fluoranthene	**0.9**	**7.8**			**35.7**	0.377 U
Benzo(g,h,i)perylene	**0.8**	10000			**4.38**	0.377 U
Benzo(k)fluoranthene	**0.9**	78			**23.8**	0.377 U
Carbazole					**5.64**	0.377 U
Chrysene	**0.4**	780			**28.8**	0.189 U
Dibenz(a,h)anthracene	**0.4**	**0.8**			**2.94**	0.189 U
Dibenzofuran(1)	160	4100			**7.24**	0.377 U
Fluoranthene	**20**	10000			**85.1 D**	0.377 U
Fluorene	28	10000			**10.8**	0.377 U
Indeno(1,2,3-cd)pyrene	**0.9**	7.8			**5.23**	0.377 U
Naphthalene	54	10000			**7.85**	0.377 U
Phenanthrene	**40**	10000			**85.2 D**	0.377 U
Pyrene	**13**	10000			**76 D**	0.377 U
TPH (mg/Kg)						
Total Petroleum Hydrocarbons	**500**	**2500**			**3440**	39.1 U

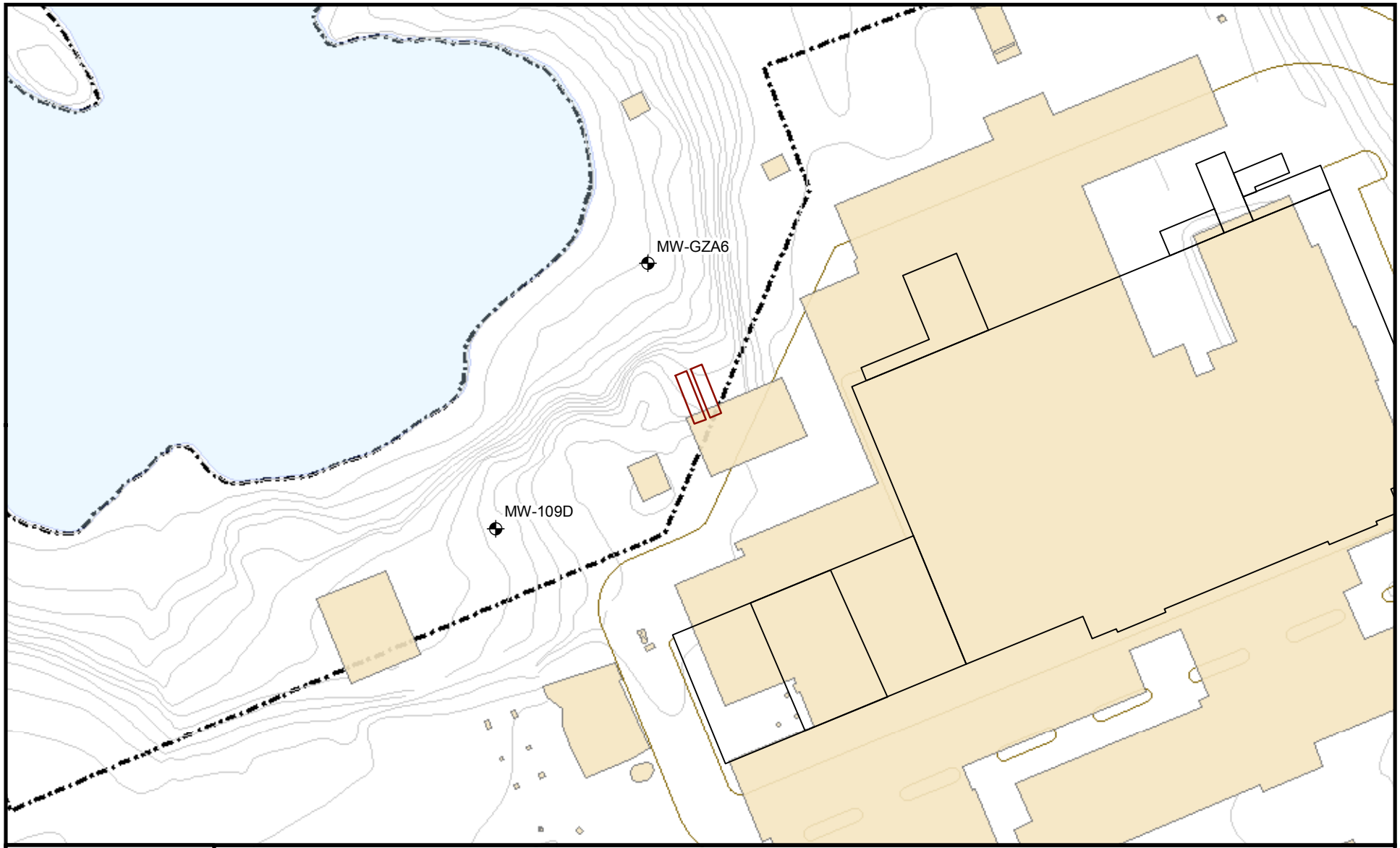
Notes:
(1) Dibenzofuran value calculated.

Prepared by / Date: KJC 01/30/08
Checked by / Date: PJM 01/31/08

Bold value indicates compound detected.
Shaded criteria indicates a detection above the criteria.

mg/kg - milligrams per kilogram
E - Reported above the quanitation limit; Estimated value.
U - Not detected, value is the detection limit.
D - Diluted.
J - Estimated value.

Figures



MACTEC

N

0 40 80 Feet

Prepared by BJR | Checked by DEH

Legend

- Monitoring Well
- Former UST Location
- Current Building
- Historic Buildings
- Pavement Outline
- Elevation

Figure 1
Location of USTs

Former Building N
333 Adelaide Avenue
Providence, Rhode Island

Document: P:\TEXTRON\GORHAM\GIS\MapDocuments\StopShopVI.mxd PDF: P:\TEXTRON\GORHAM\GIS\Figures\Location of USTs.pdf 04/04/2008 12:41 PM bjroden

Appendix A

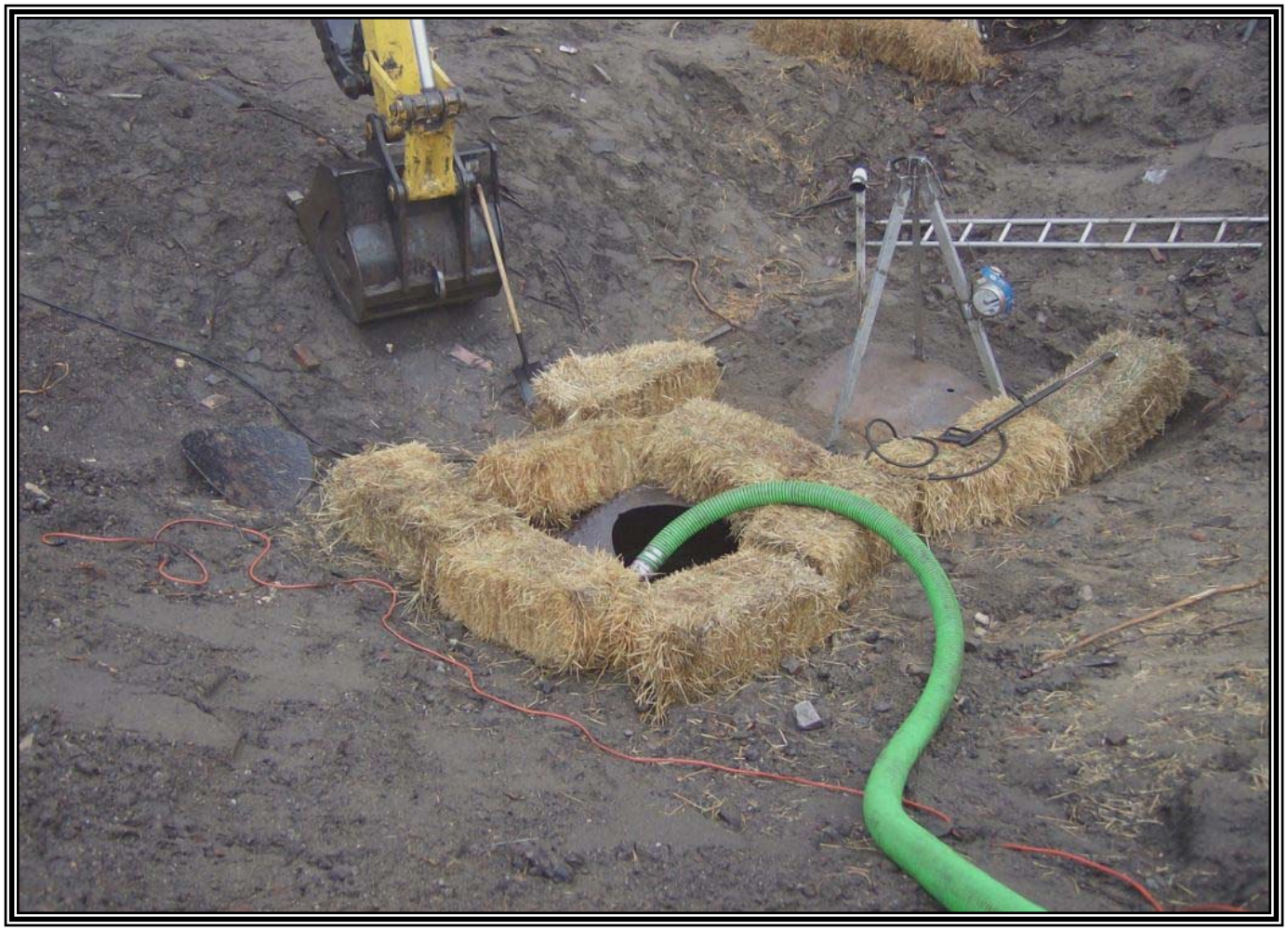
Photographs

Building N UST Completion
January 2008
333 Adelaide Ave
Providence, Rhode Island

Photo 1: East and West USTs uncovered, facing south.

Building N UST Completion
January 2008
333 Adelaide Ave
Providence, Rhode Island

Photo 2: West UST pump-out.

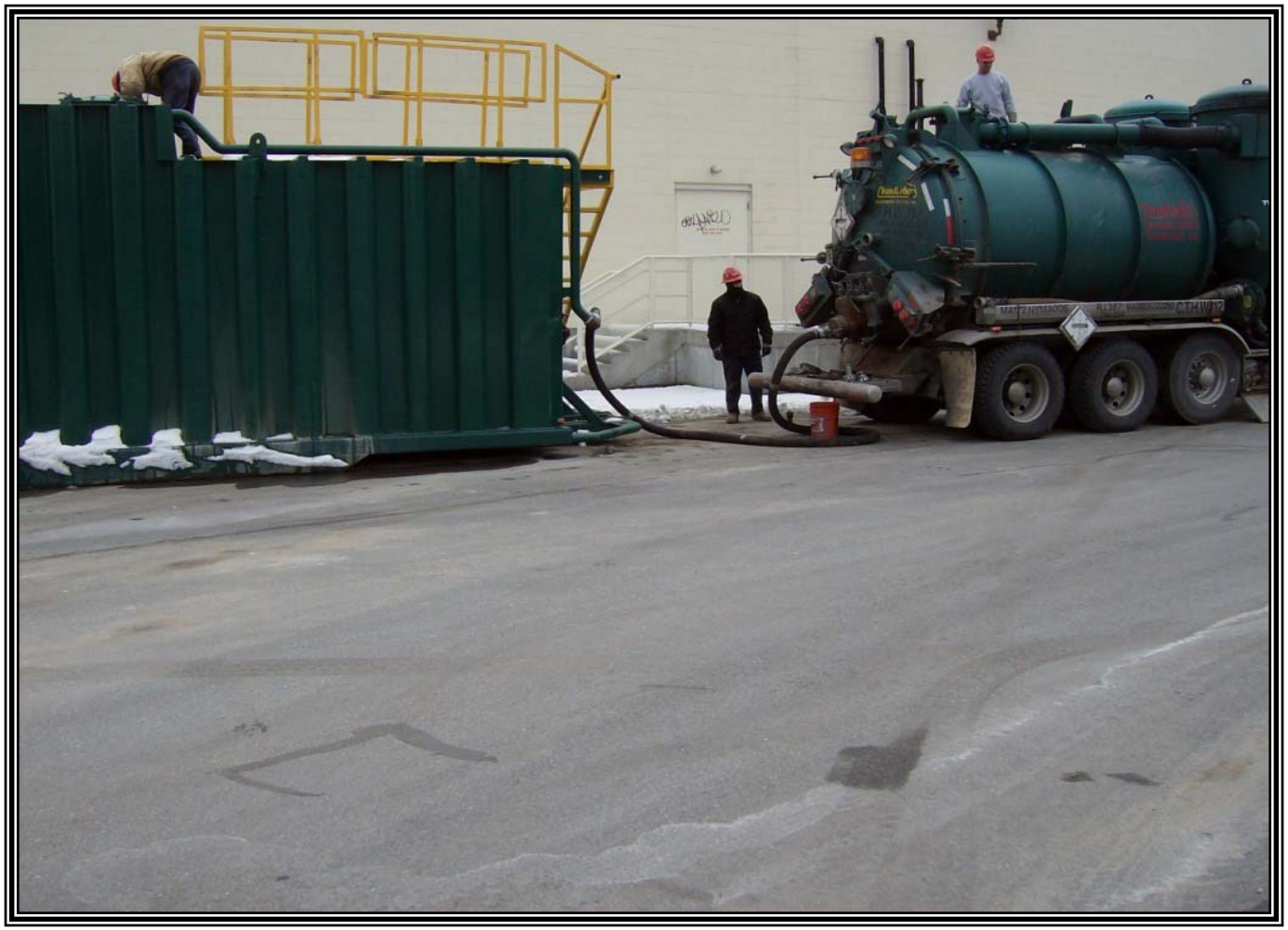


Building N UST Completion
January 2008
333 Adelaide Ave
Providence, Rhode Island

Photo 3: Vactor Truck.

Building N UST Completion
January 2008
333 Adelaide Ave
Providence, Rhode Island

Photo 4: Vactor Truck pump-out to Frac Tank.



Building N UST Completion
January 2008
333 Adelaide Ave
Providence, Rhode Island

Photo 5: Frac Tank pump-out to Trailer for transport.

Building N UST Completion
January 2008
333 Adelaide Ave
Providence, Rhode Island

Photo 6: West UST after cleaning with pressure washer.

Building N UST Completion
January 2008
333 Adelaide Ave
Providence, Rhode Island

Photo 7: Soil sample collected below east UST.

Building N UST Completion
January 2008
333 Adelaide Ave
Providence, Rhode Island

Photo 8: Filling USTs with flowable fill.

Building N UST Completion
January 2008
333 Adelaide Ave
Providence, Rhode Island

Photo 9: Flowable fill completely covering USTs.

Building N UST Completion
January 2008
333 Adelaide Ave
Providence, Rhode Island

Photo 10: Brick Structure east of USTs.

Building N UST Completion
January 2008
333 Adelaide Ave
Providence, Rhode Island

Photo 11: Soil excavation at Brick Structure.

Building N UST Completion
January 2008
333 Adelaide Ave
Providence, Rhode Island

Photo 12: Site grading.

Appendix B

Bills of Lading and Disposal Facility Weight Slips

Can #. [redacted]9
A693-25

RI 1741303
WORK ORDER NO. [redacted]303

DOCUMENT NO. 113864

STRAIGHT BILL OF LADING

TRANSPORTER 1 ~~Clean Harbors Env. Services, Inc.~~ VEHICLE ID # 460

EPA ID # MAD039322250 TRANS. 1 PHONE 781-7[redacted]-[redacted]

TRANSPORTER 2 Clean Harbors Environmental Services VEHICLE ID # ~~460~~ 4131

EPA ID # MAD039322250 TRANS. 2 PHONE (781) 792-5000

DESIGNATED FACILITY			SHIPPER	
FACILITY EPA ID # ~~ESMI OF NH~~ N/A			SHIPPER EPA ID # N/A	
ADDRESS 67 International Drive			ADDRESS 333 Adelaide Avenue	
CITY Loudon	STATE NH	ZIP 03307	CITY Providence	STATE RI ZIP

CONTAINERS NO. & SIZE	TYPE	HM	DESCRIPTION OF MATERIALS	TOTAL QUANTITY	UNIT WT/VOL
1X25Y	CM		A. NON DOT REGULATED SOIL	20	Y
			B.		
			C.		
			D.		
			E.		
			F.		
			G.		
			H.		

SPECIAL HANDLING INSTRUCTIONS
13.35/tn

SHIPPERS CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

SHIPPER	PRINT Greg Simpson	SIGN	DATE 2/26/08
TRANSPORTER 1	PRINT Adriano Brito	SIGN	DATE 2/26/08
TRANSPORTER 2	PRINT Charlie Fitzgerald	SIGN	DATE 3/5/08
RECEIVED BY	PRINT ESMI/K Smith	SIGN	DATE 3/05/08

3

CHI 107

Con# A693-25

WORK ORDER NO. RI 1741303

DOCUMENT NO. 113866

STRAIGHT BILL OF LADING

TRANSPORTER 1 ~~Clean Harbors ENv. Services, Inc.~~ VEHICLE ID # 460

EPA ID # MAD039322250 TRANS. 1 PHONE 781-792-

TRANSPORTER 2 Clean Harbors Env Services, Inc VEHICLE ID # 460

EPA ID # MAD039322250 TRANS. 2 PHONE (781) 792-5000

DESIGNATED FACILITY	SHIPPER
ESMI of NH	TEXTRON
FACILITY EPA ID # N/A	SHIPPER EPA ID # N/A
ADDRESS 67 International Drive	ADDRESS 333 Adelaide Avenue
CITY Loudon STATE NH ZIP 03307	CITY Providence STATE RI ZIP

CONTAINERS NO. & SIZE	TYPE	HM	DESCRIPTION OF MATERIALS	TOTAL QUANTITY	UNIT WT/VOL
1X25Y	CM		A. NON DOT REGULATED SOIL	20	Y
			B.		
			C. ESMI / A Gagne		
			D. TONS		
			E. 2-29-08		
			F. 7.29 Ton		
			G.		
			H.		

SPECIAL HANDLING INSTRUCTIONS

SHIPPERS CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

	PRINT	SIGN	DATE
SHIPPER	Greg Simon	[signature]	2/26/08
TRANSPORTER 1	Adriano Brito	Adriano Brito	2/26/08
TRANSPORTER 2	Adriano Brito	Adriano Brito	2/29/08
RECEIVED BY	Angela Gagne	Angela Gagne	2/29/08

3

CHI 107

CHRT 25729

DOCUMENT NO. 113921

WORK ORDER NO. RI 741303

STRAIGHT BILL OF LADING

TRANSPORTER 1 Clean Harbors Env. Services Inc.

EPA ID # MAD039372250

VEHICLE ID # 460

TRANSPORTER 2

TRANS. 1 PHONE 781 792 5000

EPA ID #

VEHICLE ID #

TRANS. 2 PHONE

DESIGNATED FACILITY	SHIPPER
ESMI of NH	Textron
FACILITY EPA ID #	SHIPPER EPA ID #
N/A	N/A
ADDRESS	ADDRESS
67 International Drive	333 Adelaide Avenue
CITY / STATE / ZIP	CITY / STATE / ZIP
Loudon NH 03307	Providence RI

CONTAINERS NO. & SIZE	TYPE	HM	DESCRIPTION OF MATERIALS	TOTAL QUANTITY	UNIT WT/VOL
1x35	CM		A. Non Dot Regulated Soil	20	T
			B.		
			C.		
			D.		
			E. ESMI/KSmith		
			F. 3/06/08		
			G. 18.02/to		
			H.		

SPECIAL HANDLING INSTRUCTIONS

"Load was Razed - partial load returned to shop." th
Please see attached B.O.L

SHIPPERS CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

	PRINT	SIGN	DATE
SHIPPER	Chris Kahler	Urgent for Textron	3-6-08
TRANSPORTER 1	Adriano Brito	Adriano Brito	3-6-08
TRANSPORTER 2			
RECEIVED BY	ESMI / KSmith		3/06/08

3

HI 107

ESMI of N.H.
67 International Drive
Loudon, NH 03307

(603) 783-0228

Ticket No : 242145
Date : 2/29/2008

Max Acceptable Soil 200.00

Customer: CH50
CLEAN HARBORS INC. (PROV.,RI)
8 DEXTER ROAD
EAST PROVIDENCE, RI 02914

Job No :5896
Textron
333 Adelaide Ave
Providence RI

Running Tonnage 7.29

Trucker
CH460 Clean Harbors #460

Gross : 64040 MAN WT
Tare : 49460 Scale 1

In 5:08:16PM
Out 5:24:21PM

Net : 14580 lb
7.290

WO01 WASTE OIL

Weigh Master: ANGELA

Driver: Adriano Brito

Remarks: Thank You For Your Business

7.29

Material $
Delvry $
Misc $
Tax $

Total $

ESMI of N.H.
67 International Drive

Loudon, NH 03307

(603) 783-0228

Ticket No : 242195
Date : 3/5/2008

Max Acceptable Soil 200.00

Job No :5896

Customer: CH50
CLEAN HARBORS INC. (PROV.,RI)
a DEXTER ROAD

EAST PROVIDENCE, RI 02914

Texaco
333 Adelaide Ave
Providence RI

Running Tonnage: 20.64

Trucker:
CHE4131 CLEAN HARBORS #4131

Gross : 60180 Scale 1 In 2:49:29PM
Tare : 33480 Scale 1 Out 2:59:36PM

Net : 26700 lb
13.350

WO01 WASTE OIL

Weigh Master: ANGELA

Driver:

Remarks: Thank You For Your Business

20.64

Material $
Delvry $
Misc $
Tax $

Total $

E3MI of N.H.
67 International Drive

Loudon,NH 03307

(603)783-0228

Ticket No : 242216
Date : 3/6/2008

Max. Acceptable Soil 200.00

Job No :5896

Customer: CH50
CLEAN HARBORS INC. (PROV.,RI)
8 DEXTER ROAD

EAST PROVIDENCE,RI 02914

Textron
333 Adelaide Ave
Providence RI

Running Tonnage 38.66

Trucker:
CHE 460 CLEAN HARBORS #460

Gross : 70400 MAN WT In 10:57:23AM
Tare : 34360 Scale 1 Out 11:38:05AM

Net : 36040 lb
18.020

WO01 WASTE OIL

Material $
Delvry $
Misc $
Tax $

Total $

Weigh Master: ANGELA

Driver:

Adriana Brito

Remarks: Thank You For Your Business

38.00

CUSCO # 4155

WORK ORDER NO. RI1741303

DOCUMENT NO. 78246

STRAIGHT BILL OF LADING

TRANSPORTER 1 Clean Harbors Environmental Services Inc VEHICLE ID # MA 62908

EPA ID # MAD039322250 TRANS. 1 PHONE 781-792-5000

TRANSPORTER 2 Clean Harbors Env. Services Inc. VEHICLE ID # MA 62908

EPA ID # MAD039322250 TRANS. 2 PHONE 781-792-5000

DESIGNATED FACILITY	SHIPPER
Clean Harbors of Braintree Inc.	Texton
FACILITY EPA ID # MAD053452637	SHIPPER EPA ID # RID001195015
ADDRESS 1 Hill Avenue	ADDRESS 40 westminster St.
CITY Braintree STATE MA ZIP 02184	CITY Providence STATE RI ZIP 02903

CONTAINERS NO. & SIZE	TYPE	HM	DESCRIPTION OF MATERIALS	TOTAL QUANTITY	UNIT WT/VOL
1	TT		A. N/A, NON DOT Regulated Material, (Tank Bottom Sludge), NON	617	G
			B.		
			C.		
			D.		
			E.		
			F.		
			G.		
			H.		

SPECIAL HANDLING INSTRUCTIONS Emergency Phone # (800) 483-3718
A CH292153-B (KH)

SHIPPERS CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

As Agent of Texton

	PRINT	SIGN	DATE
SHIPPER	Philip S. Miller		1-18-08
TRANSPORTER 1	Kevin Hurst	Kevin Hurst	1-21-08
TRANSPORTER 2	DAVID A. BLINKHORN	David A. Blinkhorn	1-22-08
RECEIVED BY	Keith L. Derbyshire	Keith L. Derbyshire	01-22-08

1

CHI 107

Clean Harbors of Braintree, Inc.
1 Hill Avenue
Braintree, MA 02184

(781) 380-7100

Date - 1.22.08

Generator - TEXTRON
40 WEST MINISTER STREET
PROVIDENCE, RI 02903

H.W.F. Clean Harbors of Braintree
1 HILL AVE
BRAINTREE, MA

CUSCO
Trailer #/Can # 4155

BOL #
~~Manifest~~ # 78246

Drivers Name - Co # O BRINKHORN

Gross	46180 lb	07:26 01/22/2008
TARE		
NET	41260 lb	08:11 01/22/2008
	4920	

Driver ON OFF

Recorded

SW RI 1741303

CHI-214 (Rev. 8/07)

VAC # 328

Site Address:
333 Adelaide Avenue
Providence , RI 02905

PPW 11/28/2007
WORK ORDER NO. RI1741303-002

DOCUMENT NO. 113723

STRAIGHT BILL OF LADING

TRANSPORTER 1 Clean Harbors Environmental Services Inc VEHICLE ID # 614118-ME

EPA ID # MAD039322250 TRANS. 1 PHONE (781) 792-5000

TRANSPORTER 2 _____ VEHICLE ID # _____

EPA ID # _____ TRANS. 2 PHONE _____

DESIGNATED FACILITY			SHIPPER		
Clean Harbors Env Services Inc			Textron		
FACILITY EPA ID #			SHIPPER EPA ID #		
MED980672182			RID001195015		
ADDRESS			ADDRESS		
37 Rumery Road			40 Westminster Street		
CITY	STATE	ZIP	CITY	STATE	ZIP
South Portland	ME	04106	Providence	RI	02903

CONTAINERS NO. & SIZE	TYPE	HM	DESCRIPTION OF MATERIALS	TOTAL QUANTITY	UNIT WT/VOL
1X6000	TT		A. N/A, NON DOT REGULATED MATERIAL, (WASTEWATER). NONE (BOTH COMPARTMENTS)	5400	G
			B.		
			C.		
			D.		
			E.		
			F.		
			G.		
			H.		

SPECIAL HANDLING INSTRUCTIONS EMERGENCY PHONE #: (800) 483-3718
A: CH292151B

SHIPPERS CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

	PRINT	SIGN	DATE
* SHIPPER	GREGORY L. SIMPSON		1-19-08
TRANSPORTER 1	DAVID A. BLINKHORN		1-19-08
TRANSPORTER 2			
RECEIVED BY	Thomas J Paul		1-18-08

1

CHI 107

Clean Harbors

FLEET # 328

FRONT / REAR

37 Rumery Road
South Portland, Maine
207-772-2201
MED980672182

MANIFEST #	RM #	IC #
BOL 113723	328	RI 1741303

GENERATOR	DATE:
Textron Providence, RI	1-19-08

TRANSPORTER	DRIVER
Clean Harbors Environmental Services Inc. 358 Quincy Ave. Braintree, MA 02184	Dave Blinkhorn

SAMPLE DESCRIPTION:	SAMPLER
H2O	CB

CWT
C

TOTAL GALLONS	OIL	TANK #	WATER	TANK #	TYPE OF OIL	SOLIDS	TYPE OF ACTIVITY
5400			5400	7			OFFLOAD

CENTRIFUGE ANALYSIS	OIL%	H2O%	SED%	RAG%	ANALYST
		99	1	-	CT

ANALYSIS PARAMETER	M.D.L. (mg/kg)	RESULT (mg/kg)	DATE ANALYZED	ACCEPTANCE LIMIT	METHOD & REF #	ANALYST
CADMIUM	0.005			1.0 mg/kg	EPA213.1	CT
CHROMIUM	0.05			5.0 mg/kg	EPA218.1	
LEAD	0.1			5.0 mg/kg	EPA239.1	
SILVER	0.01			5.0 mg/kg	EPA272.1	
*COPPER	0.02			N/A	EPA220.1	
*NICKEL	0.04			N/A	EPA249.1	
*ZINC	0.005			N/A	EPA289.1	
pH	N/A	7	1-18-08	2.0 - 12.5		
FLASH POINT	N/A	140		> 140° F	ASTM 1010-C	
PCBs		ND		< 2.0 mg/l		

C4/50

COMMENTS: *This load is recommended for acceptance*

* No EPA TCLP / Hazardous Waste limits: acceptability based on treatability

The waste oil that I/we have received or generated, to the best of my/our knowledge, meets the above waste oil specifications and has not been mixed with hazardous waste. I/we also hereby acknowledge the requirement to pay a $0.01 per gallon fee to the MAINE HAZARDOUS WASTE FUND on all waste oil collected.

X _____

CHI authorized signature

VAC# 328

Site Address:
333 Adelaide Avenue
Providence , RI 02905

PPW 11/28/2007
WORK ORDER NO. RI1741303-002

DOCUMENT NO. 113722

STRAIGHT BILL OF LADING

TRANSPORTER 1 Clean Harbors Environmental Services Inc VEHICLE ID # 614118 ME

EPA ID # MAD039322250 TRANS. 1 PHONE (781) 799-5888

TRANSPORTER 2 _____ VEHICLE ID # _____

EPA ID # _____ TRANS. 2 PHONE _____

DESIGNATED FACILITY				SHIPPER		
Clean Harbors Env Services Inc				Textron		
FACILITY EPA ID #				SHIPPER EPA ID #		
MED980672182				RID001195015		
ADDRESS				ADDRESS		
37 Rumery Road				40 Westminster Street		
CITY	STATE	ZIP		CITY	STATE	ZIP
South Portland	ME	04106		Providence	RI	02903

CONTAINERS NO. & SIZE	TYPE	HM	DESCRIPTION OF MATERIALS	TOTAL QUANTITY	UNIT WT/VOL
1 X 6000	TT		A. N/A, NON DOT REGULATED MATERIAL, (WASTEWATER) NONE (Both compartments)	5100	G
			B.		
			C.		
			D.		
			E.		
			F.		
			G.		
			H.		

SPECIAL HANDLING INSTRUCTIONS EMERGENCY PHONE #: (800) 483-3718
A: CH292151B

SHIPPERS CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

	PRINT	SIGN	DATE
* SHIPPER	Gregory L. Simpson		1/18/08
TRANSPORTER 1	DAVID A. BLINKHORN		1/18/08
TRANSPORTER 2			
RECEIVED BY	Thomas		1-18-08

1

CHI 107

Cleanharbors

FLEET # 328

FRONT / REAR

37 Rumery Road
South Portland, Maine
207-772-2201
MED980672182

MANIFEST #	RM #	IC #
BOL 113720	328	RI 1741303
GENERATOR: Textron Providence, RI		DATE: 1-18-08
TRANSPORTER: Clean Harbors Environmental Services Inc. 358 Quincy Ave. Braintree, MA 02184		DRIVER: Dave Blinkhorn
SAMPLE DESCRIPTION: H2O		SAMPLER: CB

CWT
C

TOTAL GALLONS	OIL	TANK #	WATER	TANK #	TYPE OF OIL	SOLIDS	TYPE OF ACTIVITY
5100			5100	7			CP LOAD

CENTRIFUGE ANALYSIS	OIL%	H2O%	SED%	RAG%	ANALYST
		99%	1%	—	CB

ANALYSIS PARAMETER	M.D.L. (mg/kg)	RESULT (mg/kg)	DATE ANALYZED	ACCEPTANCE LIMIT	METHOD & REF #	ANALYST
CADMIUM	0.005			1.0 mg/kg	EPA213.1	CB
CHROMIUM	0.05			5.0 mg/kg	EPA218.1	
LEAD	0.1			5.0 mg/kg	EPA239.1	
SILVER	0.01			5.0 mg/kg	EPA272.1	
*COPPER	0.02			N/A	EPA220.1	
*NICKEL	0.04			N/A	EPA249.1	
*ZINC	0.005			N/A	EPA289.1	
pH	N/A	7		2.0 - 12.5		
FLASH POINT	N/A	140°		> 140° F	ASTM 1010-C	
PCBs		ND		< 2.0 mg/l		

CA/SE

COMMENTS: *This load is recommended for acceptance*

* No EPA TCLP / Hazardous Waste limits: acceptability based on treatability

The waste oil that I/we have received or generated, to the best of my/our knowledge, meets the above waste oil specifications and has not been mixed with hazardous waste. I/we also hereby acknowledge the requirement to pay a $0.01 per gallon fee to the MAINE HAZARDOUS WASTE FUND on all waste oil collected.

X _____

CHI authorized signature

VAC # 328

Site Address:
333 Adelaide Avenue
Providence , RI 02905

PPW 11/28/2007
WORK ORDER NO. RI1741303-002

DOCUMENT NO. 113724

STRAIGHT BILL OF LADING

TRANSPORTER 1 Clean Harbors Environmental Services Inc — VEHICLE ID # 614118

EPA ID # MAD039322250 — TRANS. 1 PHONE (781) 792-5000

TRANSPORTER 2 _____ — VEHICLE ID # _____

EPA ID # _____ — TRANS. 2 PHONE _____

DESIGNATED FACILITY Clean Harbors Env Services Inc	SHIPPER Textron
FACILITY EPA ID # MED980672182	SHIPPER EPA ID # RID001195015
ADDRESS 37 Rumery Road	ADDRESS 40 Westminster Street
CITY South Portland STATE ME ZIP 04106	CITY Providence STATE RI ZIP 02903

CONTAINERS NO. & SIZE	TYPE	HM	DESCRIPTION OF MATERIALS	TOTAL QUANTITY	UNIT WT/VOL
1X6000	TT		A. N/A, NON DOT REGULATED MATERIAL, (WASTEWATER) NONE (BOTH COMPARTMENTS)	3800	G
			B.		
			C.		
			D.		
			E.		
			F.		
			G.		
			H.		

SPECIAL HANDLING INSTRUCTIONS EMERGENCY PHONE #: (800) 483-3718
A: CH292151B

SHIPPERS CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

	PRINT	SIGN	DATE
* SHIPPER	GREGORY L. SIMPSON		1.19.08
TRANSPORTER 1	DAVID A. BLINKHORN		1.19.08
TRANSPORTER 2			
RECEIVED BY	Brian Least		1-21-08

1

CHI 107

[redacted]

Clean Harbors

FLEET # 328

FRONT / REAR

37 Rumery Road
South Portland, Maine
207-772-2201
MED980672182

MANIFEST #	RM #	IC#
3011372 4	328	RI 1741303

GENERATOR	DATE:
Textron Providence, RI	1-19 08

TRANSPORTER	DRIVER
Clean Harbors Environmental Services Inc. 358 Quincy Ave. Braintree, MA 02184	Dave Blinkhorn

SAMPLE DESCRIPTION:	SAMPLER
H2O	TP

CWT
C

TOTAL GALLONS	OIL	TANK #	WATER	TANK #	TYPE OF OIL	SOLIDS	TYPE OF ACTIVITY
3800							ctf load / rinse

CENTRIFUGE ANALYSIS	OIL%	H2O%	SED%	RAG%	ANALYST
		99	1		C3

ANALYSIS PARAMETER	M.D.L. (mg/kg)	RESULT (mg/kg)	DATE ANALYZED	ACCEPTANCE LIMIT	METHOD & REF #	ANALYST
CADMIUM	0.005			1.0 mg/kg	EPA213.1	
CHROMIUM	0.05			5.0 mg/kg	EPA218.1	
LEAD	0.1			5.0 mg/kg	EPA239.1	
SILVER	0.01			5.0 mg/kg	EPA272.1	
*COPPER	0.02			N/A	EPA220.1	
*NICKEL	0.04			N/A	EPA249.1	
*ZINC	0.005			N/A	EPA289.1	
pH	N/A	-	1-19-08	2.0 - 12.5		CT
FLASH POINT	N/A	140°		>140° F	ASTM 1010-C	
PCBs		ND		< 2.0 mg/l		

COMMENTS: *This load is recommended for acceptance*

* No EPA TCLP / Hazardous Waste limits: acceptability based on treatability

The waste oil that I/we have received or generated, to the best of my/our knowledge, meets the above waste oil specifications and has not been mixed with hazardous waste. I/we also hereby acknowledge the requirement to pay a $0.01 per gallon fee to the MAINE HAZARDOUS WASTE FUND on all waste oil collected.

X _____

CHI authorized signature

Appendix C

ESS Laboratory Reports

(March 1995 UST Report
and 2008)

LS 28109

March 27, 1995

PN: 09111.09

Mr. Dan Russell
Rhode Island Department of Environmental Management
Division of Waste Management - UST Section
291 Promenade Street
Providence, Rhode Island 02908-5767

Subject: Underground Storage Tanks
333 Adelaide Avenue, Providence

Dear Mr. Russell:

This letter presents the findings of ABB Environmental Services, Inc.'s (ABB-ES) investigation of the two underground storage tanks (USTs) located behind Building N on the 333 Adelaide Avenue property in Providence, Rhode Island. As you are aware, the tanks were scheduled to be excavated on February 27, 1995 under a closure permit granted by Rhode Island Department of Environmental Management (RIDEM) UST Section. However, prior to commencing tank removal activities, ABB-ES undertook exploratory excavation to determine tank size, orientation and contents.

Results of Tank Investigation

On February 24, 1995, ABB-ES personnel and its subcontractor, Franklin Environmental Services, Inc. (Franklin) were on site to excavate soil surrounding the tanks to expose the tops of the tanks and manways. Results of this investigation showed that there are two USTs located behind (north of) Building N (see attached figure). The tanks are located side by side, with the long axis of the two tanks oriented north/south. An unknown length of the tanks appears to extend beneath the building. Each tank is approximately 30 feet long and 8 feet in diameter with an estimated capacity of approximately 15,000 gallons.

During excavation activities, the excavated soils were field screened with a portable photoionization detector (PID) for volatile organic compounds. PID readings were non-detectable.

No access ports were observed on the excavated portions of the tanks. However, a manway providing access to the eastern tank (Tank 1) was observed inside Building N. This manway had a pump and piping, and one of the pipes leads to an aboveground steel storage tank. An access port to Tank 2 was not found, either within the building or along the excavated top of the tank.

The manway on the eastern tank was opened and the tank appeared to be entirely full of water. No sheen was observed on the water surface. PID readings taken in the manway were non-detectable. A sample of the water collected for headspace analysis was also non-detectable. A sample of the water was collected for analysis of VOCs by EPA Method 8240 at a Rhode Island certified laboratory. No VOC's were detected in this aqueous sample. Laboratory analytical reports are attached.

A site-wide Remedial Investigation is currently being undertaken, and a groundwater table map has been developed for the property. The USTs are located above the water table indicating that the tanks are not submerged in groundwater, and that the material housed in the tanks was not the result of groundwater infiltration. Recently, the basement of Building N has flooded due to pipe breaks, and a leaking roof and floor boards. This water may have entered the tanks through gaps in piping or the manway. If oil had been originally contained in the tanks, the water in the basement would have forced oil out of the tank. However, no oil or staining was observed on the basement floor, the manway or the piping.

No vent or fill pipes were identified in the vicinity of the tanks or Building N, offering additional evidence that these tanks were not used for oil storage. Furthermore, Building N did not accommodate a furnace or a boiler.

Upon completion of the tank investigation activities, the excavation around the tanks was backfilled and the site restored to previous conditions. RIDEM was verbally notified of our findings and tank closure activities planned for February 27, 1995 were canceled.

Conclusions

Based on the information obtained, ABB-ES concludes that the tanks were likely used for water storage for firefighting purposes, and not for the storage of fuel oil or hazardous materials. Since the USTs located behind Building N do not contain petroleum products or hazardous materials, they are not regulated under RIDEM regulations (DEM-DWM-UST05-93, Section 5.03). Because they are not used for fuel or hazardous material storage, and because they extend under the building, we do not propose to remove or close the tanks at this time.

Sincerely,

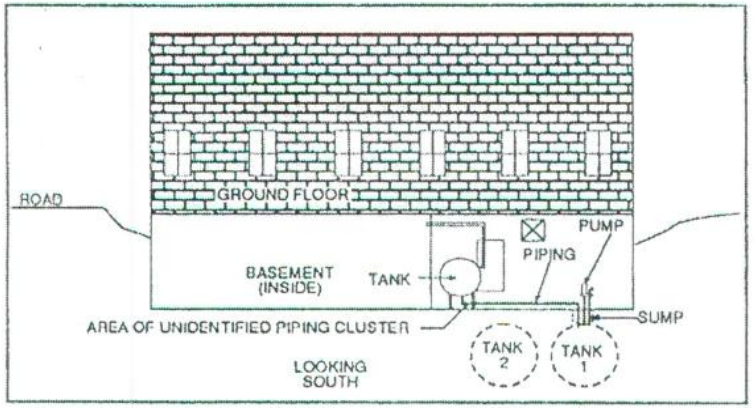
ABB ENVIRONMENTAL SERVICES, INC.

Kathleen Donovan

Kathleen Donovan
Scientist

Ellen G. Cool, Ph.D.
Regional Project Director

cc: R. Brayley, Textron, Inc.
J. Palmieri, City of Providence, Department of Planning
J. Teverow, Esq.
G. Benik, McGovern, Noel, & Benik, Esq.
M. Dennen, RIDEM



APPROXIMATE LOCATION OF USTs

MW-JS

MW-JD

GZA-6

BLDG. H

OLD PUMP

PUMP

TANK 1

TANK 2

TANK

PIPING

BLDG. N

BLDG. K-I

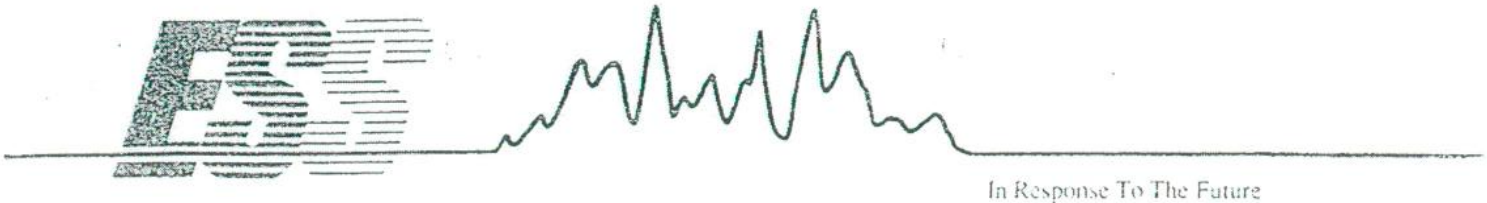
N

0 10 20 40

SCALE FEET

ABB Environmental Services, Inc.

LOCATION OF BUILDING N USTs
GORHAM MANUFACTURING FACILITY
PROVIDENCE, RHODE ISLAND



In Response To The Future

March 9, 1995

Ms. Ellen Cool
ABB Environmental Services
Corporate Place 128 Bldg. 3
107 Audubon Road
Wakefield, MA 01880

Dear Ms. Cool:

Enclosed is the data report of laboratory test results for the analyses of the samples which were received at ESS on February 24, 1995 as part of your Gorham/Textron project number 09111-09.

This letter authorizes the release of your analytical results and should be considered a part of this report. This report should not be copied except in full without the approval of the laboratory.

The Project Invoice for this data report is being forwarded to your Accounts Payable Department. If you have any questions please feel free to call.

Sincerely,

Dave Dickinson
Laboratory Director

Enclosure

Environmental Science Services
532 Atwells Avenue, Providence, Rhode Island 02909 (401) 421-0398 Fax (401) 421-5731

CERTIFICATE OF ANALYSIS

In Response To The Future

VOLATILE ORGANICS
Method 8240

Client: ABB Environmental Services

Client Project ID: Gorham/Textron

ESS Project ID: 950858

Client Sample ID: Gorham/Textron 2/24

ESS Sample ID: 950858-01

Date Sampled: 2/24/95

Dilution Factor: 1x

Date Analyzed: 3/8/95

Units: ug/L

Parameter	Result	MRL
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5
1,1-Dichloroethene	ND	5
Acetone	ND	50
Carbon Disulfide	ND	5
Methylene Chloride	ND	5
Methyl tert-Butyl Ether	ND	10
Trans-1,2-Dichloroethene	ND	5
1,1-Dichloroethane	ND	5
Cis-1,2-Dichloroethene	ND	5
Methyl Ethyl Ketone	ND	50
Chloroform	ND	5
1,1,1-Trichloroethane	ND	5
Carbon Tetrachloride	ND	5
Benzene	ND	5
1,2-Dichloroethane	ND	5
Trichloroethene	ND	5
1,2-Dichloropropane	ND	5
Bromodichloromethane	ND	5
Cis-1,3-Dichloropropene	ND	5
Methyl Isobutyl Ketone	ND	50
Toluene	ND	5
Trans-1,3-Dichloropropene	ND	5
1,1,2-Trichloroethane	ND	5
Tetrachloroethene	ND	5
2-Hexanone	ND	50
Dibromochloromethane	ND	5
Chlorobenzene	ND	5
Ethylbenzene	ND	5
Xylenes (Total)	ND	10
Styrene	ND	5
Bromoform	ND	5
1,1,2,2-Tetrachloroethane	ND	5
Dichlorobenzene (Total)	ND	10

ND = Not Detected above Method Reporting Limit (MRL)

Approved by: _____ Date: 3/9/95

Environmental Science Services
532 Atwells Avenue, Providence, Rhode Island 02909 (401) 421-0398 Fax. (401) 421-5731

QUALITY CONTROL SECTION

CERTIFICATE OF ANALYSIS

In Response To The Future

VOA AQUEOUS SURROGATE RECOVERY

Client: ABB Environmental Services

Client Project ID: Gorham/Textron

Date Sample Analyzed: 3/8/95

ESS Project ID: 950858

SAMPLE ID	1,2 DICHLOROETHANE-D4 (76-114%)*	TOLUENE-D8 (86-110%)*	BFB (86-115%)*
V0308B1	77%	97%	97%
950858-01	77	96	95

* Acceptance criteria

Approved by: _____ Date: 3/9/95

Environmental Science Services
532 Atwells Avenue, Providence, Rhode Island 02909 (401) 421-0398 Fax. (401) 421-5731

QUALITY SYSTEM REGISTRATION

VOLATILE ORGANICS
Method 8240

Client: ABB Environmental Services

Client Project ID: Gorham\Textron

ESS Project ID: 950858

Client Sample ID: Method Blank

ESS Sample ID: V0308B1

Date Sampled: N/A

Dilution Factor: 1x

Date Analyzed: 3/8/95

Units: ug/L

Parameter	Result	MRL
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5
1,1-Dichloroethene	ND	5
Acetone	ND	50
Carbon Disulfide	ND	5
Methylene Chloride	ND	5
Methyl tert-Butyl Ether	ND	10
Trans-1,2-Dichloroethene	ND	5
1,1-Dichloroethane	ND	5
Cis-1,2-Dichloroethene	ND	5
Methyl Ethyl Ketone	ND	50
Chloroform	ND	5
1,1,1-Trichloroethane	ND	5
Carbon Tetrachloride	ND	5
Benzene	ND	5
1,2-Dichloroethane	ND	5
Trichloroethene	ND	5
1,2-Dichloropropane	ND	5
Bromodichloromethane	ND	5
Cis-1,3-Dichloropropene	ND	5
Methyl Isobutyl Ketone	ND	50
Toluene	ND	5
Trans-1,3-Dichloropropene	ND	5
1,1,2-Trichloroethane	ND	5
Tetrachloroethene	ND	5
2-Hexanone	ND	50
Dibromochloromethane	ND	5
Chlorobenzene	ND	5
Ethylbenzene	ND	5
Xylenes (Total)	ND	10
Styrene	ND	5
Bromoform	ND	5
1,1,2,2-Tetrachloroethane	ND	5
Dichlorobenzene (Total)	ND	10

N/A = Not Applicable
ND = Not Detected above Method Reporting Limit (MRL)

Approved by: _____ Date: 3/9/95

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

PROJECT NARRATIVE

David Heislein
MACTEC Engineering & Consulting, Inc.
107 Audubon Road
Wakefield, MA 01880

RE: Providence Gorham Site
ESS Laboratory Work Order Number: 0801152

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 Project Narrative, the entire report has been paginated. The ESS Laboratory Certifications sheet is the final report page. 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 mailed. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

Date: January 16, 2008

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 may be used instead of automated integration because it produces more accurate results. All ICP Metals were analyzed using the established linear dynamic range to determine acceptable analytical results.

ESS Laboratory certifies that the test results meet the requirements of NELAC, except where noted within this project narrative.

Sample Receipt
The following sample(s) were received on January 15, 2008 for the analyses specified on the enclosed Chain of Custody Record.

Laboratory ID	Matrix	Client SampleID
0801152-01	Ground Water	West UST

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0801152

PROJECT NARRATIVE

8260B Volatile Organic Compounds

BA81511-BS1 **Blank Spike recovery is above upper control limit.**
tert-Butylbenzene, Vinyl Chloride

8270C Semi-Volatile Organic Compounds

BA81509-BS1 **Blank Spike recovery is below lower control limit.**
Benzoic Acid

BA81509-BSD1 **Blank Spike recovery is below lower control limit.**
Benzoic Acid

BA81509-BSD1 **Relative percent difference for duplicate is outside of criteria.**
2,4-Dinitrophenol, N-Nitrosodimethylamine, Pyridine

BRA0141-CCV1 **Continuing Calibration recovery is below lower control limit.**
2,4-Dinitrophenol

8270C(SIM) Polynuclear Aromatic Hydrocarbons

0801152-01 **Reported above the quantitation limit; Estimated value.**
2-Methylnaphthalene

No other observations noted.

End of Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site
Client Sample ID: West UST
Date Sampled: 01/15/08 10:30
Percent Solids: N/A
Initial Volume: 10
Final Volume: 10
Extraction Method: 5030B

ESS Laboratory Work Order: 0801152
ESS Laboratory Sample ID: 0801152-01
Sample Matrix: Ground Water
Analyst: RES

8260B Volatile Organic Compounds

Analyte	Results	Units	MRL	RI - GA Limit	DF	Analyzed
1,1,1,2-Tetrachloroethane	ND	mg/L	0.0010		1	01/15/08
1,1,1-Trichloroethane	ND	mg/L	0.0010	0.2	1	01/15/08
1,1,2,2-Tetrachloroethane	ND	mg/L	0.0005		1	01/15/08
1,1,2-Trichloroethane	ND	mg/L	0.0010	0.005	1	01/15/08
1,1-Dichloroethane	ND	mg/L	0.0010		1	01/15/08
1,1-Dichloroethene	ND	mg/L	0.0010	0.007	1	01/15/08
1,1-Dichloropropene	ND	mg/L	0.0020		1	01/15/08
1,2,3-Trichlorobenzene	ND	mg/L	0.0010		1	01/15/08
1,2,3-Trichloropropane	ND	mg/L	0.0010		1	01/15/08
1,2,4-Trichlorobenzene	ND	mg/L	0.0010	0.07	1	01/15/08
1,2,4-Trimethylbenzene	**0.0070**	mg/L	0.0010		1	01/15/08
1,2-Dibromo-3-Chloropropane	ND	mg/L	0.0050	0.0002	1	01/15/08
1,2-Dibromoethane	ND	mg/L	0.0010	0.00005	1	01/15/08
1,2-Dichlorobenzene	ND	mg/L	0.0010	0.6	1	01/15/08
1,2-Dichloroethane	ND	mg/L	0.0010	0.005	1	01/15/08
1,2-Dichloropropane	ND	mg/L	0.0010	0.005	1	01/15/08
1,3,5-Trimethylbenzene	**0.0012**	mg/L	0.0010		1	01/15/08
1,3-Dichlorobenzene	ND	mg/L	0.0010	0.6	1	01/15/08
1,3-Dichloropropane	ND	mg/L	0.0010		1	01/15/08
1,4-Dichlorobenzene	ND	mg/L	0.0010	0.075	1	01/15/08
1,4-Dioxane - Screen	ND	mg/L	0.500		1	01/15/08
1-Chlorohexane	ND	mg/L	0.0010		1	01/15/08
2,2-Dichloropropane	ND	mg/L	0.0010		1	01/15/08
2-Butanone	ND	mg/L	0.0250		1	01/15/08
2-Chlorotoluene	ND	mg/L	0.0010		1	01/15/08
2-Hexanone	ND	mg/L	0.0100		1	01/15/08
4-Chlorotoluene	ND	mg/L	0.0010		1	01/15/08
4-Isopropyltoluene	ND	mg/L	0.0010		1	01/15/08
4-Methyl-2-Pentanone	ND	mg/L	0.0250		1	01/15/08
Acetone	ND	mg/L	0.0250		1	01/15/08
Benzene	ND	mg/L	0.0010	0.005	1	01/15/08
Bromobenzene	ND	mg/L	0.0020		1	01/15/08
Bromochloromethane	ND	mg/L	0.0010		1	01/15/08
Bromodichloromethane	ND	mg/L	0.0006		1	01/15/08
Bromoform	ND	mg/L	0.0010		1	01/15/08

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site
Client Sample ID: West UST
Date Sampled: 01/15/08 10:30
Percent Solids: N/A
Initial Volume: 10
Final Volume: 10
Extraction Method: 5030B

ESS Laboratory Work Order: 0801152
ESS Laboratory Sample ID: 0801152-01
Sample Matrix: Ground Water
Analyst: RES

8260B Volatile Organic Compounds

Bromomethane	ND	mg/L	0.0020		1	01/15/08
Carbon Disulfide	ND	mg/L	0.0010		1	01/15/08
Carbon Tetrachloride	ND	mg/L	0.0010	0.005	1	01/15/08
Chlorobenzene	ND	mg/L	0.0010	0.1	1	01/15/08
Chloroethane	ND	mg/L	0.0020		1	01/15/08
Chloroform	ND	mg/L	0.0010		1	01/15/08
Chloromethane	ND	mg/L	0.0020		1	01/15/08
cis-1,2-Dichloroethene	ND	mg/L	0.0010	0.07	1	01/15/08
cis-1,3-Dichloropropene	ND	mg/L	0.0004		1	01/15/08
Dibromochloromethane	ND	mg/L	0.0010		1	01/15/08
Dibromomethane	ND	mg/L	0.0010		1	01/15/08
Dichlorodifluoromethane	ND	mg/L	0.0020		1	01/15/08
Diethyl Ether	ND	mg/L	0.0010		1	01/15/08
Di-isopropyl ether	ND	mg/L	0.0010		1	01/15/08
Ethyl tertiary-butyl ether	ND	mg/L	0.0010		1	01/15/08
Ethylbenzene	ND	mg/L	0.0010	0.7	1	01/15/08
Hexachlorobutadiene	ND	mg/L	0.0006		1	01/15/08
Hexachloroethane	ND	mg/L	0.0010		1	01/15/08
Isopropylbenzene	ND	mg/L	0.0010		1	01/15/08
Methyl tert-Butyl Ether	ND	mg/L	0.0010	0.04	1	01/15/08
Methylene Chloride	ND	mg/L	0.0040	0.005	1	01/15/08
Naphthalene	**0.0079**	mg/L	0.0010	0.02	1	01/15/08
n-Butylbenzene	ND	mg/L	0.0010		1	01/15/08
n-Propylbenzene	ND	mg/L	0.0010		1	01/15/08
sec-Butylbenzene	ND	mg/L	0.0010		1	01/15/08
Styrene	ND	mg/L	0.0010	0.1	1	01/15/08
tert-Butylbenzene	ND	mg/L	0.0010		1	01/15/08
Tertiary-amyl methyl ether	ND	mg/L	0.0010		1	01/15/08
Tetrachloroethene	ND	mg/L	0.0010	0.005	1	01/15/08
Tetrahydrofuran	ND	mg/L	0.0050		1	01/15/08
Toluene	ND	mg/L	0.0010	1	1	01/15/08
trans-1,2-Dichloroethene	ND	mg/L	0.0010	0.1	1	01/15/08
trans-1,3-Dichloropropene	ND	mg/L	0.0005		1	01/15/08
Trichloroethene	ND	mg/L	0.0010	0.005	1	01/15/08
Trichlorofluoromethane	ND	mg/L	0.0010		1	01/15/08
Vinyl Acetate	ND	mg/L	0.0050		1	01/15/08

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site
Client Sample ID: West UST
Date Sampled: 01/15/08 10:30
Percent Solids: N/A
Initial Volume: 10
Final Volume: 10
Extraction Method: 5030B

ESS Laboratory Work Order: 0801152
ESS Laboratory Sample ID: 0801152-01
Sample Matrix: Ground Water
Analyst: RES

8260B Volatile Organic Compounds

Vinyl Chloride	ND	mg/L	0.0010	0.002	1	01/15/08
Xylene O	**0.0016**	mg/L	0.0010	10	1	01/15/08
Xylene P,M	ND	mg/L	0.0020	10	1	01/15/08
Xylenes (Total)	ND	mg/L	0.0030	10	1	01/15/08
Trihalomethanes (Total)	ND	mg/L	0.0036	0.1		01/15/08

	%Recovery	*Qualifier*	*Limits*
Surrogate: 1,2-Dichloroethane-d4	*89 %*		*70-130*
Surrogate: 4-Bromofluorobenzene	*99 %*		*70-130*
Surrogate: Dibromofluoromethane	*99 %*		*70-130*
Surrogate: Toluene-d8	*99 %*		*70-130*

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site
Client Sample ID: West UST
Date Sampled: 01/15/08 10:30
Percent Solids: N/A
Initial Volume: 950
Final Volume: 1
Extraction Method: 3520C

ESS Laboratory Work Order: 0801152
ESS Laboratory Sample ID: 0801152-01
Sample Matrix: Ground Water
Analyst: VSC
Prepared: 01/15/08

8270C Semi-Volatile Organic Compounds

Analyte	Results	Units	MRL	RI - GA Limit	DF	Analyzed
1,1-Biphenyl	ND	mg/L	0.01		1	01/16/08
1,2,4-Trichlorobenzene	ND	mg/L	0.01	0.07	1	01/16/08
1,2-Dichlorobenzene	ND	mg/L	0.01	0.6	1	01/16/08
1,3-Dichlorobenzene	ND	mg/L	0.01	0.6	1	01/16/08
1,4-Dichlorobenzene	ND	mg/L	0.01	0.075	1	01/16/08
2,3,4,6-Tetrachlorophenol	ND	mg/L	0.05		1	01/16/08
2,4,5-Trichlorophenol	ND	mg/L	0.01		1	01/16/08
2,4,6-Trichlorophenol	ND	mg/L	0.01		1	01/16/08
2,4-Dichlorophenol	ND	mg/L	0.01		1	01/16/08
2,4-Dimethylphenol	ND	mg/L	0.05		1	01/16/08
2,4-Dinitrophenol	ND	mg/L	0.05		1	01/16/08
2,4-Dinitrotoluene	ND	mg/L	0.01		1	01/16/08
2,6-Dinitrotoluene	ND	mg/L	0.01		1	01/16/08
2-Chloronaphthalene	ND	mg/L	0.01		1	01/16/08
2-Chlorophenol	ND	mg/L	0.01		1	01/16/08
2-Methylnaphthalene	**0.03**	mg/L	0.01		1	01/16/08
2-Methylphenol	ND	mg/L	0.01		1	01/16/08
2-Nitroaniline	ND	mg/L	0.01		1	01/16/08
2-Nitrophenol	ND	mg/L	0.01		1	01/16/08
3,3'-Dichlorobenzidine	ND	mg/L	0.02		1	01/16/08
3+4-Methylphenol	ND	mg/L	0.02		1	01/16/08
3-Nitroaniline	ND	mg/L	0.01		1	01/16/08
4,6-Dinitro-2-Methylphenol	ND	mg/L	0.05		1	01/16/08
4-Bromophenyl-phenylether	ND	mg/L	0.01		1	01/16/08
4-Chloro-3-Methylphenol	ND	mg/L	0.01		1	01/16/08
4-Chloroaniline	ND	mg/L	0.02		1	01/16/08
4-Chloro-phenyl-phenyl ether	ND	mg/L	0.01		1	01/16/08
4-Nitroaniline	ND	mg/L	0.01		1	01/16/08
4-Nitrophenol	ND	mg/L	0.05		1	01/16/08
Acetophenone	ND	mg/L	0.01		1	01/16/08
Aniline	ND	mg/L	0.01		1	01/16/08
Azobenzene	ND	mg/L	0.02		1	01/16/08
Benzoic Acid	ND	mg/L	0.1		1	01/16/08
Benzyl Alcohol	ND	mg/L	0.01		1	01/16/08
bis(2-Chloroethoxy)methane	ND	mg/L	0.01		1	01/16/08

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site
Client Sample ID: West UST
Date Sampled: 01/15/08 10:30
Percent Solids: N/A
Initial Volume: 950
Final Volume: 1
Extraction Method: 3520C

ESS Laboratory Work Order: 0801152
ESS Laboratory Sample ID: 0801152-01
Sample Matrix: Ground Water
Analyst: VSC
Prepared: 01/15/08

8270C Semi-Volatile Organic Compounds

bis(2-Chloroethyl)ether	ND	mg/L	0.01		1	01/16/08
bis(2-chloroisopropyl)Ether	ND	mg/L	0.01		1	01/16/08
bis(2-Ethylhexyl)phthalate	ND	mg/L	0.006	0.006	1	01/16/08
Butylbenzylphthalate	ND	mg/L	0.01		1	01/16/08
Carbazole	ND	mg/L	0.01		1	01/16/08
Dibenzofuran	ND	mg/L	0.01		1	01/16/08
Diethylphthalate	ND	mg/L	0.01		1	01/16/08
Dimethylphthalate	ND	mg/L	0.01		1	01/16/08
Di-n-butylphthalate	ND	mg/L	0.01		1	01/16/08
Di-n-octylphthalate	ND	mg/L	0.01		1	01/16/08
Hexachlorobenzene	ND	mg/L	0.01	0.001	1	01/16/08
Hexachlorobutadiene	ND	mg/L	0.01		1	01/16/08
Hexachlorocyclopentadiene	ND	mg/L	0.05		1	01/16/08
Hexachloroethane	ND	mg/L	0.005		1	01/16/08
Isophorone	ND	mg/L	0.01		1	01/16/08
Nitrobenzene	ND	mg/L	0.01		1	01/16/08
N-Nitrosodimethylamine	ND	mg/L	0.01		1	01/16/08
N-Nitroso-Di-n-Propylamine	ND	mg/L	0.01		1	01/16/08
N-nitrosodiphenylamine	ND	mg/L	0.02		1	01/16/08
Pentachlorophenol	ND	mg/L	0.05	0.001	1	01/16/08
Phenol	ND	mg/L	0.01		1	01/16/08
Pyridine	ND	mg/L	0.1		1	01/16/08

	%Recovery	*Qualifier*	*Limits*
Surrogate: 1,2-Dichlorobenzene-d4	*71 %*		*30-130*
Surrogate: 2,4,6-Tribromophenol	*81 %*		*15-110*
Surrogate: 2-Chlorophenol-d4	*67 %*		*15-110*
Surrogate: 2-Fluorobiphenyl	*79 %*		*30-130*
Surrogate: 2-Fluorophenol	*65 %*		*15-110*
Surrogate: Nitrobenzene-d5	*80 %*		*30-130*
Surrogate: Phenol-d6	*69 %*		*15-110*
Surrogate: p-Terphenyl-d14	*83 %*		*30-130*

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site
Client Sample ID: West UST
Date Sampled: 01/15/08 10:30
Percent Solids: N/A
Initial Volume: 910
Final Volume: 0.25
Extraction Method: 3510C

ESS Laboratory Work Order: 0801152
ESS Laboratory Sample ID: 0801152-01
Sample Matrix: Ground Water
Analyst: VSC
Prepared: 01/15/08

8270C(SIM) Polynuclear Aromatic Hydrocarbons

Analyte		Results	Units	MRL	RI - GA Limit	DF	Analyzed
2-Methylnaphthalene	E	**0.0196**	mg/L	0.00022		1	01/16/08
Acenaphthene		**0.00032**	mg/L	0.00022		1	01/16/08
Acenaphthylene		ND	mg/L	0.00022		1	01/16/08
Anthracene		ND	mg/L	0.00022		1	01/16/08
Benzo(a)anthracene		ND	mg/L	0.00005		1	01/16/08
Benzo(a)pyrene		ND	mg/L	0.00005	0.0002	1	01/16/08
Benzo(b)fluoranthene		ND	mg/L	0.00005		1	01/16/08
Benzo(g,h,i)perylene		ND	mg/L	0.00022		1	01/16/08
Benzo(k)fluoranthene		ND	mg/L	0.00005		1	01/16/08
Chrysene		ND	mg/L	0.00005		1	01/16/08
Dibenzo(a,h)Anthracene		ND	mg/L	0.00005		1	01/16/08
Fluoranthene		ND	mg/L	0.00022		1	01/16/08
Fluorene		**0.00052**	mg/L	0.00022		1	01/16/08
Hexachlorobenzene		ND	mg/L	0.00022	0.001	1	01/16/08
Indeno(1,2,3-cd)Pyrene		ND	mg/L	0.00005		1	01/16/08
Naphthalene		**0.00317**	mg/L	0.00022	0.02	1	01/16/08
Phenanthrene		**0.00046**	mg/L	0.00022		1	01/16/08
Pyrene		ND	mg/L	0.00022		1	01/16/08

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichlorobenzene-d4	*42 %*		*30-130*
Surrogate: 2,4,6-Tribromophenol	*80 %*		*15-110*
Surrogate: 2-Fluorobiphenyl	*64 %*		*30-130*
Surrogate: Nitrobenzene-d5	*51 %*		*30-130*
Surrogate: p-Terphenyl-d14	*76 %*		*30-130*

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0801152

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8260B Volatile Organic Compounds										
Batch BA81511 - 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							
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	0.0250	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	0.0250	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							

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0801152

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8260B Volatile Organic Compounds										
Batch BA81511 - 5030B										
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	0.0040	mg/L							
Naphthalene	ND	0.0010	mg/L							
n-Butylbenzene	ND	0.0010	mg/L							
n-Propyibenzene	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	0.0005	mg/L							
Trichloroethene	ND	0.0010	mg/L							
Trichlorofluoromethane	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							
Surrogate: 1,2-Dichloroethane-d4	*20.6*		ug/L	*25.00*		*82*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*24.5*		ug/L	*25.00*		*98*	*70-130*			
Surrogate: Dibromofluoromethane	*24.4*		ug/L	*25.00*		*97*	*70-130*			
Surrogate: Toluene-d8	*24.9*		ug/L	*25.00*		*100*	*70-130*			
LCS										
1,1,1,2-Tetrachloroethane	10.3		ug/L	10.00		103	70-130			
1,1,1-Trichloroethane	10.4		ug/L	10.00		104	70-130			
1,1,2,2-Tetrachloroethane	9.36		ug/L	10.00		94	70-130			
1,1,2-Trichloroethane	9.44		ug/L	10.00		94	70-130			
1,1-Dichloroethane	11.1		ug/L	10.00		111	70-130			
1,1-Dichloroethene	12.2		ug/L	10.00		122	70-130			
1,1-Dichloropropene	10.8		ug/L	10.00		108	70-130			
1,2,3-Trichlorobenzene	10.2		ug/L	10.00		102	70-130			
1,2,3-Trichloropropane	9.47		ug/L	10.00		95	70-130			
1,2,4-Trichlorobenzene	10.7		ug/L	10.00		107	70-130			
1,2,4-Trimethylbenzene	12.2		ug/L	10.00		122	70-130			
1,2-Dibromo-3-Chloropropane	9.50		ug/L	10.00		95	70-130			

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0801152

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8260B Volatile Organic Compounds										
Batch BA81511 - 5030B										
1,2-Dibromoethane	9.44		ug/L	10.00		94	70-130			
1,2-Dichlorobenzene	10.9		ug/L	10.00		109	70-130			
1,2-Dichloroethane	9.16		ug/L	10.00		92	70-130			
1,2-Dichloropropane	10.6		ug/L	10.00		106	70-130			
1,3,5-Trimethylbenzene	11.8		ug/L	10.00		118	70-130			
1,3-Dichlorobenzene	11.3		ug/L	10.00		113	70-130			
1,3-Dichloropropane	9.63		ug/L	10.00		96	70-130			
1,4-Dichlorobenzene	11.1		ug/L	10.00		111	70-130			
1,4-Dioxane - Screen	628		ug/L	200.0		314	0-332			
1-Chlorohexane	11.9		ug/L	10.00		119	70-130			
2,2-Dichloropropane	11.5		ug/L	10.00		115	70-130			
2-Butanone	57.8		ug/L	50.00		116	70-130			
2-Chlorotoluene	11.0		ug/L	10.00		110	70-130			
2-Hexanone	56.2		ug/L	50.00		112	70-130			
4-Chlorotoluene	11.4		ug/L	10.00		114	70-130			
4-Isopropyltoluene	11.9		ug/L	10.00		119	70-130			
4-Methyl-2-Pentanone	48.5		ug/L	50.00		97	70-130			
Acetone	61.4		ug/L	50.00		123	70-130			
Benzene	10.9		ug/L	10.00		109	70-130			
Bromobenzene	10.7		ug/L	10.00		107	70-130			
Bromochloromethane	9.73		ug/L	10.00		97	70-130			
Bromodichloromethane	10.7		ug/L	10.00		107	70-130			
Bromoform	8.76		ug/L	10.00		88	70-130			
Bromomethane	11.0		ug/L	10.00		110	70-130			
Carbon Disulfide	12.3		ug/L	10.00		123	70-130			
Carbon Tetrachloride	10.7		ug/L	10.00		107	70-130			
Chlorobenzene	10.6		ug/L	10.00		106	70-130			
Chloroethane	11.8		ug/L	10.00		118	70-130			
Chloroform	10.6		ug/L	10.00		106	70-130			
Chloromethane	9.94		ug/L	10.00		99	70-130			
cis-1,2-Dichloroethene	11.6		ug/L	10.00		116	70-130			
cis-1,3-Dichloropropene	10.1		ug/L	10.00		101	70-130			
Dibromochloromethane	9.89		ug/L	10.00		99	70-130			
Dibromomethane	9.24		ug/L	10.00		92	70-130			
Dichlorodifluoromethane	8.35		ug/L	10.00		84	70-130			
Diethyl Ether	9.86		ug/L	10.00		99	70-130			
Di-isopropyl ether	10.9		ug/L	10.00		109	70-130			
Ethyl tertiary-butyl ether	9.89		ug/L	10.00		99	70-130			
Ethylbenzene	10.8		ug/L	10.00		108	70-130			
Hexachlorobutadiene	12.9		ug/L	10.00		129	70-130			
Isopropylbenzene	10.6		ug/L	10.00		106	70-130			
Methyl tert-Butyl Ether	9.89		ug/L	10.00		99	70-130			
Methylene Chloride	11.2		ug/L	10.00		112	70-130			
Naphthalene	10.9		ug/L	10.00		109	70-130			
n-Butylbenzene	12.9		ug/L	10.00		129	70-130			
n-Propylbenzene	12.1		ug/L	10.00		121	70-130			

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0801152

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8260B Volatile Organic Compounds										
Batch BA81511 - 5030B										
sec-Butylbenzene	12.5		ug/L	10.00		125	70-130			
Styrene	10.7		ug/L	10.00		107	70-130			
tert-Butylbenzene	13.4		ug/L	10.00		134	70-130			B+
Tertiary-amyl methyl ether	9.90		ug/L	10.00		99	70-130			
Tetrachloroethene	8.10		ug/L	10.00		81	70-130			
Tetrahydrofuran	10.8		ug/L	10.00		108	70-130			
Toluene	10.7		ug/L	10.00		107	70-130			
trans-1,2-Dichloroethene	11.7		ug/L	10.00		117	70-130			
trans-1,3-Dichloropropene	8.51		ug/L	10.00		85	70-130			
Trichloroethene	10.6		ug/L	10.00		106	70-130			
Trichlorofluoromethane	10.0		ug/L	10.00		100	70-130			
Vinyl Acetate	10.2		ug/L	10.00		102	70-130			
Vinyl Chloride	13.1		ug/L	10.00		131	70-130			B+
Xylene O	11.2		ug/L	10.00		112	70-130			
Xylene P,M	22.4		ug/L	20.00		112	70-130			
Surrogate: 1,2-Dichloroethane-d4	*20.8*		ug/L	*25.00*		*83*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*24.2*		ug/L	*25.00*		*97*	*70-130*			
Surrogate: Dibromofluoromethane	*24.1*		ug/L	*25.00*		*96*	*70-130*			
Surrogate: Toluene-d8	*26.0*		ug/L	*25.00*		*104*	*70-130*			
LCS Dup										
1,1,1,2-Tetrachloroethane	9.80		ug/L	10.00		98	70-130	5	20	
1,1,1-Trichloroethane	9.86		ug/L	10.00		99	70-130	6	20	
1,1,2,2-Tetrachloroethane	9.64		ug/L	10.00		96	70-130	3	20	
1,1,2-Trichloroethane	9.63		ug/L	10.00		96	70-130	2	20	
1,1-Dichloroethane	10.4		ug/L	10.00		104	70-130	6	20	
1,1-Dichloroethene	11.6		ug/L	10.00		116	70-130	5	20	
1,1-Dichloropropene	10.1		ug/L	10.00		101	70-130	6	20	
1,2,3-Trichlorobenzene	9.51		ug/L	10.00		95	70-130	7	20	
1,2,3-Trichloropropane	9.59		ug/L	10.00		96	70-130	1	20	
1,2,4-Trichlorobenzene	9.97		ug/L	10.00		100	70-130	7	20	
1,2,4-Trimethylbenzene	10.8		ug/L	10.00		108	70-130	13	20	
1,2-Dibromo-3-Chloropropane	9.35		ug/L	10.00		94	70-130	2	20	
1,2-Dibromoethane	9.64		ug/L	10.00		96	70-130	2	20	
1,2-Dichlorobenzene	10.2		ug/L	10.00		102	70-130	7	20	
1,2-Dichloroethane	9.41		ug/L	10.00		94	70-130	3	20	
1,2-Dichloropropane	9.94		ug/L	10.00		99	70-130	6	20	
1,3,5-Trimethylbenzene	10.4		ug/L	10.00		104	70-130	13	20	
1,3-Dichlorobenzene	10.2		ug/L	10.00		102	70-130	10	20	
1,3-Dichloropropane	9.59		ug/L	10.00		96	70-130	0.4	20	
1,4-Dichlorobenzene	10.3		ug/L	10.00		103	70-130	8	20	
1,4-Dioxane - Screen	460		ug/L	200.0		230	0-332	31	200	
1-Chlorohexane	11.0		ug/L	10.00		110	70-130	8	20	
2,2-Dichloropropane	10.6		ug/L	10.00		106	70-130	8	20	
2-Butanone	61.2		ug/L	50.00		122	70-130	6	20	
2-Chlorotoluene	10.3		ug/L	10.00		103	70-130	6	20	
2-Hexanone	58.0		ug/L	50.00		116	70-130	3	20	

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0801152

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8260B Volatile Organic Compounds										
Batch BA81511 - 5030B										
4-Chlorotoluene	10.2		ug/L	10.00		102	70-130	11	20	
4-Isopropyltoluene	10.4		ug/L	10.00		104	70-130	13	20	
4-Methyl-2-Pentanone	52.5		ug/L	50.00		105	70-130	8	20	
Acetone	64.6		ug/L	50.00		129	70-130	5	20	
Benzene	10.1		ug/L	10.00		101	70-130	8	20	
Bromobenzene	9.96		ug/L	10.00		100	70-130	7	20	
Bromochloromethane	9.72		ug/L	10.00		97	70-130	0.1	20	
Bromodichloromethane	10.5		ug/L	10.00		105	70-130	2	20	
Bromoform	9.20		ug/L	10.00		92	70-130	5	20	
Bromomethane	10.4		ug/L	10.00		104	70-130	5	20	
Carbon Disulfide	11.5		ug/L	10.00		115	70-130	6	20	
Carbon Tetrachloride	9.99		ug/L	10.00		100	70-130	6	20	
Chlorobenzene	9.99		ug/L	10.00		100	70-130	6	20	
Chloroethane	11.4		ug/L	10.00		114	70-130	4	20	
Chloroform	9.83		ug/L	10.00		98	70-130	7	20	
Chloromethane	9.02		ug/L	10.00		90	70-130	10	20	
cis-1,2-Dichloroethene	10.9		ug/L	10.00		109	70-130	6	20	
cis-1,3-Dichloropropene	9.71		ug/L	10.00		97	70-130	4	20	
Dibromochloromethane	9.80		ug/L	10.00		98	70-130	0.9	20	
Dibromomethane	9.32		ug/L	10.00		93	70-130	0.9	20	
Dichlorodifluoromethane	7.95		ug/L	10.00		80	70-130	5	20	
Diethyl Ether	9.80		ug/L	10.00		98	70-130	0.6	20	
Di-isopropyl ether	10.5		ug/L	10.00		105	70-130	3	20	
Ethyl tertiary-butyl ether	9.90		ug/L	10.00		99	70-130	0.1	20	
Ethylbenzene	10.0		ug/L	10.00		100	70-130	8	20	
Hexachlorobutadiene	10.8		ug/L	10.00		108	70-130	18	20	
Isopropylbenzene	9.43		ug/L	10.00		94	70-130	12	20	
Methyl tert-Butyl Ether	10.2		ug/L	10.00		102	70-130	3	20	
Methylene Chloride	10.8		ug/L	10.00		108	70-130	4	20	
Naphthalene	10.1		ug/L	10.00		101	70-130	7	20	
n-Butylbenzene	11.1		ug/L	10.00		111	70-130	15	20	
n-Propylbenzene	10.7		ug/L	10.00		107	70-130	13	20	
sec-Butylbenzene	10.9		ug/L	10.00		109	70-130	14	20	
Styrene	10.1		ug/L	10.00		101	70-130	6	20	
tert-Butylbenzene	11.9		ug/L	10.00		119	70-130	12	20	
Tertiary-amyl methyl ether	10.1		ug/L	10.00		101	70-130	2	20	
Tetrachloroethene	7.70		ug/L	10.00		77	70-130	5	20	
Tetrahydrofuran	11.1		ug/L	10.00		111	70-130	2	20	
Toluene	10.1		ug/L	10.00		101	70-130	6	20	
trans-1,2-Dichloroethene	10.8		ug/L	10.00		108	70-130	8	20	
trans-1,3-Dichloropropene	8.55		ug/L	10.00		86	70-130	0.5	20	
Trichloroethene	9.88		ug/L	10.00		99	70-130	7	20	
Trichlorofluoromethane	9.61		ug/L	10.00		96	70-130	4	20	
Vinyl Acetate	10.2		ug/L	10.00		102	70-130	0.4	20	
Vinyl Chloride	12.1		ug/L	10.00		121	70-130	8	20	
Xylene O	10.3		ug/L	10.00		103	70-130	9	20	

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0801152

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8260B Volatile Organic Compounds										
Batch BA81511 - 5030B										
Xylene P,M	20.8		ug/L	20.00		104	70-130	7	20	
Surrogate: 1,2-Dichloroethane-d4	*22.2*		ug/L	*25.00*		*89*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*24.9*		ug/L	*25.00*		*99*	*70-130*			
Surrogate: Dibromofluoromethane	*24.8*		ug/L	*25.00*		*99*	*70-130*			
Surrogate: Toluene-d8	*25.6*		ug/L	*25.00*		*102*	*70-130*			
8270C Semi-Volatile Organic Compounds										
Batch BA81509 - 3520C										
Blank										
1,1-Biphenyl	ND	0.01	mg/L							
1,2,4-Trichlorobenzene	ND	0.01	mg/L							
1,2-Dichlorobenzene	ND	0.01	mg/L							
1,3-Dichlorobenzene	ND	0.01	mg/L							
1,4-Dichlorobenzene	ND	0.01	mg/L							
2,3,4,6-Tetrachlorophenol	ND	0.05	mg/L							
2,4,5-Trichlorophenol	ND	0.01	mg/L							
2,4,6-Trichlorophenol	ND	0.01	mg/L							
2,4-Dichlorophenol	ND	0.01	mg/L							
2,4-Dimethylphenol	ND	0.05	mg/L							
2,4-Dinitrophenol	ND	0.05	mg/L							
2,4-Dinitrotoluene	ND	0.01	mg/L							
2,6-Dinitrotoluene	ND	0.01	mg/L							
2-Chloronaphthalene	ND	0.01	mg/L							
2-Chlorophenol	ND	0.01	mg/L							
2-Methylnaphthalene	ND	0.01	mg/L							
2-Methylphenol	ND	0.01	mg/L							
2-Nitroaniline	ND	0.01	mg/L							
2-Nitrophenol	ND	0.01	mg/L							
3,3´-Dichlorobenzidine	ND	0.02	mg/L							
3+4-Methylphenol	ND	0.02	mg/L							
3-Nitroaniline	ND	0.01	mg/L							
4,6-Dinitro-2-Methylphenol	ND	0.05	mg/L							
4-Bromophenyl-phenylether	ND	0.01	mg/L							
4-Chloro-3-Methylphenol	ND	0.01	mg/L							
4-Chloroaniline	ND	0.02	mg/L							
4-Chloro-phenyl-phenyl ether	ND	0.01	mg/L							
4-Nitroaniline	ND	0.01	mg/L							
4-Nitrophenol	ND	0.05	mg/L							
Acetophenone	ND	0.01	mg/L							
Aniline	ND	0.01	mg/L							
Azobenzene	ND	0.02	mg/L							
Benzoic Acid	ND	0.1	mg/L							
Benzyl Alcohol	ND	0.01	mg/L							
bis(2-Chloroethoxy)methane	ND	0.01	mg/L							
bis(2-Chloroethyl)ether	ND	0.01	mg/L							

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0801152

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8270C Semi-Volatile Organic Compounds										
Batch BA81509 - 3520C										
bis(2-chloroisopropyl)Ether	ND	0.01	mg/L							
bis(2-Ethylhexyl)phthalate	ND	0.006	mg/L							
Butylbenzylphthalate	ND	0.01	mg/L							
Carbazole	ND	0.01	mg/L							
Dibenzofuran	ND	0.01	mg/L							
Diethylphthalate	ND	0.01	mg/L							
Dimethylphthalate	ND	0.01	mg/L							
Di-n-butylphthalate	ND	0.01	mg/L							
Di-n-octylphthalate	ND	0.01	mg/L							
Hexachlorobenzene	ND	0.01	mg/L							
Hexachlorobutadiene	ND	0.01	mg/L							
Hexachlorocyclopentadiene	ND	0.05	mg/L							
Hexachloroethane	ND	0.005	mg/L							
Isophorone	ND	0.01	mg/L							
Nitrobenzene	ND	0.01	mg/L							
N-Nitrosodimethylamine	ND	0.01	mg/L							
N-Nitroso-Di-n-Propylamine	ND	0.01	mg/L							
N-nitrosodiphenylamine	ND	0.02	mg/L							
Pentachlorophenol	ND	0.05	mg/L							
Phenol	ND	0.01	mg/L							
Pyridine	ND	0.1	mg/L							
Surrogate: 1,2-Dichlorobenzene-d4	*0.0766*		mg/L	*0.1000*		*77*	*30-130*			
Surrogate: 2,4,6-Tribromophenol	*0.101*		mg/L	*0.1500*		*68*	*15-110*			
Surrogate: 2-Chlorophenol-d4	*0.106*		mg/L	*0.1500*		*70*	*15-110*			
Surrogate: 2-Fluorobiphenyl	*0.0801*		mg/L	*0.1000*		*80*	*30-130*			
Surrogate: 2-Fluorophenol	*0.0929*		mg/L	*0.1500*		*62*	*15-110*			
Surrogate: Nitrobenzene-d5	*0.0832*		mg/L	*0.1000*		*83*	*30-130*			
Surrogate: Phenol-d6	*0.0994*		mg/L	*0.1500*		*66*	*15-110*			
Surrogate: p-Terphenyl-d14	*0.0868*		mg/L	*0.1000*		*87*	*30-130*			
LCS										
1,1-Biphenyl	0.09	0.01	mg/L	0.1000		88	40-140			
1,2,4-Trichlorobenzene	0.08	0.01	mg/L	0.1000		75	40-140			
1,2-Dichlorobenzene	0.06	0.01	mg/L	0.1000		63	40-140			
1,3-Dichlorobenzene	0.06	0.01	mg/L	0.1000		62	40-140			
1,4-Dichlorobenzene	0.06	0.01	mg/L	0.1000		59	40-140			
2,3,4,6-Tetrachlorophenol	0.08	0.05	mg/L	0.1000		81	40-140			
2,4,5-Trichlorophenol	0.1	0.01	mg/L	0.1000		95	30-130			
2,4,6-Trichlorophenol	0.09	0.01	mg/L	0.1000		95	30-130			
2,4-Dichlorophenol	0.09	0.01	mg/L	0.1000		86	30-130			
2,4-Dimethylphenol	0.08	0.05	mg/L	0.1000		78	30-130			
2,4-Dinitrophenol	0.04	0.05	mg/L	0.1000		44	30-130			
2,4-Dinitrotoluene	0.09	0.01	mg/L	0.1000		86	40-140			
2,6-Dinitrotoluene	0.08	0.01	mg/L	0.1000		83	40-140			
2-Chloronaphthalene	0.07	0.01	mg/L	0.1000		69	40-140			
2-Chlorophenol	0.07	0.01	mg/L	0.1000		74	30-130			
2-Methylnaphthalene	0.08	0.01	mg/L	0.1000		78	40-140			

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0801152

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8270C Semi-Volatile Organic Compounds										
Batch BA81509 - 3520C										
2-Methylphenol	0.08	0.01	mg/L	0.1000		77	30-130			
2-Nitroanilline	0.1	0.01	mg/L	0.1000		101	40-140			
2-Nitrophenol	0.08	0.01	mg/L	0.1000		81	30-130			
3,3'-Dichlorobenzidine	0.08	0.02	mg/L	0.1000		82	40-140			
3+4-Methylphenol	0.2	0.02	mg/L	0.2000		76	30-130			
3-Nitroaniline	0.09	0.01	mg/L	0.1000		85	40-140			
4,6-Dinitro-2-Methylphenol	0.08	0.05	mg/L	0.1000		82	30-130			
4-Bromophenyl-phenylether	0.1	0.01	mg/L	0.1000		98	40-140			
4-Chloro-3-Methylphenol	0.08	0.01	mg/L	0.1000		84	30-130			
4-Chloroanilline	0.07	0.02	mg/L	0.1000		67	40-140			
4-Chloro-phenyl-phenyl ether	0.08	0.01	mg/L	0.1000		82	40-140			
4-Nitroaniline	0.09	0.01	mg/L	0.1000		90	40-140			
4-Nitrophenol	0.08	0.05	mg/L	0.1000		82	30-130			
Acetophenone	0.08	0.01	mg/L	0.1000		80	40-140			
Aniline	0.05	0.01	mg/L	0.1000		51	40-140			
Azobenzene	0.1	0.02	mg/L	0.1000		96	40-140			
Benzoic Acid	0.02	0.1	mg/L	0.1000		24	40-140			B-
Benzyl Alcohol	0.09	0.01	mg/L	0.1000		92	40-140			
bis(2-Chloroethoxy)methane	0.08	0.01	mg/L	0.1000		79	40-140			
bis(2-Chloroethyl)ether	0.07	0.01	mg/L	0.1000		75	40-140			
bis(2-chloroisopropyl)Ether	0.07	0.01	mg/L	0.1000		67	40-140			
bis(2-Ethylhexyl)phthalate	0.09	0.006	mg/L	0.1000		92	40-140			
Butylbenzylphthalate	0.09	0.01	mg/L	0.1000		89	40-140			
Carbazole	0.09	0.01	mg/L	0.1000		87	40-140			
Dibenzofuran	0.08	0.01	mg/L	0.1000		84	40-140			
Diethylphthalate	0.09	0.01	mg/L	0.1000		85	40-140			
Dimethylphthalate	0.08	0.01	mg/L	0.1000		84	40-140			
Di-n-butylphthalate	0.09	0.01	mg/L	0.1000		86	40-140			
Di-n-octylphthalate	0.1	0.01	mg/L	0.1000		104	40-140			
Hexachlorobenzene	0.09	0.01	mg/L	0.1000		92	40-140			
Hexachlorobutadiene	0.07	0.01	mg/L	0.1000		72	40-140			
Hexachlorocyclopentadiene	0.05	0.05	mg/L	0.1000		50	40-140			
Hexachloroethane	0.06	0.005	mg/L	0.1000		57	40-140			
Isophorone	0.08	0.01	mg/L	0.1000		79	40-140			
Nitrobenzene	0.08	0.01	mg/L	0.1000		77	40-140			
N-Nitrosodimethylamine	0.08	0.01	mg/L	0.1000		78	40-140			
N-Nitroso-Di-n-Propylamine	0.08	0.01	mg/L	0.1000		75	40-140			
N-nitrosodiphenylamine	0.09	0.02	mg/L	0.1000		95	40-140			
Pentachlorophenol	0.07	0.05	mg/L	0.1000		72	30-130			
Phenol	0.07	0.01	mg/L	0.1000		66	30-130			
Pyridine	0.05	0.1	mg/L	0.1000		51	40-140			
Surrogate: 1,2-Dichlorobenzene-d4	*0.0702*		mg/L	*0.1000*		*70*	*30-130*			
Surrogate: 2,4,6-Tribromophenol	*0.127*		mg/L	*0.1500*		*84*	*15-110*			
Surrogate: 2-Chlorophenol-d4	*0.111*		mg/L	*0.1500*		*74*	*15-110*			
Surrogate: 2-Fluorobiphenyl	*0.0851*		mg/L	*0.1000*		*85*	*30-130*			
Surrogate: 2-Fluorophenol	*0.106*		mg/L	*0.1500*		*71*	*15-110*			

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0801152

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8270C Semi-Volatile Organic Compounds										
Batch BA81509 - 3520C										
Surrogate: Nitrobenzene-d5	*0.0774*		mg/L	*0.1000*		*77*	*30-130*			
Surrogate: Phenol-d6	*0.108*		mg/L	*0.1500*		*72*	*15-110*			
Surrogate: p-Terphenyl-d14	*0.0862*		mg/L	*0.1000*		*86*	*30-130*			
LCS Dup										
1,1-Biphenyl	0.09	0.01	mg/L	0.1000		86	40-140	2	20	
1,2,4-Trichlorobenzene	0.07	0.01	mg/L	0.1000		74	40-140	1	20	
1,2-Dichlorobenzene	0.06	0.01	mg/L	0.1000		61	40-140	4	20	
1,3-Dichlorobenzene	0.06	0.01	mg/L	0.1000		57	40-140	8	20	
1,4-Dichlorobenzene	0.06	0.01	mg/L	0.1000		60	40-140	2	20	
2,3,4,6-Tetrachlorophenol	0.09	0.05	mg/L	0.1000		87	40-140	7	20	
2,4,5-Trichlorophenol	0.1	0.01	mg/L	0.1000		96	30-130	0.5	20	
2,4,6-Trichlorophenol	0.1	0.01	mg/L	0.1000		96	30-130	2	20	
2,4-Dichlorophenol	0.09	0.01	mg/L	0.1000		87	30-130	1	20	
2,4-Dimethylphenol	0.08	0.05	mg/L	0.1000		80	30-130	1	20	
2,4-Dinitrophenol	0.05	0.05	mg/L	0.1000		55	30-130	23	20	D+
2,4-Dinitrotoluene	0.09	0.01	mg/L	0.1000		93	40-140	8	20	
2,6-Dinitrotoluene	0.09	0.01	mg/L	0.1000		90	40-140	8	20	
2-Chloronaphthalene	0.07	0.01	mg/L	0.1000		68	40-140	2	20	
2-Chlorophenol	0.07	0.01	mg/L	0.1000		73	30-130	0.7	20	
2-Methylnaphthalene	0.08	0.01	mg/L	0.1000		79	40-140	1	20	
2-Methylphenol	0.07	0.01	mg/L	0.1000		75	30-130	3	20	
2-Nitroaniline	0.1	0.01	mg/L	0.1000		106	40-140	5	20	
2-Nitrophenol	0.08	0.01	mg/L	0.1000		83	30-130	2	20	
3,3'-Dichlorobenzidine	0.09	0.02	mg/L	0.1000		93	40-140	13	20	
3+4-Methylphenol	0.1	0.02	mg/L	0.2000		71	30-130	6	20	
3-Nitroaniline	0.09	0.01	mg/L	0.1000		92	40-140	8	20	
4,6-Dinitro-2-Methylphenol	0.09	0.05	mg/L	0.1000		86	30-130	5	20	
4-Bromophenyl-phenylether	0.08	0.01	mg/L	0.1000		84	40-140	16	20	
4-Chloro-3-Methylphenol	0.09	0.01	mg/L	0.1000		89	30-130	5	20	
4-Chloroaniline	0.07	0.02	mg/L	0.1000		69	40-140	2	20	
4-Chloro-phenyl-phenyl ether	0.09	0.01	mg/L	0.1000		89	40-140	8	20	
4-Nitroaniline	0.09	0.01	mg/L	0.1000		93	40-140	2	20	
4-Nitrophenol	0.1	0.05	mg/L	0.1000		100	30-130	19	20	
Acetophenone	0.08	0.01	mg/L	0.1000		82	40-140	2	20	
Aniline	0.05	0.01	mg/L	0.1000		50	40-140	2	20	
Azobenzene	0.09	0.02	mg/L	0.1000		92	40-140	4	20	
Benzoic Acid	0.03	0.1	mg/L	0.1000		29	40-140	19	20	B-
Benzyl Alcohol	0.09	0.01	mg/L	0.1000		85	40-140	8	20	
bis(2-Chloroethoxy)methane	0.08	0.01	mg/L	0.1000		82	40-140	4	20	
bis(2-Chloroethyl)ether	0.07	0.01	mg/L	0.1000		73	40-140	3	20	
bis(2-chloroisopropyl)Ether	0.07	0.01	mg/L	0.1000		65	40-140	3	20	
bis(2-Ethylhexyl)phthalate	0.1	0.006	mg/L	0.1000		96	40-140	3	20	
Butylbenzylphthalate	0.09	0.01	mg/L	0.1000		90	40-140	0.6	20	
Carbazole	0.09	0.01	mg/L	0.1000		88	40-140	1	20	
Dibenzofuran	0.08	0.01	mg/L	0.1000		83	40-140	0.5	20	

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0801152

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8270C Semi-Volatile Organic Compounds										
Batch BA81509 - 3520C										
Diethylphthalate	0.09	0.01	mg/L	0.1000		90	40-140	5	20	
Dimethylphthalate	0.08	0.01	mg/L	0.1000		82	40-140	2	20	
Di-n-butylphthalate	0.09	0.01	mg/L	0.1000		86	40-140	0.3	20	
Di-n-octylphthalate	0.1	0.01	mg/L	0.1000		100	40-140	3	20	
Hexachlorobenzene	0.09	0.01	mg/L	0.1000		90	40-140	2	20	
Hexachlorobutadiene	0.07	0.01	mg/L	0.1000		71	40-140	2	20	
Hexachlorocyclopentadiene	0.05	0.05	mg/L	0.1000		49	40-140	2	20	
Hexachloroethane	0.06	0.005	mg/L	0.1000		57	40-140	0.9	20	
Isophorone	0.08	0.01	mg/L	0.1000		80	40-140	1	20	
Nitrobenzene	0.08	0.01	mg/L	0.1000		80	40-140	4	20	
N-Nitrosodimethylamine	0.1	0.01	mg/L	0.1000		98	40-140	22	20	D+
N-Nitroso-Di-n-Propylamine	0.07	0.01	mg/L	0.1000		71	40-140	6	20	
N-nitrosodiphenylamine	0.09	0.02	mg/L	0.1000		92	40-140	3	20	
Pentachlorophenol	0.08	0.05	mg/L	0.1000		78	30-130	7	20	
Phenol	0.06	0.01	mg/L	0.1000		59	30-130	12	20	
Pyridine	0.07	0.1	mg/L	0.1000		70	40-140	30	20	D+
Surrogate: 1,2-Dichlorobenzene-d4	*0.0688*		mg/L	*0.1000*		*69*	*30-130*			
Surrogate: 2,4,6-Tribromophenol	*0.130*		mg/L	*0.1500*		*87*	*15-110*			
Surrogate: 2-Chlorophenol-d4	*0.107*		mg/L	*0.1500*		*71*	*15-110*			
Surrogate: 2-Fluorobiphenyl	*0.0806*		mg/L	*0.1000*		*81*	*30-130*			
Surrogate: 2-Fluorophenol	*0.102*		mg/L	*0.1500*		*68*	*15-110*			
Surrogate: Nitrobenzene-d5	*0.0789*		mg/L	*0.1000*		*79*	*30-130*			
Surrogate: Phenol-d6	*0.103*		mg/L	*0.1500*		*69*	*15-110*			
Surrogate: p-Terphenyl-d14	*0.0874*		mg/L	*0.1000*		*87*	*30-130*			
8270C(SIM) Polynuclear Aromatic Hydrocarbons										
Batch BA81521 - 3510C										
Blank										
2-Methylnaphthalene	ND	0.00020	mg/L							
Acenaphthene	ND	0.00020	mg/L							
Acenaphthylene	ND	0.00020	mg/L							
Anthracene	ND	0.00020	mg/L							
Benzo(a)anthracene	ND	0.00005	mg/L							
Benzo(a)pyrene	ND	0.00005	mg/L							
Benzo(b)fluoranthene	ND	0.00005	mg/L							
Benzo(g,h,i)perylene	ND	0.00020	mg/L							
Benzo(k)fluoranthene	ND	0.00005	mg/L							
Chrysene	ND	0.00005	mg/L							
Dibenzo(a,h)Anthracene	ND	0.00005	mg/L							
Fluoranthene	ND	0.00020	mg/L							
Fluorene	ND	0.00020	mg/L							
Hexachlorobenzene	ND	0.00020	mg/L							
Indeno(1,2,3-cd)Pyrene	ND	0.00005	mg/L							
Naphthalene	ND	0.00020	mg/L							
Phenanthrene	ND	0.00020	mg/L							

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0801152

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8270C(SIM) Polynuclear Aromatic Hydrocarbons										
Batch BA81521 - 3510C										
Pyrene	ND	0.00020	mg/L							
Surrogate: 1,2-Dichlorobenzene-d4	*0.000318*		mg/L	*0.0006250*		*51*	*30-130*			
Surrogate: 2,4,6-Tribromophenol	*0.000498*		mg/L	*0.0009375*		*53*	*15-110*			
Surrogate: 2-Fluorobiphenyl	*0.000402*		mg/L	*0.0006250*		*64*	*30-130*			
Surrogate: Nitrobenzene-d5	*0.000338*		mg/L	*0.0006250*		*54*	*30-130*			
Surrogate: p-Terphenyl-d14	*0.000428*		mg/L	*0.0006250*		*68*	*30-130*			
LCS										
2-Methylnaphthalene	0.00036	0.00020	mg/L	0.0005000		72	40-140			
Acenaphthene	0.00037	0.00020	mg/L	0.0005000		74	40-140			
Acenaphthylene	0.00036	0.00020	mg/L	0.0005000		72	40-140			
Anthracene	0.00040	0.00020	mg/L	0.0005000		81	40-140			
Benzo(a)anthracene	0.00041	0.00005	mg/L	0.0005000		82	40-140			
Benzo(a)pyrene	0.00039	0.00005	mg/L	0.0005000		78	40-140			
Benzo(b)fluoranthene	0.00042	0.00005	mg/L	0.0005000		83	40-140			
Benzo(g,h,i)perylene	0.00034	0.00020	mg/L	0.0005000		67	40-140			
Benzo(k)fluoranthene	0.00044	0.00005	mg/L	0.0005000		88	40-140			
Chrysene	0.00042	0.00005	mg/L	0.0005000		84	40-140			
Dibenzo(a,h)Anthracene	0.00031	0.00005	mg/L	0.0005000		62	40-140			
Fluoranthene	0.00044	0.00020	mg/L	0.0005000		88	40-140			
Fluorene	0.00038	0.00020	mg/L	0.0005000		75	40-140			
Hexachlorobenzene	0.00038	0.00020	mg/L	0.0005000		76	40-140			
Indeno(1,2,3-cd)Pyrene	0.00032	0.00005	mg/L	0.0005000		65	40-140			
Naphthalene	0.00034	0.00020	mg/L	0.0005000		69	40-140			
Phenanthrene	0.00040	0.00020	mg/L	0.0005000		79	40-140			
Pyrene	0.00039	0.00020	mg/L	0.0005000		78	40-140			
Surrogate: 1,2-Dichlorobenzene-d4	*0.000345*		mg/L	*0.0006250*		*55*	*30-130*			
Surrogate: 2,4,6-Tribromophenol	*0.000610*		mg/L	*0.0009375*		*65*	*15-110*			
Surrogate: 2-Fluorobiphenyl	*0.000462*		mg/L	*0.0006250*		*74*	*30-130*			
Surrogate: Nitrobenzene-d5	*0.000390*		mg/L	*0.0006250*		*62*	*30-130*			
Surrogate: p-Terphenyl-d14	*0.000402*		mg/L	*0.0006250*		*64*	*30-130*			
LCS Dup										
2-Methylnaphthalene	0.00032	0.00020	mg/L	0.0005000		65	40-140	10	20	
Acenaphthene	0.00033	0.00020	mg/L	0.0005000		66	40-140	13	20	
Acenaphthylene	0.00032	0.00020	mg/L	0.0005000		63	40-140	13	20	
Anthracene	0.00036	0.00020	mg/L	0.0005000		71	40-140	12	20	
Benzo(a)anthracene	0.00036	0.00005	mg/L	0.0005000		71	40-140	14	20	
Benzo(a)pyrene	0.00034	0.00005	mg/L	0.0005000		67	40-140	15	20	
Benzo(b)fluoranthene	0.00035	0.00005	mg/L	0.0005000		70	40-140	16	20	
Benzo(g,h,i)perylene	0.00030	0.00020	mg/L	0.0005000		60	40-140	11	20	
Benzo(k)fluoranthene	0.00038	0.00005	mg/L	0.0005000		75	40-140	15	20	
Chrysene	0.00037	0.00005	mg/L	0.0005000		74	40-140	13	20	
Dibenzo(a,h)Anthracene	0.00028	0.00005	mg/L	0.0005000		56	40-140	8	20	
Fluoranthene	0.00036	0.00020	mg/L	0.0005000		72	40-140	20	20	
Fluorene	0.00032	0.00020	mg/L	0.0005000		64	40-140	15	20	
Hexachlorobenzene	0.00034	0.00020	mg/L	0.0005000		67	40-140	12	20	
Indeno(1,2,3-cd)Pyrene	0.00029	0.00005	mg/L	0.0005000		58	40-140	12	20	

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0801152

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8270C(SIM) Polynuclear Aromatic Hydrocarbons										
Batch BA81521 - 3510C										
Naphthalene	0.00032	0.00020	mg/L	0.0005000		64	40-140	8	20	
Phenanthrene	0.00034	0.00020	mg/L	0.0005000		68	40-140	15	20	
Pyrene	0.00036	0.00020	mg/L	0.0005000		72	40-140	7	20	
Surrogate: 1,2-Dichlorobenzene-d4	*0.000348*		mg/L	*0.0006250*		*56*	*30-130*			
Surrogate: 2,4,6-Tribromophenol	*0.000610*		mg/L	*0.0009375*		*65*	*15-110*			
Surrogate: 2-Fluorobiphenyl	*0.000465*		mg/L	*0.0006250*		*74*	*30-130*			
Surrogate: Nitrobenzene-d5	*0.000395*		mg/L	*0.0006250*		*63*	*30-130*			
Surrogate: p-Terphenyl-d14	*0.000432*		mg/L	*0.0006250*		*69*	*30-130*			

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site ESS Laboratory Work Order: 0801152

Notes and Definitions

U	Analyte included in the analysis, but not detected
E	Reported above the quantitation limit; Estimated value.
D+	Relative percent difference for duplicate is outside of criteria.
C-	Continuing Calibration recovery is below lower control limit.
B+	Blank Spike recovery is above upper control limit.
B-	Blank Spike recovery is below lower control limit.
ND	Analyte NOT DETECTED above the detection limit
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting 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.

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0801152

ESS LABORATORY CERTIFICATIONS

U.S. Army Corps of Engineers
Soil and Water

Navy Installation Restoration QA Program
Soil and Water

Rhode Island: A-179

Connecticut: PH-0750

Maine: RI002

Massachusetts: M-RI002

New Hampshire (NELAP accredited): 242405
Potable Water
Non Potable Water

New York (NELAP accredited): 11313
Potable Water
Non Potable Water
Solid and Hazardous Waste

United States Department of Agriculture
Soil Permit: S-54210

New Jersey (NELAP accredited): RI002
Potable Water
Non Potable Water
Soil and Hazardous Waste

Maryland: 301
Potable Water

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

Page 1 of 1

Turn Time ___ Standard Other 24-hr
If faster than 5 days, prior approval by laboratory is required #_____

State where samples were collected from:
MA (RI) CT NH NJ NY ME Other_____

Is this project for any of the following:
MA-MCP Navy USACE Other_____

Reporting Limits: RIDEM GA

ESS LAB PROJECT ID: 0801152

Electronic Deliverable ✓ Yes ___ No

Format: Excel ✓ Access ___ PDF ___ Other ___

Co. Name	Project #	Project Name (20 Char. or less)
MACTEC	3650504171 TS	GORHAM

Contact Person	Address
DARON KURKJIAN	107 AUDUBON

City	State	Zip	PO#
Wakefield	MA	01880	

Telephone #	Fax #	Email Address
781-245-6606	781-246-5060	DKURKJIAN@MACTEC.COM

ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Pres Code	Number of Containers	Type of Containers	Write Required Analysis: VOCs	SVOCs
01	1/15/08	1030		X	GW	WEST UST	2 1	5	3-VOA 2-1L	X	X

Container Type: P-Poly G-Glass S-Sterile V-VOA | Matrix: S-Soil SD-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present ___ Yes ___ No
Seals Intact ___ Yes ___ No NA: ___
Cooler Temp: 4/5

Internal Use Only
[ ] Pickup
[ ] Technicians____

Preservation Code: 1- NP, 2- HCl, 3- H_2SO_4, 4- HNO_3, 5- NaOH, 6- MeOH, 7- Asorbic Acid, 8- ZnAct, 9- _____

Sampled by:

Comments:

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	1/15/08 11:30	[signature]	1/15/08 11:30				
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 samples were collected in accordance with MADEP CAM VII A

Please fax all changes to Chain of Custody in writing.

1 (White) Lab Copy 2 (Yellow) Client Receipt

10/26/04 A

ESS Laboratory
Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

PROJECT NARRATIVE

David Heislein
MACTEC Engineering & Consulting, Inc.
107 Audubon Road
Wakefield, MA 01880

RE: Providence Gorham Site
ESS Laboratory Work Order Number: 0801239

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 Project Narrative, the entire report has been paginated. The ESS Laboratory Certifications sheet is the final report page. 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 mailed. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

Date: January 22, 2008

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 may be used instead of automated integration because it produces more accurate results. All ICP Metals were analyzed using the established linear dynamic range to determine acceptable analytical results.

ESS Laboratory certifies that the test results meet the requirements of NELAC, except where noted within this project narrative.

Sample Receipt
The following sample(s) were received on January 21, 2008 for the analyses specified on the enclosed Chain of Custody Record.

Laboratory ID	Matrix	Client SampleID
0801239-01	Soil	SBWest00
0801239-02	Soil	SBEast00
0801239-03	Soil	Brickpit1

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0801239

PROJECT NARRATIVE

5035/8260B Volatile Organic Compounds / Low Level

0801239-03	**Internal Standard(s) outside of criteria. Sample was reanalyzed to confirm.**
0801239-03	**Reported above the quantitation limit; Estimated value.** Naphthalene

5035/8260B Volatile Organic Compounds / Methanol

BRA0175-CCV1	**Continuing Calibration recovery is below lower control limit.** 2-Butanone, 2-Hexanone, Tetrahydrofuran

8270C Semi-Volatile Organic Compounds

0801239-03	**Internal Standard(s) outside of criteria due to matrix (UCM/coelution is present).**
BA82115-BS1	**Blank Spike recovery is below lower control limit.** 2,4-Dinitrophenol, 4-Chloroaniline, Benzoic Acid, Hexachlorocyclopentadiene, Pyridine
BA82115-BSD1	**Blank Spike recovery is below lower control limit.** 3+4-Methylphenol, 4-Chloroaniline, Benzoic Acid, Hexachlorocyclopentadiene, Pyridine
BA82115-BSD1	**Relative percent difference for duplicate is outside of criteria.** 2,4-Dinitrophenol, 3+4-Methylphenol, 4,6-Dinitro-2-Methylphenol, Benzoic Acid

No other observations noted.

End of Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site
Client Sample ID: SBWest00
Date Sampled: 01/21/08 08:40
Percent Solids: 89
Initial Volume: 5.2
Final Volume: 10
Extraction Method: 5035

ESS Laboratory Work Order: 0801239
ESS Laboratory Sample ID: 0801239-01
Sample Matrix: Soil
Analyst: MD

5035/8260B Volatile Organic Compounds / Low Level

Analyte	Results	Units	MRL	RI - RES DEC Limit	DF	Analyzed
1,1,1,2-Tetrachloroethane	ND	mg/kg dry	0.0054	2.2	1	01/21/08
1,1,1-Trichloroethane	ND	mg/kg dry	0.0054	540	1	01/21/08
1,1,2,2-Tetrachloroethane	ND	mg/kg dry	0.0054	1.3	1	01/21/08
1,1,2-Trichloroethane	ND	mg/kg dry	0.0054	3.6	1	01/21/08
1,1-Dichloroethane	ND	mg/kg dry	0.0054	920	1	01/21/08
1,1-Dichloroethene	ND	mg/kg dry	0.0054	0.2	1	01/21/08
1,1-Dichloropropene	ND	mg/kg dry	0.0054		1	01/21/08
1,2,3-Trichlorobenzene	ND	mg/kg dry	0.0054		1	01/21/08
1,2,3-Trichloropropane	ND	mg/kg dry	0.0054		1	01/21/08
1,2,4-Trichlorobenzene	ND	mg/kg dry	0.0054	96	1	01/21/08
1,2,4-Trimethylbenzene	ND	mg/kg dry	0.0054		1	01/21/08
1,2-Dibromo-3-Chloropropane	ND	mg/kg dry	0.0054	0.5	1	01/21/08
1,2-Dibromoethane	ND	mg/kg dry	0.0054	0.01	1	01/21/08
1,2-Dichlorobenzene	ND	mg/kg dry	0.0054	510	1	01/21/08
1,2-Dichloroethane	ND	mg/kg dry	0.0054	0.9	1	01/21/08
1,2-Dichloropropane	ND	mg/kg dry	0.0054	1.9	1	01/21/08
1,3,5-Trimethylbenzene	ND	mg/kg dry	0.0054		1	01/21/08
1,3-Dichlorobenzene	ND	mg/kg dry	0.0054	430	1	01/21/08
1,3-Dichloropropane	ND	mg/kg dry	0.0054		1	01/21/08
1,4-Dichlorobenzene	ND	mg/kg dry	0.0054	27	1	01/21/08
1,4-Dioxane - Screen	ND	mg/kg dry	0.270		1	01/21/08
1-Chlorohexane	ND	mg/kg dry	0.0054		1	01/21/08
2,2-Dichloropropane	ND	mg/kg dry	0.0054		1	01/21/08
2-Butanone	ND	mg/kg dry	0.0540	10000	1	01/21/08
2-Chlorotoluene	ND	mg/kg dry	0.0054		1	01/21/08
2-Hexanone	ND	mg/kg dry	0.0540		1	01/21/08
4-Chlorotoluene	ND	mg/kg dry	0.0054		1	01/21/08
4-Isopropyltoluene	ND	mg/kg dry	0.0054		1	01/21/08
4-Methyl-2-Pentanone	ND	mg/kg dry	0.0540	1200	1	01/21/08
Acetone	ND	mg/kg dry	0.0540	7800	1	01/21/08
Benzene	ND	mg/kg dry	0.0054	2.5	1	01/21/08
Bromobenzene	ND	mg/kg dry	0.0054		1	01/21/08
Bromochloromethane	ND	mg/kg dry	0.0054		1	01/21/08
Bromodichloromethane	ND	mg/kg dry	0.0054	10	1	01/21/08
Bromoform	ND	mg/kg dry	0.0054	81	1	01/21/08

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site
Client Sample ID: SBWest00
Date Sampled: 01/21/08 08:40
Percent Solids: 89
Initial Volume: 5.2
Final Volume: 10
Extraction Method: 5035

ESS Laboratory Work Order: 0801239
ESS Laboratory Sample ID: 0801239-01
Sample Matrix: Soil
Analyst: MD

5035/8260B Volatile Organic Compounds / Low Level

Bromomethane	ND	mg/kg dry	0.0108	0.8	1	01/21/08
Carbon Disulfide	ND	mg/kg dry	0.0054		1	01/21/08
Carbon Tetrachloride	ND	mg/kg dry	0.0054	1.5	1	01/21/08
Chlorobenzene	ND	mg/kg dry	0.0054	210	1	01/21/08
Chloroethane	ND	mg/kg dry	0.0108		1	01/21/08
Chloroform	ND	mg/kg dry	0.0054	1.2	1	01/21/08
Chloromethane	ND	mg/kg dry	0.0108		1	01/21/08
cis-1,2-Dichloroethene	ND	mg/kg dry	0.0054	630	1	01/21/08
cis-1,3-Dichloropropene	ND	mg/kg dry	0.0054		1	01/21/08
Dibromochloromethane	ND	mg/kg dry	0.0054	7.6	1	01/21/08
Dibromomethane	ND	mg/kg dry	0.0054		1	01/21/08
Dichlorodifluoromethane	ND	mg/kg dry	0.0108		1	01/21/08
Diethyl Ether	ND	mg/kg dry	0.0054		1	01/21/08
Di-isopropyl ether	ND	mg/kg dry	0.0054		1	01/21/08
Ethyl tertiary-butyl ether	ND	mg/kg dry	0.0054		1	01/21/08
Ethylbenzene	ND	mg/kg dry	0.0054	71	1	01/21/08
Hexachlorobutadiene	ND	mg/kg dry	0.0054	8.2	1	01/21/08
Isopropylbenzene	ND	mg/kg dry	0.0054	27	1	01/21/08
Methyl tert-Butyl Ether	ND	mg/kg dry	0.0054	390	1	01/21/08
Methylene Chloride	ND	mg/kg dry	0.0270	45	1	01/21/08
Naphthalene	ND	mg/kg dry	0.0054	54	1	01/21/08
n-Butylbenzene	ND	mg/kg dry	0.0054		1	01/21/08
n-Propylbenzene	ND	mg/kg dry	0.0054		1	01/21/08
sec-Butylbenzene	ND	mg/kg dry	0.0054		1	01/21/08
Styrene	ND	mg/kg dry	0.0054	13	1	01/21/08
tert-Butylbenzene	ND	mg/kg dry	0.0054		1	01/21/08
Tertiary-amyl methyl ether	ND	mg/kg dry	0.0054		1	01/21/08
Tetrachloroethene	ND	mg/kg dry	0.0054	12	1	01/21/08
Tetrahydrofuran	ND	mg/kg dry	0.0054		1	01/21/08
Toluene	ND	mg/kg dry	0.0054	190	1	01/21/08
trans-1,2-Dichloroethene	ND	mg/kg dry	0.0054	1100	1	01/21/08
trans-1,3-Dichloropropene	ND	mg/kg dry	0.0054		1	01/21/08
Trichloroethene	ND	mg/kg dry	0.0054	13	1	01/21/08
Trichlorofluoromethane	ND	mg/kg dry	0.0054		1	01/21/08
Vinyl Acetate	ND	mg/kg dry	0.0054		1	01/21/08
Vinyl Chloride	ND	mg/kg dry	0.0108	0.02	1	01/21/08

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site
Client Sample ID: SBWest00
Date Sampled: 01/21/08 08:40
Percent Solids: 89
Initial Volume: 5.2
Final Volume: 10
Extraction Method: 5035

ESS Laboratory Work Order: 0801239
ESS Laboratory Sample ID: 0801239-01
Sample Matrix: Soil
Analyst: MD

5035/8260B Volatile Organic Compounds / Low Level

Xylene O	ND	mg/kg dry	0.0054	110	1	01/21/08
Xylene P,M	ND	mg/kg dry	0.0108	110	1	01/21/08
Xylenes (Total)	ND	mg/kg dry	0.0162	110	0	01/21/08

	%Recovery	*Qualifier*	*Limits*
Surrogate: 1,2-Dichloroethane-d4	*104 %*		*70-130*
Surrogate: 4-Bromofluorobenzene	*84 %*		*70-130*
Surrogate: Dibromofluoromethane	*95 %*		*70-130*
Surrogate: Toluene-d8	*102 %*		*70-130*

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site
Client Sample ID: SBEast00
Date Sampled: 01/21/08 09:45
Percent Solids: 95
Initial Volume: 6.3
Final Volume: 10
Extraction Method: 5035

ESS Laboratory Work Order: 0801239
ESS Laboratory Sample ID: 0801239-02
Sample Matrix: Soil
Analyst: MD

5035/8260B Volatile Organic Compounds / Low Level

RI - RES DEC

Analyte	Results	Units	MRL	Limit	DF	Analyzed
1,1,1,2-Tetrachloroethane	ND	mg/kg dry	0.0042	2.2	1	01/21/08
1,1,1-Trichloroethane	ND	mg/kg dry	0.0042	540	1	01/21/08
1,1,2,2-Tetrachloroethane	ND	mg/kg dry	0.0042	1.3	1	01/21/08
1,1,2-Trichloroethane	ND	mg/kg dry	0.0042	3.6	1	01/21/08
1,1-Dichloroethane	ND	mg/kg dry	0.0042	920	1	01/21/08
1,1-Dichloroethene	ND	mg/kg dry	0.0042	0.2	1	01/21/08
1,1-Dichloropropene	ND	mg/kg dry	0.0042		1	01/21/08
1,2,3-Trichlorobenzene	ND	mg/kg dry	0.0042		1	01/21/08
1,2,3-Trichloropropane	ND	mg/kg dry	0.0042		1	01/21/08
1,2,4-Trichlorobenzene	ND	mg/kg dry	0.0042	96	1	01/21/08
1,2,4-Trimethylbenzene	ND	mg/kg dry	0.0042		1	01/21/08
1,2-Dibromo-3-Chloropropane	ND	mg/kg dry	0.0042	0.5	1	01/21/08
1,2-Dibromoethane	ND	mg/kg dry	0.0042	0.01	1	01/21/08
1,2-Dichlorobenzene	ND	mg/kg dry	0.0042	510	1	01/21/08
1,2-Dichloroethane	ND	mg/kg dry	0.0042	0.9	1	01/21/08
1,2-Dichloropropane	ND	mg/kg dry	0.0042	1.9	1	01/21/08
1,3,5-Trimethylbenzene	ND	mg/kg dry	0.0042		1	01/21/08
1,3-Dichlorobenzene	ND	mg/kg dry	0.0042	430	1	01/21/08
1,3-Dichloropropane	ND	mg/kg dry	0.0042		1	01/21/08
1,4-Dichlorobenzene	ND	mg/kg dry	0.0042	27	1	01/21/08
1,4-Dioxane - Screen	ND	mg/kg dry	0.209		1	01/21/08
1-Chlorohexane	ND	mg/kg dry	0.0042		1	01/21/08
2,2-Dichloropropane	ND	mg/kg dry	0.0042		1	01/21/08
2-Butanone	ND	mg/kg dry	0.0418	10000	1	01/21/08
2-Chlorotoluene	ND	mg/kg dry	0.0042		1	01/21/08
2-Hexanone	ND	mg/kg dry	0.0418		1	01/21/08
4-Chlorotoluene	ND	mg/kg dry	0.0042		1	01/21/08
4-Isopropyltoluene	ND	mg/kg dry	0.0042		1	01/21/08
4-Methyl-2-Pentanone	ND	mg/kg dry	0.0418	1200	1	01/21/08
Acetone	ND	mg/kg dry	0.0418	7800	1	01/21/08
Benzene	ND	mg/kg dry	0.0042	2.5	1	01/21/08
Bromobenzene	ND	mg/kg dry	0.0042		1	01/21/08
Bromochloromethane	ND	mg/kg dry	0.0042		1	01/21/08
Bromodichloromethane	ND	mg/kg dry	0.0042	10	1	01/21/08
Bromoform	ND	mg/kg dry	0.0042	81	1	01/21/08

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site
Client Sample ID: SBEast00
Date Sampled: 01/21/08 09:45
Percent Solids: 95
Initial Volume: 6.3
Final Volume: 10
Extraction Method: 5035

ESS Laboratory Work Order: 0801239
ESS Laboratory Sample ID: 0801239-02
Sample Matrix: Soil
Analyst: MD

5035/8260B Volatile Organic Compounds / Low Level

Bromomethane	ND	mg/kg dry	0.0084	0.8	1	01/21/08
Carbon Disulfide	ND	mg/kg dry	0.0042		1	01/21/08
Carbon Tetrachloride	ND	mg/kg dry	0.0042	1.5	1	01/21/08
Chlorobenzene	ND	mg/kg dry	0.0042	210	1	01/21/08
Chloroethane	ND	mg/kg dry	0.0084		1	01/21/08
Chloroform	ND	mg/kg dry	0.0042	1.2	1	01/21/08
Chloromethane	ND	mg/kg dry	0.0084		1	01/21/08
cis-1,2-Dichloroethene	ND	mg/kg dry	0.0042	630	1	01/21/08
cis-1,3-Dichloropropene	ND	mg/kg dry	0.0042		1	01/21/08
Dibromochloromethane	ND	mg/kg dry	0.0042	7.6	1	01/21/08
Dibromomethane	ND	mg/kg dry	0.0042		1	01/21/08
Dichlorodifluoromethane	ND	mg/kg dry	0.0084		1	01/21/08
Diethyl Ether	ND	mg/kg dry	0.0042		1	01/21/08
Di-isopropyl ether	ND	mg/kg dry	0.0042		1	01/21/08
Ethyl tertiary-butyl ether	ND	mg/kg dry	0.0042		1	01/21/08
Ethylbenzene	ND	mg/kg dry	0.0042	71	1	01/21/08
Hexachlorobutadiene	ND	mg/kg dry	0.0042	8.2	1	01/21/08
Isopropylbenzene	ND	mg/kg dry	0.0042	27	1	01/21/08
Methyl tert-Butyl Ether	ND	mg/kg dry	0.0042	390	1	01/21/08
Methylene Chloride	ND	mg/kg dry	0.0209	45	1	01/21/08
Naphthalene	ND	mg/kg dry	0.0042	54	1	01/21/08
n-Butylbenzene	ND	mg/kg dry	0.0042		1	01/21/08
n-Propylbenzene	ND	mg/kg dry	0.0042		1	01/21/08
sec-Butylbenzene	ND	mg/kg dry	0.0042		1	01/21/08
Styrene	ND	mg/kg dry	0.0042	13	1	01/21/08
tert-Butylbenzene	ND	mg/kg dry	0.0042		1	01/21/08
Tertiary-amyl methyl ether	ND	mg/kg dry	0.0042		1	01/21/08
Tetrachloroethene	**0.0057**	mg/kg dry	0.0042	12	1	01/21/08
Tetrahydrofuran	ND	mg/kg dry	0.0042		1	01/21/08
Toluene	ND	mg/kg dry	0.0042	190	1	01/21/08
trans-1,2-Dichloroethene	ND	mg/kg dry	0.0042	1100	1	01/21/08
trans-1,3-Dichloropropene	ND	mg/kg dry	0.0042		1	01/21/08
Trichloroethene	ND	mg/kg dry	0.0042	13	1	01/21/08
Trichlorofluoromethane	ND	mg/kg dry	0.0042		1	01/21/08
Vinyl Acetate	ND	mg/kg dry	0.0042		1	01/21/08
Vinyl Chloride	ND	mg/kg dry	0.0084	0.02	1	01/21/08

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site
Client Sample ID: SBEast00
Date Sampled: 01/21/08 09:45
Percent Solids: 95
Initial Volume: 6.3
Final Volume: 10
Extraction Method: 5035

ESS Laboratory Work Order: 0801239
ESS Laboratory Sample ID: 0801239-02
Sample Matrix: Soil
Analyst: MD

5035/8260B Volatile Organic Compounds / Low Level

Xylene O	ND	mg/kg dry	0.0042	110	1	01/21/08
Xylene P,M	ND	mg/kg dry	0.0084	110	1	01/21/08
Xylenes (Total)	ND	mg/kg dry	0.0125	110	0	01/21/08

	%Recovery	*Qualifier*	*Limits*
Surrogate: 1,2-Dichloroethane-d4	*108 %*		*70-130*
Surrogate: 4-Bromofluorobenzene	*88 %*		*70-130*
Surrogate: Dibromofluoromethane	*100 %*		*70-130*
Surrogate: Toluene-d8	*105 %*		*70-130*

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site
Client Sample ID: Brickpit1
Date Sampled: 01/21/08 11:45
Percent Solids: 74
Initial Volume: 5.6
Final Volume: 10
Extraction Method: 5035

ESS Laboratory Work Order: 0801239
ESS Laboratory Sample ID: 0801239-03
Sample Matrix: Soil
Analyst: MD

5035/8260B Volatile Organic Compounds / Low Level

Analyte	Results	Units	MRL	RI - RES DEC Limit	DF	Analyzed
1,1,1,2-Tetrachloroethane	ND	mg/kg dry	0.0060	2.2	1	01/21/08
1,1,1-Trichloroethane	ND	mg/kg dry	0.0060	540	1	01/21/08
1,1,2,2-Tetrachloroethane	ND	mg/kg dry	0.0060	1.3	1	01/21/08
1,1,2-Trichloroethane	ND	mg/kg dry	0.0060	3.6	1	01/21/08
1,1-Dichloroethane	ND	mg/kg dry	0.0060	920	1	01/21/08
1,1-Dichloroethene	ND	mg/kg dry	0.0060	0.2	1	01/21/08
1,1-Dichloropropene	ND	mg/kg dry	0.0060		1	01/21/08
1,2,3-Trichlorobenzene	ND	mg/kg dry	0.0060		1	01/21/08
1,2,3-Trichloropropane	ND	mg/kg dry	0.0060		1	01/21/08
1,2,4-Trichlorobenzene	ND	mg/kg dry	0.0060	96	1	01/21/08
1,2,4-Trimethylbenzene	**0.0224**	mg/kg dry	0.0060		1	01/21/08
1,2-Dibromo-3-Chloropropane	ND	mg/kg dry	0.0060	0.5	1	01/21/08
1,2-Dibromoethane	ND	mg/kg dry	0.0060	0.01	1	01/21/08
1,2-Dichlorobenzene	ND	mg/kg dry	0.0060	510	1	01/21/08
1,2-Dichloroethane	ND	mg/kg dry	0.0060	0.9	1	01/21/08
1,2-Dichloropropane	ND	mg/kg dry	0.0060	1.9	1	01/21/08
1,3,5-Trimethylbenzene	**0.0064**	mg/kg dry	0.0060		1	01/21/08
1,3-Dichlorobenzene	ND	mg/kg dry	0.0060	430	1	01/21/08
1,3-Dichloropropane	ND	mg/kg dry	0.0060		1	01/21/08
1,4-Dichlorobenzene	ND	mg/kg dry	0.0060	27	1	01/21/08
1,4-Dioxane - Screen	ND	mg/kg dry	0.302		1	01/21/08
1-Chlorohexane	ND	mg/kg dry	0.0060		1	01/21/08
2,2-Dichloropropane	ND	mg/kg dry	0.0060		1	01/21/08
2-Butanone	ND	mg/kg dry	0.0603	10000	1	01/21/08
2-Chlorotoluene	ND	mg/kg dry	0.0060		1	01/21/08
2-Hexanone	ND	mg/kg dry	0.0603		1	01/21/08
4-Chlorotoluene	ND	mg/kg dry	0.0060		1	01/21/08
4-Isopropyltoluene	**0.0193**	mg/kg dry	0.0060		1	01/21/08
4-Methyl-2-Pentanone	ND	mg/kg dry	0.0603	1200	1	01/21/08
Acetone	ND	mg/kg dry	0.0603	7800	1	01/21/08
Benzene	ND	mg/kg dry	0.0060	2.5	1	01/21/08
Bromobenzene	ND	mg/kg dry	0.0060		1	01/21/08
Bromochloromethane	ND	mg/kg dry	0.0060		1	01/21/08
Bromodichloromethane	ND	mg/kg dry	0.0060	10	1	01/21/08
Bromoform	ND	mg/kg dry	0.0060	81	1	01/21/08

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site
Client Sample ID: Brickpit1
Date Sampled: 01/21/08 11:45
Percent Solids: 74
Initial Volume: 5.6
Final Volume: 10
Extraction Method: 5035

ESS Laboratory Work Order: 0801239
ESS Laboratory Sample ID: 0801239-03
Sample Matrix: Soil
Analyst: MD

5035/8260B Volatile Organic Compounds / Low Level

Bromomethane		ND	mg/kg dry	0.0121	0.8	1	01/21/08
Carbon Disulfide		ND	mg/kg dry	0.0060		1	01/21/08
Carbon Tetrachloride		ND	mg/kg dry	0.0060	1.5	1	01/21/08
Chlorobenzene		ND	mg/kg dry	0.0060	210	1	01/21/08
Chloroethane		ND	mg/kg dry	0.0121		1	01/21/08
Chloroform		ND	mg/kg dry	0.0060	1.2	1	01/21/08
Chloromethane		ND	mg/kg dry	0.0121		1	01/21/08
cis-1,2-Dichloroethene		ND	mg/kg dry	0.0060	630	1	01/21/08
cis-1,3-Dichloropropene		ND	mg/kg dry	0.0060		1	01/21/08
Dibromochloromethane		ND	mg/kg dry	0.0060	7.6	1	01/21/08
Dibromomethane		ND	mg/kg dry	0.0060		1	01/21/08
Dichlorodifluoromethane		ND	mg/kg dry	0.0121		1	01/21/08
Diethyl Ether		ND	mg/kg dry	0.0060		1	01/21/08
Di-isopropyl ether		ND	mg/kg dry	0.0060		1	01/21/08
Ethyl tertiary-butyl ether		ND	mg/kg dry	0.0060		1	01/21/08
Ethylbenzene		ND	mg/kg dry	0.0060	71	1	01/21/08
Hexachlorobutadiene		ND	mg/kg dry	0.0060	8.2	1	01/21/08
Isopropylbenzene		**0.0064**	mg/kg dry	0.0060	27	1	01/21/08
Methyl tert-Butyl Ether		ND	mg/kg dry	0.0060	390	1	01/21/08
Methylene Chloride		ND	mg/kg dry	0.0302	45	1	01/21/08
Naphthalene	E	**0.379**	mg/kg dry	0.0060	54	1	01/21/08
n-Butylbenzene		ND	mg/kg dry	0.0060		1	01/21/08
n-Propylbenzene		ND	mg/kg dry	0.0060		1	01/21/08
sec-Butylbenzene		**0.0077**	mg/kg dry	0.0060		1	01/21/08
Styrene		ND	mg/kg dry	0.0060	13	1	01/21/08
tert-Butylbenzene		ND	mg/kg dry	0.0060		1	01/21/08
Tertiary-amyl methyl ether		ND	mg/kg dry	0.0060		1	01/21/08
Tetrachloroethene		ND	mg/kg dry	0.0060	12	1	01/21/08
Tetrahydrofuran		ND	mg/kg dry	0.0060		1	01/21/08
Toluene		ND	mg/kg dry	0.0060	190	1	01/21/08
trans-1,2-Dichloroethene		ND	mg/kg dry	0.0060	1100	1	01/21/08
trans-1,3-Dichloropropene		ND	mg/kg dry	0.0060		1	01/21/08
Trichloroethene		ND	mg/kg dry	0.0060	13	1	01/21/08
Trichlorofluoromethane		ND	mg/kg dry	0.0060		1	01/21/08
Vinyl Acetate		ND	mg/kg dry	0.0060		1	01/21/08
Vinyl Chloride		ND	mg/kg dry	0.0121	0.02	1	01/21/08

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site
Client Sample ID: Brickpit1
Date Sampled: 01/21/08 11:45
Percent Solids: 74
Initial Volume: 5.6
Final Volume: 10
Extraction Method: 5035

ESS Laboratory Work Order: 0801239
ESS Laboratory Sample ID: 0801239-03
Sample Matrix: Soil
Analyst: MD

5035/8260B Volatile Organic Compounds / Low Level

Xylene O	ND	mg/kg dry	0.0060	110	1	01/21/08
Xylene P,M	ND	mg/kg dry	0.0121	110	1	01/21/08
Xylenes (Total)	ND	mg/kg dry	0.0181	110	0	01/21/08

	%Recovery	*Qualifier*	*Limits*
Surrogate: 1,2-Dichloroethane-d4	*111 %*		*70-130*
Surrogate: 4-Bromofluorobenzene	*73 %*		*70-130*
Surrogate: Dibromofluoromethane	*99 %*		*70-130*
Surrogate: Toluene-d8	*111 %*		*70-130*

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site
Client Sample ID: Brickpit1
Date Sampled: 01/21/08 11:45
Percent Solids: 74
Initial Volume: 15.8
Final Volume: 15
Extraction Method: 5035

ESS Laboratory Work Order: 0801239
ESS Laboratory Sample ID: 0801239-03
Sample Matrix: Soil
Analyst: RES

5035/8260B Volatile Organic Compounds / Methanol

Analyte		Results	Units	MRL	MDL	RI - RES DEC Limit	DF	Analyzed
1,1,1,2-Tetrachloroethane		ND	mg/kg dry	0.163	0.0539	2.2	1	01/21/08
1,1,1-Trichloroethane		ND	mg/kg dry	0.0817	0.0212	540	1	01/21/08
1,1,2,2-Tetrachloroethane		ND	mg/kg dry	0.0817	0.0245	1.3	1	01/21/08
1,1,2-Trichloroethane		ND	mg/kg dry	0.0817	0.0261	3.6	1	01/21/08
1,1-Dichloroethane		ND	mg/kg dry	0.0817	0.0229	920	1	01/21/08
1,1-Dichloroethene		ND	mg/kg dry	0.0817	0.0196	0.2	1	01/21/08
1,1-Dichloropropene		ND	mg/kg dry	0.0817	0.0212		1	01/21/08
1,2,3-Trichlorobenzene		ND	mg/kg dry	0.0817	0.0245		1	01/21/08
1,2,3-Trichloropropane		ND	mg/kg dry	0.0817	0.0245		1	01/21/08
1,2,4-Trichlorobenzene		ND	mg/kg dry	0.0817	0.0180	96	1	01/21/08
1,2,4-Trimethylbenzene		**0.0932**	mg/kg dry	0.0817	0.0196		1	01/21/08
1,2-Dibromo-3-Chloropropane		ND	mg/kg dry	0.490	0.163	0.5	1	01/21/08
1,2-Dibromoethane		ND	mg/kg dry	0.0817	0.0180	0.01	1	01/21/08
1,2-Dichlorobenzene		ND	mg/kg dry	0.0817	0.0180	510	1	01/21/08
1,2-Dichloroethane		ND	mg/kg dry	0.0817	0.0180	0.9	1	01/21/08
1,2-Dichloropropane		ND	mg/kg dry	0.0817	0.0229	1.9	1	01/21/08
1,3,5-Trimethylbenzene	J	**0.0392**	mg/kg dry	0.0817	0.0212		1	01/21/08
1,3-Dichlorobenzene		ND	mg/kg dry	0.0817	0.0196	430	1	01/21/08
1,3-Dichloropropane		ND	mg/kg dry	0.0817	0.0163		1	01/21/08
1,4-Dichlorobenzene		ND	mg/kg dry	0.0817	0.0212	27	1	01/21/08
1,4-Dioxane - Screen		ND	mg/kg dry	8.17	4.09		1	01/21/08
1-Chlorohexane		ND	mg/kg dry	0.0817	0.0212		1	01/21/08
2,2-Dichloropropane		ND	mg/kg dry	0.163	0.0409		1	01/21/08
2-Butanone		ND	mg/kg dry	2.04	0.409	10000	1	01/21/08
2-Chlorotoluene		ND	mg/kg dry	0.0817	0.0245		1	01/21/08
2-Hexanone		ND	mg/kg dry	0.817	0.114		1	01/21/08
4-Chlorotoluene		ND	mg/kg dry	0.0817	0.0196		1	01/21/08
4-Isopropyltoluene	J	**0.0719**	mg/kg dry	0.0817	0.0212		1	01/21/08
4-Methyl-2-Pentanone		ND	mg/kg dry	0.817	0.114	1200	1	01/21/08
Acetone		ND	mg/kg dry	2.04	0.654	7800	1	01/21/08
Benzene		ND	mg/kg dry	0.0817	0.0245	2.5	1	01/21/08
Bromobenzene		ND	mg/kg dry	0.0817	0.0180		1	01/21/08
Bromochloromethane		ND	mg/kg dry	0.0817	0.0245		1	01/21/08
Bromodichloromethane		ND	mg/kg dry	0.0817	0.0229	10	1	01/21/08
Bromoform		ND	mg/kg dry	0.0817	0.0261	81	1	01/21/08

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site
Client Sample ID: Brickpit1
Date Sampled: 01/21/08 11:45
Percent Solids: 74
Initial Volume: 15.8
Final Volume: 15
Extraction Method: 5035

ESS Laboratory Work Order: 0801239
ESS Laboratory Sample ID: 0801239-03
Sample Matrix: Soil
Analyst: RES

5035/8260B Volatile Organic Compounds / Methanol

Bromomethane	ND	mg/kg dry	0.163	0.0409	0.8	1	01/21/08
Carbon Disulfide	ND	mg/kg dry	0.0817	0.0196		1	01/21/08
Carbon Tetrachloride	ND	mg/kg dry	0.0817	0.0229	1.5	1	01/21/08
Chlorobenzene	ND	mg/kg dry	0.0817	0.0180	210	1	01/21/08
Chloroethane	ND	mg/kg dry	0.163	0.0539		1	01/21/08
Chloroform	ND	mg/kg dry	0.0817	0.0196	1.2	1	01/21/08
Chloromethane	ND	mg/kg dry	0.163	0.0261		1	01/21/08
cis-1,2-Dichloroethene	ND	mg/kg dry	0.0817	0.0245	630	1	01/21/08
cis-1,3-Dichloropropene	ND	mg/kg dry	0.0817	0.0180		1	01/21/08
Dibromochloromethane	ND	mg/kg dry	0.0817	0.0163	7.6	1	01/21/08
Dibromomethane	ND	mg/kg dry	0.0817	0.0245		1	01/21/08
Dichlorodifluoromethane	ND	mg/kg dry	0.0817	0.0196		1	01/21/08
Diethyl Ether	ND	mg/kg dry	0.0817	0.0245		1	01/21/08
Di-isopropyl ether	ND	mg/kg dry	0.0817	0.0196		1	01/21/08
Ethyl tertiary-butyl ether	ND	mg/kg dry	0.0817	0.0163		1	01/21/08
Ethylbenzene	ND	mg/kg dry	0.0817	0.0196	71	1	01/21/08
Hexachlorobutadiene	ND	mg/kg dry	0.0817	0.0261	8.2	1	01/21/08
Isopropylbenzene	ND	mg/kg dry	0.0817	0.0180	27	1	01/21/08
Methyl tert-Butyl Ether	ND	mg/kg dry	0.0817	0.0196	390	1	01/21/08
Methylene Chloride	ND	mg/kg dry	0.409	0.0327	45	1	01/21/08
Naphthalene	**2.92**	mg/kg dry	0.0817	0.0245	54	1	01/21/08
n-Butylbenzene	ND	mg/kg dry	0.0817	0.0196		1	01/21/08
n-Propylbenzene	ND	mg/kg dry	0.0817	0.0212		1	01/21/08
sec-Butylbenzene	ND	mg/kg dry	0.0817	0.0212		1	01/21/08
Styrene	ND	mg/kg dry	0.0817	0.0212	13	1	01/21/08
tert-Butylbenzene	ND	mg/kg dry	0.0817	0.0196		1	01/21/08
Tertiary-amyl methyl ether	ND	mg/kg dry	0.0817	0.0245		1	01/21/08
Tetrachloroethene	ND	mg/kg dry	0.0817	0.0261	12	1	01/21/08
Tetrahydrofuran	ND	mg/kg dry	0.817	0.212		1	01/21/08
Toluene	ND	mg/kg dry	0.0817	0.0229	190	1	01/21/08
trans-1,2-Dichloroethene	ND	mg/kg dry	0.0817	0.0261	1100	1	01/21/08
trans-1,3-Dichloropropene	ND	mg/kg dry	0.0817	0.0196		1	01/21/08
Trichloroethene	ND	mg/kg dry	0.0817	0.0196	13	1	01/21/08
Trichlorofluoromethane	ND	mg/kg dry	0.0817	0.0229		1	01/21/08
Vinyl Acetate	ND	mg/kg dry	0.409	0.0327		1	01/21/08
Vinyl Chloride	ND	mg/kg dry	0.0817	0.0196	0.02	1	01/21/08

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site
Client Sample ID: Brickpit1
Date Sampled: 01/21/08 11:45
Percent Solids: 74
Initial Volume: 15.8
Final Volume: 15
Extraction Method: 5035

ESS Laboratory Work Order: 0801239
ESS Laboratory Sample ID: 0801239-03
Sample Matrix: Soil
Analyst: RES

5035/8260B Volatile Organic Compounds / Methanol

Xylene O	ND	mg/kg dry	0.0817	0.0163	110	1	01/21/08
Xylene P,M	ND	mg/kg dry	0.163	0.0409	110	1	01/21/08
Xylenes (Total)	ND	mg/kg dry	0.245		110	1	01/21/08

	%Recovery	*Qualifier*	*Limits*
Surrogate: 1,2-Dichloroethane-d4	*98 %*		*70-130*
Surrogate: 4-Bromofluorobenzene	*93 %*		*70-130*
Surrogate: Dibromofluoromethane	*112 %*		*70-130*
Surrogate: Toluene-d8	*95 %*		*70-130*

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site
Client Sample ID: Brickpit1
Date Sampled: 01/21/08 11:45
Percent Solids: 74
Initial Volume: 20.2
Final Volume: 2
Extraction Method: 3541

ESS Laboratory Work Order: 0801239
ESS Laboratory Sample ID: 0801239-03
Sample Matrix: Soil
Analyst: SEP
Prepared: 01/21/08

8100M Total Petroleum Hydrocarbons

Analyte	Results	Units	MRL	RI - RES DEC Limit	DF	Analyzed
Total Petroleum Hydrocarbons	**3440**	mg/kg dry	100	500	1	01/21/08

	%Recovery	Qualifier	Limits
Surrogate: O-Terphenyl	*88 %*		*40-140*

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site
Client Sample ID: Brickpit1
Date Sampled: 01/21/08 11:45
Percent Solids: 74
Initial Volume: 15.1
Final Volume: 2
Extraction Method: 3541

ESS Laboratory Work Order: 0801239
ESS Laboratory Sample ID: 0801239-03
Sample Matrix: Soil
Analyst: SEP
Prepared: 01/21/08

8270C Semi-Volatile Organic Compounds

Analyte	Results	Units	MRL	RI - RES DEC Limit	DF	Analyzed
1,1-Biphenyl	ND	mg/kg dry	1.79	0.8	1	01/21/08
1,2,4-Trichlorobenzene	ND	mg/kg dry	1.79	96	1	01/21/08
1,2-Dichlorobenzene	ND	mg/kg dry	1.79	510	1	01/21/08
1,3-Dichlorobenzene	ND	mg/kg dry	1.79	430	1	01/21/08
1,4-Dichlorobenzene	ND	mg/kg dry	1.79	27	1	01/21/08
2,3,4,6-Tetrachlorophenol	ND	mg/kg dry	8.97		1	01/21/08
2,4,5-Trichlorophenol	ND	mg/kg dry	1.79	330	1	01/21/08
2,4,6-Trichlorophenol	ND	mg/kg dry	1.79	58	1	01/21/08
2,4-Dichlorophenol	ND	mg/kg dry	1.79	30	1	01/21/08
2,4-Dimethylphenol	ND	mg/kg dry	1.79	1400	1	01/21/08
2,4-Dinitrophenol	ND	mg/kg dry	8.97	160	1	01/21/08
2,4-Dinitrotoluene	ND	mg/kg dry	1.79	0.9	1	01/21/08
2,6-Dinitrotoluene	ND	mg/kg dry	1.79		1	01/21/08
2-Chloronaphthalene	ND	mg/kg dry	1.79		1	01/21/08
2-Chlorophenol	ND	mg/kg dry	1.79	50	1	01/21/08
2-Methylnaphthalene	**4.41**	mg/kg dry	1.79	123	1	01/21/08
2-Methylphenol	ND	mg/kg dry	1.79		1	01/21/08
2-Nitroaniline	ND	mg/kg dry	1.79		1	01/21/08
2-Nitrophenol	ND	mg/kg dry	1.79		1	01/21/08
3,3'-Dichlorobenzidine	ND	mg/kg dry	3.58	1.4	1	01/21/08
3+4-Methylphenol	ND	mg/kg dry	3.58		1	01/21/08
3-Nitroaniline	ND	mg/kg dry	1.79		1	01/21/08
4,6-Dinitro-2-Methylphenol	ND	mg/kg dry	8.97		1	01/21/08
4-Bromophenyl-phenylether	ND	mg/kg dry	1.79		1	01/21/08
4-Chloro-3-Methylphenol	ND	mg/kg dry	1.79		1	01/21/08
4-Chloroaniline	ND	mg/kg dry	3.58	310	1	01/21/08
4-Chloro-phenyl-phenyl ether	ND	mg/kg dry	1.79		1	01/21/08
4-Nitroaniline	ND	mg/kg dry	1.79		1	01/21/08
4-Nitrophenol	ND	mg/kg dry	8.97		1	01/21/08
Acenaphthene	**8.71**	mg/kg dry	1.79	43	1	01/21/08
Acenaphthylene	ND	mg/kg dry	1.79	23	1	01/21/08
Acetophenone	ND	mg/kg dry	3.58		1	01/21/08
Aniline	ND	mg/kg dry	8.97		1	01/21/08
Anthracene	**14.0**	mg/kg dry	1.79	35	1	01/21/08
Azobenzene	ND	mg/kg dry	1.79		1	01/21/08

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site
Client Sample ID: Brickpit1
Date Sampled: 01/21/08 11:45
Percent Solids: 74
Initial Volume: 15.1
Final Volume: 2
Extraction Method: 3541

ESS Laboratory Work Order: 0801239
ESS Laboratory Sample ID: 0801239-03
Sample Matrix: Soil
Analyst: SEP
Prepared: 01/21/08

8270C Semi-Volatile Organic Compounds

Benzo(a)anthracene	**34.7**	mg/kg dry	1.79	0.9	1	01/21/08
Benzo(a)pyrene	**23.7**	mg/kg dry	0.897	0.4	1	01/21/08
Benzo(b)fluoranthene	**35.7**	mg/kg dry	1.79	0.9	1	01/21/08
Benzo(g,h,i)perylene	**4.38**	mg/kg dry	1.79	0.8	1	01/21/08
Benzo(k)fluoranthene	**23.8**	mg/kg dry	1.79	0.9	1	01/21/08
Benzoic Acid	ND	mg/kg dry	8.97		1	01/21/08
Benzyl Alcohol	ND	mg/kg dry	1.79		1	01/21/08
bis(2-Chloroethoxy)methane	ND	mg/kg dry	1.79		1	01/21/08
bis(2-Chloroethyl)ether	ND	mg/kg dry	1.79	0.6	1	01/21/08
bis(2-chloroisopropyl)Ether	ND	mg/kg dry	1.79	9.1	1	01/21/08
bis(2-Ethylhexyl)phthalate	ND	mg/kg dry	1.79	46	1	01/21/08
Butylbenzylphthalate	ND	mg/kg dry	1.79		1	01/21/08
Carbazole	**5.64**	mg/kg dry	1.79		1	01/21/08
Chrysene	**28.8**	mg/kg dry	0.897	0.4	1	01/21/08
Dibenzo(a,h)Anthracene	**2.94**	mg/kg dry	0.897	0.4	1	01/21/08
Dibenzofuran	**7.24**	mg/kg dry	1.79		1	01/21/08
Diethylphthalate	ND	mg/kg dry	1.79	340	1	01/21/08
Dimethylphthalate	ND	mg/kg dry	1.79	1900	1	01/21/08
Di-n-butylphthalate	ND	mg/kg dry	1.79		1	01/21/08
Di-n-octylphthalate	ND	mg/kg dry	1.79		1	01/21/08
Fluoranthene	**85.1**	mg/kg dry	8.94	20	5	01/22/08
Fluorene	**10.8**	mg/kg dry	1.79	28	1	01/21/08
Hexachlorobenzene	ND	mg/kg dry	0.897	0.4	1	01/21/08
Hexachlorobutadiene	ND	mg/kg dry	1.79	8.2	1	01/21/08
Hexachlorocyclopentadiene	ND	mg/kg dry	8.97		1	01/21/08
Hexachloroethane	ND	mg/kg dry	1.79	46	1	01/21/08
Indeno(1,2,3-cd)Pyrene	**5.23**	mg/kg dry	1.79	0.9	1	01/21/08
Isophorone	ND	mg/kg dry	1.79		1	01/21/08
Naphthalene	**7.85**	mg/kg dry	1.79	54	1	01/21/08
Nitrobenzene	ND	mg/kg dry	1.79		1	01/21/08
N-Nitrosodimethylamine	ND	mg/kg dry	1.79		1	01/21/08
N-Nitroso-Di-n-Propylamine	ND	mg/kg dry	1.79		1	01/21/08
N-nitrosodiphenylamine	ND	mg/kg dry	1.79		1	01/21/08
Pentachlorophenol	ND	mg/kg dry	8.97	5.3	1	01/21/08
Phenanthrene	**85.2**	mg/kg dry	8.94	40	5	01/22/08
Phenol	ND	mg/kg dry	1.79	6000	1	01/21/08

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site
Client Sample ID: Brickpit1
Date Sampled: 01/21/08 11:45
Percent Solids: 74
Initial Volume: 15.1
Final Volume: 2
Extraction Method: 3541

ESS Laboratory Work Order: 0801239
ESS Laboratory Sample ID: 0801239-03
Sample Matrix: Soil
Analyst: VSC
Prepared: 01/21/08

8270C Semi-Volatile Organic Compounds

Pyrene	**76.0**	mg/kg dry	8.94	13	5	01/22/08
Pyridine	ND	mg/kg dry	8.97		1	01/21/08

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichlorobenzene-d4	*50 %*		*30-130*
Surrogate: 2,4,6-Tribromophenol	*71 %*		*30-130*
Surrogate: 2-Chlorophenol-d4	*59 %*		*30-130*
Surrogate: 2-Fluorobiphenyl	*74 %*		*30-130*
Surrogate: 2-Fluorophenol	*52 %*		*30-130*
Surrogate: Nitrobenzene-d5	*64 %*		*30-130*
Surrogate: Phenol-d6	*67 %*		*30-130*
Surrogate: p-Terphenyl-d14	*120 %*		*30-130*

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0801239

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
5035/8260B Volatile Organic Compounds / Low Level										
Batch BA82120 - 5035										
Blank										
1,1,1,2-Tetrachloroethane	ND	0.0050	mg/kg wet							
1,1,1-Trichloroethane	ND	0.0050	mg/kg wet							
1,1,2,2-Tetrachloroethane	ND	0.0050	mg/kg wet							
1,1,2-Trichloroethane	ND	0.0050	mg/kg wet							
1,1-Dichloroethane	ND	0.0050	mg/kg wet							
1,1-Dichloroethene	ND	0.0050	mg/kg wet							
1,1-Dichloropropene	ND	0.0050	mg/kg wet							
1,2,3-Trichlorobenzene	ND	0.0050	mg/kg wet							
1,2,3-Trichloropropane	ND	0.0050	mg/kg wet							
1,2,4-Trichlorobenzene	ND	0.0050	mg/kg wet							
1,2,4-Trimethylbenzene	ND	0.0050	mg/kg wet							
1,2-Dibromo-3-Chloropropane	ND	0.0050	mg/kg wet							
1,2-Dibromoethane	ND	0.0050	mg/kg wet							
1,2-Dichlorobenzene	ND	0.0050	mg/kg wet							
1,2-Dichloroethane	ND	0.0050	mg/kg wet							
1,2-Dichloropropane	ND	0.0050	mg/kg wet							
1,3,5-Trimethylbenzene	ND	0.0050	mg/kg wet							
1,3-Dichlorobenzene	ND	0.0050	mg/kg wet							
1,3-Dichloropropane	ND	0.0050	mg/kg wet							
1,4-Dichlorobenzene	ND	0.0050	mg/kg wet							
1,4-Dioxane - Screen	ND	0.250	mg/kg wet							
1-Chlorohexane	ND	0.0050	mg/kg wet							
2,2-Dichloropropane	ND	0.0050	mg/kg wet							
2-Butanone	ND	0.0500	mg/kg wet							
2-Chlorotoluene	ND	0.0050	mg/kg wet							
2-Hexanone	ND	0.0500	mg/kg wet							
4-Chlorotoluene	ND	0.0050	mg/kg wet							
4-Isopropyltoluene	ND	0.0050	mg/kg wet							
4-Methyl-2-Pentanone	ND	0.0500	mg/kg wet							
Acetone	ND	0.0500	mg/kg wet							
Benzene	ND	0.0050	mg/kg wet							
Bromobenzene	ND	0.0050	mg/kg wet							
Bromochloromethane	ND	0.0050	mg/kg wet							
Bromodichloromethane	ND	0.0050	mg/kg wet							
Bromoform	ND	0.0050	mg/kg wet							
Bromomethane	ND	0.0100	mg/kg wet							
Carbon Disulfide	ND	0.0050	mg/kg wet							
Carbon Tetrachloride	ND	0.0050	mg/kg wet							
Chlorobenzene	ND	0.0050	mg/kg wet							
Chloroethane	ND	0.0100	mg/kg wet							
Chloroform	ND	0.0050	mg/kg wet							
Chloromethane	ND	0.0100	mg/kg wet							
cis-1,2-Dichloroethene	ND	0.0050	mg/kg wet							
cis-1,3-Dichloropropene	ND	0.0050	mg/kg wet							
Dibromochloromethane	ND	0.0050	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0801239

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
5035/8260B Volatile Organic Compounds / Low Level										
Batch BA82120 - 5035										
Dibromomethane	ND	0.0050	mg/kg wet							
Dichlorodifluoromethane	ND	0.0100	mg/kg wet							
Diethyl Ether	ND	0.0050	mg/kg wet							
Di-isopropyl ether	ND	0.0050	mg/kg wet							
Ethyl tertiary-butyl ether	ND	0.0050	mg/kg wet							
Ethylbenzene	ND	0.0050	mg/kg wet							
Hexachlorobutadiene	ND	0.0050	mg/kg wet							
Isopropylbenzene	ND	0.0050	mg/kg wet							
Methyl tert-Butyl Ether	ND	0.0050	mg/kg wet							
Methylene Chloride	ND	0.0250	mg/kg wet							
Naphthalene	ND	0.0050	mg/kg wet							
n-Butylbenzene	ND	0.0050	mg/kg wet							
n-Propylbenzene	ND	0.0050	mg/kg wet							
sec-Butylbenzene	ND	0.0050	mg/kg wet							
Styrene	ND	0.0050	mg/kg wet							
tert-Butylbenzene	ND	0.0050	mg/kg wet							
Tertiary-amyl methyl ether	ND	0.0050	mg/kg wet							
Tetrachloroethene	ND	0.0050	mg/kg wet							
Tetrahydrofuran	ND	0.0050	mg/kg wet							
Toluene	ND	0.0050	mg/kg wet							
trans-1,2-Dichloroethene	ND	0.0050	mg/kg wet							
trans-1,3-Dichloropropene	ND	0.0050	mg/kg wet							
Trichloroethene	ND	0.0050	mg/kg wet							
Vinyl Acetate	ND	0.0050	mg/kg wet							
Vinyl Chloride	ND	0.0100	mg/kg wet							
Xylene O	ND	0.0050	mg/kg wet							
Xylene P,M	ND	0.0100	mg/kg wet							
Surrogate: 1,2-Dichloroethane-d4	*24.8*		ug/L	*25.00*		*99*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*22.1*		ug/L	*25.00*		*88*	*70-130*			
Surrogate: Dibromofluoromethane	*24.2*		ug/L	*25.00*		*97*	*70-130*			
Surrogate: Toluene-d8	*24.9*		ug/L	*25.00*		*100*	*70-130*			
LCS										
1,1,1,2-Tetrachloroethane	21.9		ug/L	25.00		88	70-130			
1,1,1-Trichloroethane	20.9		ug/L	25.00		84	70-130			
1,1,2,2-Tetrachloroethane	21.3		ug/L	25.00		85	70-130			
1,1,2-Trichloroethane	21.9		ug/L	25.00		87	70-130			
1,1-Dichloroethane	22.9		ug/L	25.00		92	70-130			
1,1-Dichloroethene	25.0		ug/L	25.00		100	70-130			
1,1-Dichloropropene	23.0		ug/L	25.00		92	70-130			
1,2,3-Trichlorobenzene	21.1		ug/L	25.00		84	70-130			
1,2,3-Trichloropropane	21.2		ug/L	25.00		85	70-130			
1,2,4-Trichlorobenzene	21.2		ug/L	25.00		85	70-130			
1,2,4-Trimethylbenzene	21.9		ug/L	25.00		88	70-130			
1,2-Dibromo-3-Chloropropane	19.1		ug/L	25.00		76	70-130			
1,2-Dibromoethane	21.5		ug/L	25.00		86	70-130			
1,2-Dichlorobenzene	21.4		ug/L	25.00		86	70-130			

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0801239

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
5035/8260B Volatile Organic Compounds / Low Level										
Batch BA82120 - 5035										
1,2-Dichloroethane	21.8		ug/L	25.00		87	70-130			
1,2-Dichloropropane	22.4		ug/L	25.00		89	70-130			
1,3,5-Trimethylbenzene	20.2		ug/L	25.00		81	70-130			
1,3-Dichlorobenzene	20.8		ug/L	25.00		83	70-130			
1,3-Dichloropropane	21.6		ug/L	25.00		86	70-130			
1,4-Dichlorobenzene	20.3		ug/L	25.00		81	70-130			
1,4-Dioxane - Screen	400		ug/L	500.0		80	44-241			
1-Chlorohexane	24.8		ug/L	25.00		99	70-130			
2,2-Dichloropropane	22.5		ug/L	25.00		90	70-130			
2-Butanone	120		ug/L	125.0		96	70-130			
2-Chlorotoluene	21.7		ug/L	25.00		87	70-130			
2-Hexanone	115		ug/L	125.0		92	70-130			
4-Chlorotoluene	21.1		ug/L	25.00		85	70-130			
4-Isopropyltoluene	21.1		ug/L	25.00		85	70-130			
4-Methyl-2-Pentanone	108		ug/L	125.0		86	70-130			
Acetone	115		ug/L	125.0		92	70-130			
Benzene	21.8		ug/L	25.00		87	70-130			
Bromobenzene	21.2		ug/L	25.00		85	70-130			
Bromochloromethane	20.8		ug/L	25.00		83	70-130			
Bromodichloromethane	24.2		ug/L	25.00		97	70-130			
Bromoform	22.4		ug/L	25.00		89	70-130			
Bromomethane	25.4		ug/L	25.00		102	70-130			
Carbon Disulfide	23.7		ug/L	25.00		95	70-130			
Carbon Tetrachloride	22.5		ug/L	25.00		90	70-130			
Chlorobenzene	21.1		ug/L	25.00		85	70-130			
Chloroethane	22.7		ug/L	25.00		91	70-130			
Chloroform	22.1		ug/L	25.00		89	70-130			
Chloromethane	18.0		ug/L	25.00		72	70-130			
cis-1,2-Dichloroethene	24.4		ug/L	25.00		98	70-130			
cis-1,3-Dichloropropene	22.9		ug/L	25.00		92	70-130			
Dibromochloromethane	23.5		ug/L	25.00		94	70-130			
Dibromomethane	20.9		ug/L	25.00		84	70-130			
Dichlorodifluoromethane	18.0		ug/L	25.00		72	70-130			
Diethyl Ether	22.4		ug/L	25.00		90	70-130			
Di-isopropyl ether	25.0		ug/L	25.00		100	70-130			
Ethyl tertiary-butyl ether	23.6		ug/L	25.00		94	70-130			
Ethylbenzene	22.3		ug/L	25.00		89	70-130			
Hexachlorobutadiene	20.2		ug/L	25.00		81	70-130			
Isopropylbenzene	20.2		ug/L	25.00		81	70-130			
Methyl tert-Butyl Ether	23.4		ug/L	25.00		94	70-130			
Methylene Chloride	22.2		ug/L	25.00		89	70-130			
Naphthalene	21.2		ug/L	25.00		85	70-130			
n-Butylbenzene	22.2		ug/L	25.00		89	70-130			
n-Propylbenzene	21.4		ug/L	25.00		86	70-130			
sec-Butylbenzene	22.4		ug/L	25.00		90	70-130			
Styrene	22.0		ug/L	25.00		88	70-130			

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0801239

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
5035/8260B Volatile Organic Compounds / Low Level										
Batch BA82120 - 5035										
tert-Butylbenzene	21.8		ug/L	25.00		87	70-130			
Tertiary-amyl methyl ether	24.2		ug/L	25.00		97	70-130			
Tetrachloroethene	19.6		ug/L	25.00		78	70-130			
Tetrahydrofuran	21.2		ug/L	25.00		85	70-130			
Toluene	21.1		ug/L	25.00		84	70-130			
trans-1,2-Dichloroethene	24.1		ug/L	25.00		96	70-130			
trans-1,3-Dichloropropene	20.8		ug/L	25.00		83	70-130			
Trichloroethene	22.2		ug/L	25.00		89	70-130			
Vinyl Acetate	22.2		ug/L	25.00		89	70-130			
Vinyl Chloride	27.0		ug/L	25.00		108	70-130			
Xylene O	21.5		ug/L	25.00		86	70-130			
Xylene P,M	43.0		ug/L	50.00		86	70-130			
Surrogate: 1,2-Dichloroethane-d4	*24.0*		ug/L	*25.00*		*96*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*23.2*		ug/L	*25.00*		*93*	*70-130*			
Surrogate: Dibromofluoromethane	*24.2*		ug/L	*25.00*		*97*	*70-130*			
Surrogate: Toluene-d8	*24.6*		ug/L	*25.00*		*98*	*70-130*			
LCS Dup										
1,1,1,2-Tetrachloroethane	22.2		ug/L	25.00		89	70-130	1	20	
1,1,1-Trichloroethane	22.8		ug/L	25.00		91	70-130	8	20	
1,1,2,2-Tetrachloroethane	20.5		ug/L	25.00		82	70-130	4	20	
1,1,2-Trichloroethane	21.6		ug/L	25.00		87	70-130	1	20	
1,1-Dichloroethane	23.1		ug/L	25.00		93	70-130	1	20	
1,1-Dichloroethene	25.6		ug/L	25.00		103	70-130	2	20	
1,1-Dichloropropene	23.8		ug/L	25.00		95	70-130	3	20	
1,2,3-Trichlorobenzene	21.1		ug/L	25.00		84	70-130	0.2	20	
1,2,3-Trichloropropane	20.0		ug/L	25.00		80	70-130	6	20	
1,2,4-Trichlorobenzene	21.7		ug/L	25.00		87	70-130	2	20	
1,2,4-Trimethylbenzene	22.1		ug/L	25.00		88	70-130	0.9	20	
1,2-Dibromo-3-Chloropropane	18.5		ug/L	25.00		74	70-130	3	20	
1,2-Dibromoethane	20.9		ug/L	25.00		84	70-130	3	20	
1,2-Dichlorobenzene	21.1		ug/L	25.00		85	70-130	1	20	
1,2-Dichloroethane	22.2		ug/L	25.00		89	70-130	2	20	
1,2-Dichloropropane	22.5		ug/L	25.00		90	70-130	0.8	20	
1,3,5-Trimethylbenzene	20.4		ug/L	25.00		82	70-130	1	20	
1,3-Dichlorobenzene	21.0		ug/L	25.00		84	70-130	1	20	
1,3-Dichloropropane	21.8		ug/L	25.00		87	70-130	0.8	20	
1,4-Dichlorobenzene	20.5		ug/L	25.00		82	70-130	0.7	20	
1,4-Dioxane - Screen	392		ug/L	500.0		78	44-241	2	200	
1-Chlorohexane	25.5		ug/L	25.00		102	70-130	3	20	
2,2-Dichloropropane	23.7		ug/L	25.00		95	70-130	5	20	
2-Butanone	121		ug/L	125.0		97	70-130	0.9	20	
2-Chlorotoluene	22.1		ug/L	25.00		89	70-130	2	20	
2-Hexanone	117		ug/L	125.0		94	70-130	2	20	
4-Chlorotoluene	21.4		ug/L	25.00		86	70-130	1	20	
4-Isopropyltoluene	21.3		ug/L	25.00		85	70-130	0.9	20	
4-Methyl-2-Pentanone	108		ug/L	125.0		86	70-130	0.1	20	

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0801239

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
5035/8260B Volatile Organic Compounds / Low Level										
Batch BA82120 - 5035										
Acetone	136		ug/L	125.0		109	70-130	16	20	
Benzene	22.3		ug/L	25.00		89	70-130	2	20	
Bromobenzene	21.9		ug/L	25.00		88	70-130	4	20	
Bromochloromethane	21.8		ug/L	25.00		87	70-130	5	20	
Bromodichloromethane	24.3		ug/L	25.00		97	70-130	0.2	20	
Bromoform	21.8		ug/L	25.00		87	70-130	3	20	
Bromomethane	26.1		ug/L	25.00		105	70-130	3	20	
Carbon Disulfide	24.0		ug/L	25.00		96	70-130	1	20	
Carbon Tetrachloride	23.4		ug/L	25.00		93	70-130	4	20	
Chlorobenzene	21.7		ug/L	25.00		87	70-130	3	20	
Chloroethane	22.1		ug/L	25.00		88	70-130	3	20	
Chloroform	22.7		ug/L	25.00		91	70-130	2	20	
Chloromethane	18.2		ug/L	25.00		73	70-130	0.7	20	
cis-1,2-Dichloroethene	24.4		ug/L	25.00		98	70-130	0.04	20	
cis-1,3-Dichloropropene	23.2		ug/L	25.00		93	70-130	1	20	
Dibromochloromethane	23.3		ug/L	25.00		93	70-130	0.9	20	
Dibromomethane	21.0		ug/L	25.00		84	70-130	0.5	20	
Dichlorodifluoromethane	17.5		ug/L	25.00		70	70-130	3	20	
Diethyl Ether	23.4		ug/L	25.00		94	70-130	4	20	
Di-isopropyl ether	25.1		ug/L	25.00		100	70-130	0.5	20	
Ethyl tertiary-butyl ether	24.2		ug/L	25.00		97	70-130	3	20	
Ethylbenzene	22.8		ug/L	25.00		91	70-130	2	20	
Hexachlorobutadiene	21.3		ug/L	25.00		85	70-130	5	20	
Isopropylbenzene	20.4		ug/L	25.00		82	70-130	1	20	
Methyl tert-Butyl Ether	23.9		ug/L	25.00		96	70-130	2	20	
Methylene Chloride	25.1		ug/L	25.00		100	70-130	12	20	
Naphthalene	21.7		ug/L	25.00		87	70-130	2	20	
n-Butylbenzene	22.8		ug/L	25.00		91	70-130	2	20	
n-Propylbenzene	21.5		ug/L	25.00		86	70-130	0.5	20	
sec-Butylbenzene	23.1		ug/L	25.00		92	70-130	3	20	
Styrene	22.4		ug/L	25.00		89	70-130	2	20	
tert-Butylbenzene	22.3		ug/L	25.00		89	70-130	2	20	
Tertiary-amyl methyl ether	24.3		ug/L	25.00		97	70-130	0.5	20	
Tetrachloroethene	20.0		ug/L	25.00		80	70-130	2	20	
Tetrahydrofuran	20.0		ug/L	25.00		80	70-130	6	20	
Toluene	21.6		ug/L	25.00		86	70-130	3	20	
trans-1,2-Dichloroethene	25.0		ug/L	25.00		100	70-130	4	20	
trans-1,3-Dichloropropene	20.7		ug/L	25.00		83	70-130	0.5	20	
Trichloroethene	23.0		ug/L	25.00		92	70-130	4	20	
Vinyl Acetate	22.6		ug/L	25.00		90	70-130	2	20	
Vinyl Chloride	26.8		ug/L	25.00		107	70-130	0.7	20	
Xylene O	21.4		ug/L	25.00		85	70-130	0.7	20	
Xylene P,M	44.0		ug/L	50.00		88	70-130	2	20	
Surrogate: 1,2-Dichloroethane-d4	*23.0*		ug/L	*25.00*		*92*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*23.4*		ug/L	*25.00*		*94*	*70-130*			
Surrogate: Dibromofluoromethane	*23.7*		ug/L	*25.00*		*95*	*70-130*			

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0801239

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
5035/8260B Volatile Organic Compounds / Low Level										
Batch BA82120 - 5035										
Surrogate: Toluene-d8	*24.3*		ug/L	*25.00*		*97*	*70-130*			
5035/8260B Volatile Organic Compounds / Methanol										
Batch BA82108 - 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							
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							

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0801239

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 BA82108 - 5035										
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							
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							
Surrogate: 1,2-Dichloroethane-d4	*2.39*		mg/kg wet	*2.500*		*95*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*2.55*		mg/kg wet	*2.500*		*102*	*70-130*			
Surrogate: Dibromofluoromethane	*2.72*		mg/kg wet	*2.500*		*109*	*70-130*			
Surrogate: Toluene-d8	*2.62*		mg/kg wet	*2.500*		*105*	*70-130*			
LCS										
1,1,1,2-Tetrachloroethane	23.4		ug/L	25.00		94	70-130			
1,1,1-Trichloroethane	25.1		ug/L	25.00		100	70-130			
1,1,2,2-Tetrachloroethane	19.5		ug/L	25.00		78	70-130			
1,1,2-Trichloroethane	20.8		ug/L	25.00		83	70-130			
1,1-Dichloroethane	24.0		ug/L	25.00		96	70-130			
1,1-Dichloroethene	28.5		ug/L	25.00		114	70-130			
1,1-Dichloropropene	24.8		ug/L	25.00		99	70-130			
1,2,3-Trichlorobenzene	24.9		ug/L	25.00		100	70-130			
1,2,3-Trichloropropane	20.7		ug/L	25.00		83	70-130			

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0801239

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 BA82108 - 5035										
1,2,4-Trichlorobenzene	25.8		ug/L	25.00		103	70-130			
1,2,4-Trimethylbenzene	25.7		ug/L	25.00		103	70-130			
1,2-Dibromo-3-Chloropropane	19.6		ug/L	25.00		79	70-130			
1,2-Dibromoethane	20.6		ug/L	25.00		82	70-130			
1,2-Dichlorobenzene	23.6		ug/L	25.00		94	70-130			
1,2-Dichloroethane	22.3		ug/L	25.00		89	70-130			
1,2-Dichloropropane	22.8		ug/L	25.00		91	70-130			
1,3,5-Trimethylbenzene	25.0		ug/L	25.00		100	70-130			
1,3-Dichlorobenzene	24.6		ug/L	25.00		98	70-130			
1,3-Dichloropropane	20.9		ug/L	25.00		83	70-130			
1,4-Dichlorobenzene	24.2		ug/L	25.00		97	70-130			
1,4-Dioxane - Screen	499		ug/L	500.0		100	44-241			
1-Chlorohexane	24.7		ug/L	25.00		99	70-130			
2,2-Dichloropropane	25.0		ug/L	25.00		100	70-130			
2-Butanone	107		ug/L	125.0		86	70-130			
2-Chlorotoluene	24.1		ug/L	25.00		97	70-130			
2-Hexanone	99.0		ug/L	125.0		79	70-130			
4-Chlorotoluene	24.3		ug/L	25.00		97	70-130			
4-Isopropyltoluene	25.0		ug/L	25.00		100	70-130			
4-Methyl-2-Pentanone	96.7		ug/L	125.0		77	70-130			
Acetone	119		ug/L	125.0		95	70-130			
Benzene	23.4		ug/L	25.00		94	70-130			
Bromobenzene	23.8		ug/L	25.00		95	70-130			
Bromochloromethane	21.0		ug/L	25.00		84	70-130			
Bromodichloromethane	25.3		ug/L	25.00		101	70-130			
Bromoform	21.9		ug/L	25.00		88	70-130			
Bromomethane	29.8		ug/L	25.00		119	70-130			
Carbon Disulfide	26.6		ug/L	25.00		107	70-130			
Carbon Tetrachloride	26.3		ug/L	25.00		105	70-130			
Chlorobenzene	24.1		ug/L	25.00		96	70-130			
Chloroethane	31.5		ug/L	25.00		126	70-130			
Chloroform	23.9		ug/L	25.00		96	70-130			
Chloromethane	22.7		ug/L	25.00		91	70-130			
cis-1,2-Dichloroethene	26.4		ug/L	25.00		106	70-130			
cis-1,3-Dichloropropene	22.7		ug/L	25.00		91	70-130			
Dibromochloromethane	23.5		ug/L	25.00		94	70-130			
Dibromomethane	20.5		ug/L	25.00		82	70-130			
Dichlorodifluoromethane	20.5		ug/L	25.00		82	70-130			
Diethyl Ether	21.8		ug/L	25.00		87	70-130			
Di-isopropyl ether	23.3		ug/L	25.00		93	70-130			
Ethyl tertiary-butyl ether	21.8		ug/L	25.00		87	70-130			
Ethylbenzene	24.2		ug/L	25.00		97	70-130			
Hexachlorobutadiene	29.4		ug/L	25.00		117	70-130			
Isopropylbenzene	22.5		ug/L	25.00		90	70-130			
Methyl tert-Butyl Ether	21.4		ug/L	25.00		85	70-130			
Methylene Chloride	24.3		ug/L	25.00		97	70-130			

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0801239

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 BA82108 - 5035										
Naphthalene	20.6		ug/L	25.00		82	70-130			
n-Butylbenzene	27.1		ug/L	25.00		108	70-130			
n-Propylbenzene	26.4		ug/L	25.00		106	70-130			
sec-Butylbenzene	26.1		ug/L	25.00		104	70-130			
Styrene	24.1		ug/L	25.00		96	70-130			
tert-Butylbenzene	26.5		ug/L	25.00		106	70-130			
Tertiary-amyl methyl ether	21.8		ug/L	25.00		87	70-130			
Tetrachloroethene	23.0		ug/L	25.00		92	70-130			
Tetrahydrofuran	17.8		ug/L	25.00		71	70-130			
Toluene	24.0		ug/L	25.00		96	70-130			
trans-1,2-Dichloroethene	26.5		ug/L	25.00		106	70-130			
trans-1,3-Dichloropropene	19.8		ug/L	25.00		79	70-130			
Trichloroethene	24.3		ug/L	25.00		97	70-130			
Vinyl Acetate	20.8		ug/L	25.00		83	70-130			
Vinyl Chloride	28.8		ug/L	25.00		115	70-130			
Xylene O	24.4		ug/L	25.00		98	70-130			
Xylene P,M	49.1		ug/L	50.00		98	70-130			
Surrogate: 1,2-Dichloroethane-d4	*2.30*		mg/kg wet	*2.500*		*92*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*2.52*		mg/kg wet	*2.500*		*101*	*70-130*			
Surrogate: Dibromofluoromethane	*2.63*		mg/kg wet	*2.500*		*105*	*70-130*			
Surrogate: Toluene-d8	*2.68*		mg/kg wet	*2.500*		*107*	*70-130*			
LCS Dup										
1,1,1,2-Tetrachloroethane	24.1		ug/L	25.00		96	70-130	3	20	
1,1,1-Trichloroethane	25.6		ug/L	25.00		102	70-130	2	20	
1,1,2,2-Tetrachloroethane	21.1		ug/L	25.00		84	70-130	8	20	
1,1,2-Trichloroethane	22.4		ug/L	25.00		90	70-130	7	20	
1,1-Dichloroethane	24.4		ug/L	25.00		98	70-130	1	20	
1,1-Dichloroethene	28.4		ug/L	25.00		114	70-130	0.2	20	
1,1-Dichloropropene	25.3		ug/L	25.00		101	70-130	2	20	
1,2,3-Trichlorobenzene	26.2		ug/L	25.00		105	70-130	5	20	
1,2,3-Trichloropropane	22.0		ug/L	25.00		88	70-130	6	20	
1,2,4-Trichlorobenzene	26.7		ug/L	25.00		107	70-130	3	20	
1,2,4-Trimethylbenzene	25.7		ug/L	25.00		103	70-130	0.1	20	
1,2-Dibromo-3-Chloropropane	22.0		ug/L	25.00		88	70-130	12	20	
1,2-Dibromoethane	22.0		ug/L	25.00		88	70-130	7	20	
1,2-Dichlorobenzene	24.2		ug/L	25.00		97	70-130	2	20	
1,2-Dichloroethane	23.4		ug/L	25.00		94	70-130	5	20	
1,2-Dichloropropane	23.4		ug/L	25.00		94	70-130	3	20	
1,3,5-Trimethylbenzene	24.8		ug/L	25.00		99	70-130	0.8	20	
1,3-Dichlorobenzene	24.7		ug/L	25.00		99	70-130	0.6	20	
1,3-Dichloropropane	22.3		ug/L	25.00		89	70-130	7	20	
1,4-Dichlorobenzene	24.3		ug/L	25.00		97	70-130	0.7	20	
1,4-Dioxane - Screen	564		ug/L	500.0		113	44-241	12	200	
1-Chlorohexane	24.8		ug/L	25.00		99	70-130	0.5	20	
2,2-Dichloropropane	26.8		ug/L	25.00		107	70-130	7	20	
2-Butanone	119		ug/L	125.0		95	70-130	10	20	

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0801239

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 BA82108 - 5035										
2-Chlorotoluene	24.6		ug/L	25.00		98	70-130	2	20	
2-Hexanone	111		ug/L	125.0		88	70-130	11	20	
4-Chlorotoluene	24.3		ug/L	25.00		97	70-130	0.08	20	
4-Isopropyltoluene	24.9		ug/L	25.00		100	70-130	0.6	20	
4-Methyl-2-Pentanone	108		ug/L	125.0		86	70-130	11	20	
Acetone	135		ug/L	125.0		108	70-130	12	20	
Benzene	23.8		ug/L	25.00		95	70-130	2	20	
Bromobenzene	24.3		ug/L	25.00		97	70-130	2	20	
Bromochloromethane	22.2		ug/L	25.00		89	70-130	5	20	
Bromodichloromethane	26.4		ug/L	25.00		106	70-130	4	20	
Bromoform	23.7		ug/L	25.00		95	70-130	8	20	
Bromomethane	30.2		ug/L	25.00		121	70-130	1	20	
Carbon Disulfide	27.3		ug/L	25.00		109	70-130	2	20	
Carbon Tetrachloride	26.9		ug/L	25.00		108	70-130	2	20	
Chlorobenzene	24.4		ug/L	25.00		97	70-130	1	20	
Chloroethane	28.6		ug/L	25.00		114	70-130	10	20	
Chloroform	24.5		ug/L	25.00		98	70-130	2	20	
Chloromethane	22.9		ug/L	25.00		91	70-130	0.6	20	
cis-1,2-Dichloroethene	26.6		ug/L	25.00		106	70-130	0.7	20	
cis-1,3-Dichloropropene	23.9		ug/L	25.00		96	70-130	5	20	
Dibromochloromethane	24.8		ug/L	25.00		99	70-130	5	20	
Dibromomethane	22.3		ug/L	25.00		89	70-130	8	20	
Dichlorodifluoromethane	21.0		ug/L	25.00		84	70-130	2	20	
Diethyl Ether	23.4		ug/L	25.00		93	70-130	7	20	
Di-isopropyl ether	24.2		ug/L	25.00		97	70-130	4	20	
Ethyl tertiary-butyl ether	23.2		ug/L	25.00		93	70-130	6	20	
Ethylbenzene	24.4		ug/L	25.00		97	70-130	0.7	20	
Hexachlorobutadiene	29.2		ug/L	25.00		117	70-130	0.5	20	
Isopropylbenzene	22.2		ug/L	25.00		89	70-130	1	20	
Methyl tert-Butyl Ether	23.2		ug/L	25.00		93	70-130	8	20	
Methylene Chloride	24.9		ug/L	25.00		99	70-130	2	20	
Naphthalene	22.4		ug/L	25.00		90	70-130	9	20	
n-Butylbenzene	27.1		ug/L	25.00		108	70-130	0.1	20	
n-Propylbenzene	26.0		ug/L	25.00		104	70-130	2	20	
sec-Butylbenzene	25.8		ug/L	25.00		103	70-130	1	20	
Styrene	24.5		ug/L	25.00		98	70-130	2	20	
tert-Butylbenzene	27.0		ug/L	25.00		108	70-130	2	20	
Tertiary-amyl methyl ether	23.2		ug/L	25.00		93	70-130	6	20	
Tetrachloroethene	21.8		ug/L	25.00		87	70-130	6	20	
Tetrahydrofuran	19.5		ug/L	25.00		78	70-130	9	20	
Toluene	24.7		ug/L	25.00		99	70-130	3	20	
trans-1,2-Dichloroethene	27.0		ug/L	25.00		108	70-130	2	20	
trans-1,3-Dichloropropene	21.2		ug/L	25.00		85	70-130	7	20	
Trichloroethene	24.6		ug/L	25.00		98	70-130	1	20	
Vinyl Acetate	22.1		ug/L	25.00		88	70-130	6	20	
Vinyl Chloride	29.7		ug/L	25.00		119	70-130	3	20	

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0801239

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 BA82108 - 5035										
Xylene O	24.6		ug/L	25.00		98	70-130	0.8	20	
Xylene P,M	49.5		ug/L	50.00		99	70-130	0.7	20	
Surrogate: 1,2-Dichloroethane-d4	*2.45*		mg/kg wet	*2.500*		*98*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*2.58*		mg/kg wet	*2.500*		*103*	*70-130*			
Surrogate: Dibromofluoromethane	*2.70*		mg/kg wet	*2.500*		*108*	*70-130*			
Surrogate: Toluene-d8	*2.69*		mg/kg wet	*2.500*		*107*	*70-130*			
8100M Total Petroleum Hydrocarbons										
Batch BA82102 - 3541										
Blank										
Decane (C10)	ND	0.25	mg/kg wet							
Docosane (C22)	ND	0.25	mg/kg wet							
Dodecane (C12)	ND	0.25	mg/kg wet							
Eicosane (C20)	ND	0.25	mg/kg wet							
Hexacosane (C26)	ND	0.25	mg/kg wet							
Hexadecane (C16)	ND	0.25	mg/kg wet							
Nonadecane (C19)	ND	0.25	mg/kg wet							
Nonane (C9)	ND	0.25	mg/kg wet							
Octacosane (C28)	ND	0.25	mg/kg wet							
Octadecane (C18)	ND	0.25	mg/kg wet							
Tetracosane (C24)	ND	0.25	mg/kg wet							
Tetradecane (C14)	ND	0.25	mg/kg wet							
Total Petroleum Hydrocarbons	ND	37.5	mg/kg wet							
Triacontane (C30)	ND	0.25	mg/kg wet							
Surrogate: O-Terphenyl	*3.55*		mg/kg wet	*5.000*		*71*	*40-140*			
LCS										
Decane (C10)	1.75	0.25	mg/kg wet	2.500		70	40-140			
Docosane (C22)	2.25	0.25	mg/kg wet	2.500		90	40-140			
Dodecane (C12)	1.89	0.25	mg/kg wet	2.500		76	40-140			
Eicosane (C20)	2.22	0.25	mg/kg wet	2.500		89	40-140			
Hexacosane (C26)	2.26	0.25	mg/kg wet	2.500		90	40-140			
Hexadecane (C16)	2.07	0.25	mg/kg wet	2.500		83	40-140			
Nonadecane (C19)	2.26	0.25	mg/kg wet	2.500		90	40-140			
Nonane (C9)	1.45	0.25	mg/kg wet	2.500		58	30-140			
Octacosane (C28)	2.30	0.25	mg/kg wet	2.500		92	40-140			
Octadecane (C18)	2.21	0.25	mg/kg wet	2.500		89	40-140			
Tetracosane (C24)	2.42	0.25	mg/kg wet	2.500		97	40-140			
Tetradecane (C14)	1.99	0.25	mg/kg wet	2.500		79	40-140			
Triacontane (C30)	2.32	0.25	mg/kg wet	2.500		93	40-140			
Surrogate: O-Terphenyl	*3.99*		mg/kg wet	*5.000*		*80*	*40-140*			
LCS Dup										
Decane (C10)	1.58	0.25	mg/kg wet	2.500		63	40-140	10	50	
Docosane (C22)	1.97	0.25	mg/kg wet	2.500		79	40-140	13	50	

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0801239

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8100M Total Petroleum Hydrocarbons										
Batch BA82102 - 3541										
Dodecane (C12)	1.69	0.25	mg/kg wet	2.500		67	40-140	11	50	
Eicosane (C20)	1.95	0.25	mg/kg wet	2.500		78	40-140	13	50	
Hexacosane (C26)	1.97	0.25	mg/kg wet	2.500		79	40-140	14	50	
Hexadecane (C16)	1.83	0.25	mg/kg wet	2.500		73	40-140	12	50	
Nonadecane (C19)	2.00	0.25	mg/kg wet	2.500		80	40-140	12	50	
Nonane (C9)	1.31	0.25	mg/kg wet	2.500		52	30-140	10	50	
Octacosane (C28)	2.00	0.25	mg/kg wet	2.500		80	40-140	14	50	
Octadecane (C18)	1.96	0.25	mg/kg wet	2.500		78	40-140	12	50	
Tetracosane (C24)	2.12	0.25	mg/kg wet	2.500		85	40-140	14	50	
Tetradecane (C14)	1.76	0.25	mg/kg wet	2.500		70	40-140	12	50	
Triacontane (C30)	2.02	0.25	mg/kg wet	2.500		81	40-140	14	50	
Surrogate: O-Terphenyl	*3.52*		mg/kg wet	*5.000*		*70*	*40-140*			
8270C Semi-Volatile Organic Compounds										
Batch BA82115 - 3541										
Blank										
1,1-Biphenyl	ND	0.250	mg/kg wet							
1,2,4-Trichlorobenzene	ND	0.250	mg/kg wet							
1,2-Dichlorobenzene	ND	0.250	mg/kg wet							
1,3-Dichlorobenzene	ND	0.250	mg/kg wet							
1,4-Dichlorobenzene	ND	0.250	mg/kg wet							
2,3,4,6-Tetrachlorophenol	ND	1.25	mg/kg wet							
2,4,5-Trichlorophenol	ND	0.250	mg/kg wet							
2,4,6-Trichlorophenol	ND	0.250	mg/kg wet							
2,4-Dichlorophenol	ND	0.250	mg/kg wet							
2,4-Dimethylphenol	ND	0.250	mg/kg wet							
2,4-Dinitrophenol	ND	1.25	mg/kg wet							
2,4-Dinitrotoluene	ND	0.250	mg/kg wet							
2,6-Dinitrotoluene	ND	0.250	mg/kg wet							
2-Chloronaphthalene	ND	0.250	mg/kg wet							
2-Chlorophenol	ND	0.250	mg/kg wet							
2-Methylnaphthalene	ND	0.250	mg/kg wet							
2-Methylphenol	ND	0.250	mg/kg wet							
2-Nitroaniline	ND	0.250	mg/kg wet							
2-Nitrophenol	ND	0.250	mg/kg wet							
3,3'-Dichlorobenzidine	ND	0.500	mg/kg wet							
3+4-Methylphenol	ND	0.500	mg/kg wet							
3-Nitroaniline	ND	0.250	mg/kg wet							
4,6-Dinitro-2-Methylphenol	ND	1.25	mg/kg wet							
4-Bromophenyl-phenylether	ND	0.250	mg/kg wet							
4-Chloro-3-Methylphenol	ND	0.250	mg/kg wet							
4-Chloroaniline	ND	0.500	mg/kg wet							
4-Chloro-phenyl-phenyl ether	ND	0.250	mg/kg wet							
4-Nitroaniline	ND	0.250	mg/kg wet							
4-Nitrophenol	ND	1.25	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0801239

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8270C Semi-Volatile Organic Compounds										
Batch BA82115 - 3541										
Acenaphthene	ND	0.250	mg/kg wet							
Acenaphthylene	ND	0.250	mg/kg wet							
Acetophenone	ND	0.500	mg/kg wet							
Aniline	ND	1.25	mg/kg wet							
Anthracene	ND	0.250	mg/kg wet							
Azobenzene	ND	0.250	mg/kg wet							
Benzo(a)anthracene	ND	0.250	mg/kg wet							
Benzo(a)pyrene	ND	0.125	mg/kg wet							
Benzo(b)fluoranthene	ND	0.250	mg/kg wet							
Benzo(g,h,i)perylene	ND	0.250	mg/kg wet							
Benzo(k)fluoranthene	ND	0.250	mg/kg wet							
Benzoic Acid	ND	1.25	mg/kg wet							
Benzyl Alcohol	ND	0.250	mg/kg wet							
bis(2-Chloroethoxy)methane	ND	0.250	mg/kg wet							
bis(2-Chloroethyl)ether	ND	0.250	mg/kg wet							
bis(2-chloroisopropyl)Ether	ND	0.250	mg/kg wet							
bis(2-Ethylhexyl)phthalate	ND	0.250	mg/kg wet							
Butylbenzylphthalate	ND	0.250	mg/kg wet							
Carbazole	ND	0.250	mg/kg wet							
Chrysene	ND	0.125	mg/kg wet							
Dibenzo(a,h)Anthracene	ND	0.125	mg/kg wet							
Dibenzofuran	ND	0.250	mg/kg wet							
Diethylphthalate	ND	0.250	mg/kg wet							
Dimethylphthalate	ND	0.250	mg/kg wet							
Di-n-butylphthalate	ND	0.250	mg/kg wet							
Di-n-octylphthalate	ND	0.250	mg/kg wet							
Fluoranthene	ND	0.250	mg/kg wet							
Fluorene	ND	0.250	mg/kg wet							
Hexachlorobenzene	ND	0.125	mg/kg wet							
Hexachlorobutadiene	ND	0.250	mg/kg wet							
Hexachlorocyclopentadiene	ND	1.25	mg/kg wet							
Hexachloroethane	ND	0.250	mg/kg wet							
Indeno(1,2,3-cd)Pyrene	ND	0.250	mg/kg wet							
Isophorone	ND	0.250	mg/kg wet							
Naphthalene	ND	0.250	mg/kg wet							
Nitrobenzene	ND	0.250	mg/kg wet							
N-Nitrosodimethylamine	ND	0.250	mg/kg wet							
N-Nitroso-Di-n-Propylamine	ND	0.250	mg/kg wet							
N-nitrosodiphenylamine	ND	0.250	mg/kg wet							
Pentachlorophenol	ND	1.25	mg/kg wet							
Phenanthrene	ND	0.250	mg/kg wet							
Phenol	ND	0.250	mg/kg wet							
Pyrene	ND	0.250	mg/kg wet							
Pyridine	ND	1.25	mg/kg wet							
Surrogate: 1,2-Dichlorobenzene-d4	*1.92*		mg/kg wet	*2.500*		*77*	*30-130*			
Surrogate: 2,4,6-Tribromophenol	*2.34*		mg/kg wet	*3.750*		*62*	*30-130*			

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0801239

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8270C Semi-Volatile Organic Compounds										
Batch BA82115 - 3541										
Surrogate: 2-Chlorophenol-d4	*2.31*		mg/kg wet	*3.750*		*62*	*30-130*			
Surrogate: 2-Fluorobiphenyl	*1.72*		mg/kg wet	*2.500*		*69*	*30-130*			
Surrogate: 2-Fluorophenol	*2.41*		mg/kg wet	*3.750*		*64*	*30-130*			
Surrogate: Nitrobenzene-d5	*1.78*		mg/kg wet	*2.500*		*71*	*30-130*			
Surrogate: Phenol-d6	*3.09*		mg/kg wet	*3.750*		*82*	*30-130*			
Surrogate: p-Terphenyl-d14	*1.96*		mg/kg wet	*2.500*		*78*	*30-130*			
LCS										
1,1-Biphenyl	1.48	0.250	mg/kg wet	2.500		59	40-140			
1,2,4-Trichlorobenzene	1.26	0.250	mg/kg wet	2.500		50	40-140			
1,2-Dichlorobenzene	1.28	0.250	mg/kg wet	2.500		51	40-140			
1,3-Dichlorobenzene	1.22	0.250	mg/kg wet	2.500		49	40-140			
1,4-Dichlorobenzene	1.21	0.250	mg/kg wet	2.500		49	40-140			
2,3,4,6-Tetrachlorophenol	1.83	1.25	mg/kg wet	2.500		73	30-130			
2,4,5-Trichlorophenol	1.64	0.250	mg/kg wet	2.500		66	30-130			
2,4,6-Trichlorophenol	1.53	0.250	mg/kg wet	2.500		61	30-130			
2,4-Dichlorophenol	1.45	0.250	mg/kg wet	2.500		58	30-130			
2,4-Dimethylphenol	1.30	0.250	mg/kg wet	2.500		52	30-130			
2,4-Dinitrophenol	0.535	1.25	mg/kg wet	2.500		21	30-130			B-
2,4-Dinitrotoluene	1.68	0.250	mg/kg wet	2.500		67	40-140			
2,6-Dinitrotoluene	1.52	0.250	mg/kg wet	2.500		61	40-140			
2-Chloronaphthalene	1.10	0.250	mg/kg wet	2.500		44	40-140			
2-Chlorophenol	1.23	0.250	mg/kg wet	2.500		49	30-130			
2-Methylnaphthalene	1.29	0.250	mg/kg wet	2.500		52	40-140			
2-Methylphenol	1.40	0.250	mg/kg wet	2.500		56	30-130			
2-Nitroaniline	1.02	0.250	mg/kg wet	2.500		41	40-140			
2-Nitrophenol	1.25	0.250	mg/kg wet	2.500		50	30-130			
3,3´-Dichlorobenzidine	1.87	0.500	mg/kg wet	2.500		75	40-140			
3+4-Methylphenol	2.34	0.500	mg/kg wet	5.000		47	30-130			
3-Nitroaniline	1.62	0.250	mg/kg wet	2.500		65	40-140			
4,6-Dinitro-2-Methylphenol	0.964	1.25	mg/kg wet	2.500		39	30-130			
4-Bromophenyl-phenylether	1.49	0.250	mg/kg wet	2.500		60	40-140			
4-Chloro-3-Methylphenol	1.55	0.250	mg/kg wet	2.500		62	30-130			
4-Chloroaniline	0.822	0.500	mg/kg wet	2.500		33	40-140			B-
4-Chloro-phenyl-phenyl ether	1.55	0.250	mg/kg wet	2.500		62	40-140			
4-Nitroaniline	1.72	0.250	mg/kg wet	2.500		69	40-140			
4-Nitrophenol	1.79	1.25	mg/kg wet	2.500		72	30-130			
Acenaphthene	1.41	0.250	mg/kg wet	2.500		56	40-140			
Acenaphthylene	1.37	0.250	mg/kg wet	2.500		55	40-140			
Acetophenone	1.32	0.500	mg/kg wet	2.500		53	40-140			
Aniline	0.768	1.25	mg/kg wet	2.500		31	40-140			B-
Anthracene	1.55	0.250	mg/kg wet	2.500		62	40-140			
Azobenzene	1.44	0.250	mg/kg wet	2.500		58	40-140			
Benzo(a)anthracene	1.90	0.250	mg/kg wet	2.500		76	40-140			
Benzo(a)pyrene	1.75	0.125	mg/kg wet	2.500		70	40-140			
Benzo(b)fluoranthene	1.84	0.250	mg/kg wet	2.500		74	40-140			

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0801239

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8270C Semi-Volatile Organic Compounds										
Batch BA82115 - 3541										
Benzo(g,h,i)perylene	1.86	0.250	mg/kg wet	2.500		74	40-140			
Benzo(k)fluoranthene	1.87	0.250	mg/kg wet	2.500		75	40-140			
Benzoic Acid	ND	1.25	mg/kg wet	2.500			40-140			B-
Benzyl Alcohol	1.33	0.250	mg/kg wet	2.500		53	40-140			
bis(2-Chloroethoxy)methane	1.11	0.250	mg/kg wet	2.500		44	40-140			
bis(2-Chloroethyl)ether	1.38	0.250	mg/kg wet	2.500		55	40-140			
bis(2-chloroisopropyl)Ether	1.16	0.250	mg/kg wet	2.500		46	40-140			
bis(2-Ethylhexyl)phthalate	1.90	0.250	mg/kg wet	2.500		76	40-140			
Butylbenzylphthalate	1.86	0.250	mg/kg wet	2.500		74	40-140			
Carbazole	1.79	0.250	mg/kg wet	2.500		72	40-140			
Chrysene	1.87	0.125	mg/kg wet	2.500		75	40-140			
Dibenzo(a,h)Anthracene	1.83	0.125	mg/kg wet	2.500		73	40-140			
Dibenzofuran	1.44	0.250	mg/kg wet	2.500		58	40-140			
Diethylphthalate	1.47	0.250	mg/kg wet	2.500		59	40-140			
Dimethylphthalate	1.56	0.250	mg/kg wet	2.500		62	40-140			
Di-n-butylphthalate	1.71	0.250	mg/kg wet	2.500		68	40-140			
Di-n-octylphthalate	1.73	0.250	mg/kg wet	2.500		69	40-140			
Fluoranthene	1.82	0.250	mg/kg wet	2.500		73	40-140			
Fluorene	1.39	0.250	mg/kg wet	2.500		55	40-140			
Hexachlorobenzene	1.43	0.125	mg/kg wet	2.500		57	40-140			
Hexachlorobutadiene	1.21	0.250	mg/kg wet	2.500		48	40-140			
Hexachlorocyclopentadiene	0.768	1.25	mg/kg wet	2.500		31	40-140			B-
Hexachloroethane	1.19	0.250	mg/kg wet	2.500		48	40-140			
Indeno(1,2,3-cd)Pyrene	1.85	0.250	mg/kg wet	2.500		74	40-140			
Isophorone	1.24	0.250	mg/kg wet	2.500		49	40-140			
Naphthalene	1.18	0.250	mg/kg wet	2.500		47	40-140			
Nitrobenzene	1.18	0.250	mg/kg wet	2.500		47	40-140			
N-Nitrosodimethylamine	1.12	0.250	mg/kg wet	2.500		45	40-140			
N-Nitroso-Di-n-Propylamine	1.05	0.250	mg/kg wet	2.500		42	40-140			
N-nitrosodiphenylamine	1.56	0.250	mg/kg wet	2.500		62	40-140			
Pentachlorophenol	1.90	1.25	mg/kg wet	2.500		76	30-130			
Phenanthrene	1.57	0.250	mg/kg wet	2.500		63	40-140			
Phenol	1.33	0.250	mg/kg wet	2.500		53	30-130			
Pyrene	1.78	0.250	mg/kg wet	2.500		71	40-140			
Pyridine	0.940	1.25	mg/kg wet	2.500		38	40-140			B-
Surrogate: 1,2-Dichlorobenzene-d4	*1.17*		mg/kg wet	*2.500*		*47*	*30-130*			
Surrogate: 2,4,6-Tribromophenol	*2.22*		mg/kg wet	*3.750*		*59*	*30-130*			
Surrogate: 2-Chlorophenol-d4	*1.73*		mg/kg wet	*3.750*		*46*	*30-130*			
Surrogate: 2-Fluorobiphenyl	*1.31*		mg/kg wet	*2.500*		*52*	*30-130*			
Surrogate: 2-Fluorophenol	*1.75*		mg/kg wet	*3.750*		*47*	*30-130*			
Surrogate: Nitrobenzene-d5	*1.19*		mg/kg wet	*2.500*		*48*	*30-130*			
Surrogate: Phenol-d6	*2.15*		mg/kg wet	*3.750*		*57*	*30-130*			
Surrogate: p-Terphenyl-d14	*1.75*		mg/kg wet	*2.500*		*70*	*30-130*			
LCS Dup										
1,1-Biphenyl	1.73	0.250	mg/kg wet	2.500		69	40-140	16	30	
1,2,4-Trichlorobenzene	1.37	0.250	mg/kg wet	2.500		55	40-140	9	30	

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0801239

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8270C Semi-Volatile Organic Compounds										
Batch BA82115 - 3541										
1,2-Dichlorobenzene	1.30	0.250	mg/kg wet	2.500		52	40-140	2	30	
1,3-Dichlorobenzene	1.25	0.250	mg/kg wet	2.500		50	40-140	2	30	
1,4-Dichlorobenzene	1.31	0.250	mg/kg wet	2.500		53	40-140	8	30	
2,3,4,6-Tetrachlorophenol	1.97	1.25	mg/kg wet	2.500		79	30-130	7	30	
2,4,5-Trichlorophenol	1.79	0.250	mg/kg wet	2.500		72	30-130	9	30	
2,4,6-Trichlorophenol	1.71	0.250	mg/kg wet	2.500		68	30-130	11	30	
2,4-Dichlorophenol	1.59	0.250	mg/kg wet	2.500		64	30-130	9	30	
2,4-Dimethylphenol	1.48	0.250	mg/kg wet	2.500		59	30-130	13	30	
2,4-Dinitrophenol	0.804	1.25	mg/kg wet	2.500		32	30-130	40	30	D+
2,4-Dinitrotoluene	1.95	0.250	mg/kg wet	2.500		78	40-140	15	30	
2,6-Dinitrotoluene	1.75	0.250	mg/kg wet	2.500		70	40-140	14	30	
2-Chloronaphthalene	1.23	0.250	mg/kg wet	2.500		49	40-140	12	30	
2-Chlorophenol	1.30	0.250	mg/kg wet	2.500		52	30-130	6	30	
2-Methylnaphthalene	1.45	0.250	mg/kg wet	2.500		58	40-140	11	30	
2-Methylphenol	1.55	0.250	mg/kg wet	2.500		62	30-130	10	30	
2-Nitroaniline	1.01	0.250	mg/kg wet	2.500		41	40-140	1	30	
2-Nitrophenol	1.45	0.250	mg/kg wet	2.500		58	30-130	15	30	
3,3´-Dichlorobenzidine	2.00	0.500	mg/kg wet	2.500		80	40-140	7	30	
3+4-Methylphenol	1.39	0.500	mg/kg wet	5.000		28	30-130	51	30	B-, D+
3-Nitroaniline	1.85	0.250	mg/kg wet	2.500		74	40-140	13	30	
4,6-Dinitro-2-Methylphenol	1.46	1.25	mg/kg wet	2.500		58	30-130	41	30	D+
4-Bromophenyl-phenylether	1.68	0.250	mg/kg wet	2.500		67	40-140	12	30	
4-Chloro-3-Methylphenol	1.73	0.250	mg/kg wet	2.500		69	30-130	11	30	
4-Chloroaniline	0.905	0.500	mg/kg wet	2.500		36	40-140	10	30	B-
4-Chloro-phenyl-phenyl ether	1.73	0.250	mg/kg wet	2.500		69	40-140	11	30	
4-Nitroaniline	1.91	0.250	mg/kg wet	2.500		77	40-140	11	30	
4-Nitrophenol	1.95	1.25	mg/kg wet	2.500		78	30-130	9	30	
Acenaphthene	1.60	0.250	mg/kg wet	2.500		64	40-140	13	30	
Acenaphthylene	1.49	0.250	mg/kg wet	2.500		60	40-140	9	30	
Acetophenone	1.48	0.500	mg/kg wet	2.500		59	40-140	11	30	
Aniline	0.828	1.25	mg/kg wet	2.500		33	40-140	8	30	B-
Anthracene	1.72	0.250	mg/kg wet	2.500		69	40-140	11	30	
Azobenzene	1.64	0.250	mg/kg wet	2.500		66	40-140	13	30	
Benzo(a)anthracene	2.02	0.250	mg/kg wet	2.500		81	40-140	6	30	
Benzo(a)pyrene	1.87	0.125	mg/kg wet	2.500		75	40-140	7	30	
Benzo(b)fluoranthene	2.05	0.250	mg/kg wet	2.500		82	40-140	10	30	
Benzo(g,h,i)perylene	1.92	0.250	mg/kg wet	2.500		77	40-140	3	30	
Benzo(k)fluoranthene	1.94	0.250	mg/kg wet	2.500		78	40-140	4	30	
Benzoic Acid	0.271	1.25	mg/kg wet	2.500		11	40-140	200	30	B-, D+
Benzyl Alcohol	1.44	0.250	mg/kg wet	2.500		58	40-140	9	30	
bis(2-Chloroethoxy)methane	1.21	0.250	mg/kg wet	2.500		48	40-140	9	30	
bis(2-Chloroethyl)ether	1.50	0.250	mg/kg wet	2.500		60	40-140	8	30	
bis(2-chloroisopropyl)Ether	1.29	0.250	mg/kg wet	2.500		52	40-140	11	30	
bis(2-Ethylhexyl)phthalate	2.02	0.250	mg/kg wet	2.500		81	40-140	6	30	
Butylbenzylphthalate	1.99	0.250	mg/kg wet	2.500		80	40-140	7	30	
Carbazole	1.93	0.250	mg/kg wet	2.500		77	40-140	7	30	

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0801239

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8270C Semi-Volatile Organic Compounds										
Batch BA82115 - 3541										
Chrysene	1.96	0.125	mg/kg wet	2.500		78	40-140	5	30	
Dibenzo(a,h)Anthracene	1.96	0.125	mg/kg wet	2.500		78	40-140	7	30	
Dibenzofuran	1.59	0.250	mg/kg wet	2.500		63	40-140	10	30	
Diethylphthalate	1.67	0.250	mg/kg wet	2.500		67	40-140	13	30	
Dimethylphthalate	1.74	0.250	mg/kg wet	2.500		70	40-140	11	30	
Di-n-butylphthalate	1.86	0.250	mg/kg wet	2.500		74	40-140	9	30	
Di-n-octylphthalate	1.83	0.250	mg/kg wet	2.500		73	40-140	5	30	
Fluoranthene	1.97	0.250	mg/kg wet	2.500		79	40-140	8	30	
Fluorene	1.57	0.250	mg/kg wet	2.500		63	40-140	12	30	
Hexachlorobenzene	1.65	0.125	mg/kg wet	2.500		66	40-140	14	30	
Hexachlorobutadiene	1.34	0.250	mg/kg wet	2.500		54	40-140	10	30	
Hexachlorocyclopentadiene	0.835	1.25	mg/kg wet	2.500		33	40-140	8	30	B-
Hexachloroethane	1.25	0.250	mg/kg wet	2.500		50	40-140	5	30	
Indeno(1,2,3-cd)Pyrene	1.95	0.250	mg/kg wet	2.500		78	40-140	5	30	
Isophorone	1.32	0.250	mg/kg wet	2.500		53	40-140	6	30	
Naphthalene	1.34	0.250	mg/kg wet	2.500		54	40-140	12	30	
Nitrobenzene	1.35	0.250	mg/kg wet	2.500		54	40-140	14	30	
N-Nitrosodimethylamine	1.18	0.250	mg/kg wet	2.500		47	40-140	5	30	
N-Nitroso-Di-n-Propylamine	1.18	0.250	mg/kg wet	2.500		47	40-140	12	30	
N-nitrosodiphenylamine	1.76	0.250	mg/kg wet	2.500		71	40-140	12	30	
Pentachlorophenol	2.24	1.25	mg/kg wet	2.500		90	30-130	16	30	
Phenanthrene	1.79	0.250	mg/kg wet	2.500		71	40-140	13	30	
Phenol	1.38	0.250	mg/kg wet	2.500		55	30-130	3	30	
Pyrene	1.86	0.250	mg/kg wet	2.500		74	40-140	4	30	
Pyridine	0.976	1.25	mg/kg wet	2.500		39	40-140	4	30	B-
Surrogate: 1,2-Dichlorobenzene-d4	*1.24*		mg/kg wet	*2.500*		*50*	*30-130*			
Surrogate: 2,4,6-Tribromophenol	*2.59*		mg/kg wet	*3.750*		*69*	*30-130*			
Surrogate: 2-Chlorophenol-d4	*1.91*		mg/kg wet	*3.750*		*51*	*30-130*			
Surrogate: 2-Fluorobiphenyl	*1.42*		mg/kg wet	*2.500*		*57*	*30-130*			
Surrogate: 2-Fluorophenol	*1.89*		mg/kg wet	*3.750*		*50*	*30-130*			
Surrogate: Nitrobenzene-d5	*1.33*		mg/kg wet	*2.500*		*53*	*30-130*			
Surrogate: Phenol-d6	*2.42*		mg/kg wet	*3.750*		*65*	*30-130*			
Surrogate: p-Terphenyl-d14	*1.91*		mg/kg wet	*2.500*		*77*	*30-130*			

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site ESS Laboratory Work Order: 0801239

Notes and Definitions

U	Analyte included in the analysis, but not detected
Q	Calibration required quadratic regression.
J	Reported between MDL and MRL; Estimated value.
IM	Internal Standard(s) outside of criteria due to matrix (UCM/coelution is present).
IC	Internal Standard(s) outside of criteria. Sample was reanalyzed to confirm.
E	Reported above the quantitation limit; Estimated value.
D+	Relative percent difference for duplicate is outside of criteria.
D	Diluted.
C-	Continuing Calibration recovery is below lower control limit.
B-	Blank Spike recovery is below lower control limit.
ND	Analyte NOT DETECTED above the detection limit
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting 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.

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0801239

ESS LABORATORY CERTIFICATIONS

U.S. Army Corps of Engineers
Soil and Water

Navy Installation Restoration QA Program
Soil and Water

Rhode Island: A-179

Connecticut: PH-0750

Maine: RI002

Massachusetts: M-RI002

New Hampshire (NELAP accredited): 242405
Potable Water
Non Potable Water

New York (NELAP accredited): 11313
Potable Water
Non Potable Water
Solid and Hazardous Waste

United States Department of Agriculture
Soil Permit: S-54210

New Jersey (NELAP accredited): RI002
Potable Water
Non Potable Water
Soil and Hazardous Waste

Maryland: 301
Potable Water

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

Page 1 of 1

Turn Time ___ Standard Other 24 hour
If faster than 5 days, prior approval by laboratory is required #_____

State where samples were collected from:
MA (RI) CT NH NJ NY ME Other_____

Is this project for any of the following:
MA-MCP Navy USACE Other_____

Reporting Limits: RI Residential

ESS LAB PROJECT ID: 0801239

Electronic Deliverable X Yes ___ No

Format: Excel__ Access__ PDF__ Other EQuIS E2 EDD

Co. Name	Project #	Project Name (20 Char. or less)
MACTEC	365005 0041, 15	Gorham

Contact Person	Address
Dave Heisler	107 Audubon Rd. Suite 301

City	State	Zip	PO#
Wakefield	MA	01880	

Telephone #	Fax #	Email Address
781 245 6606		dheisler@mactec.com

ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Pres Code	Number of Containers	Type of Containers	Write Required Analysis: VOC	% Solids	TPH	SVOC
1	1.21.08	0840		X	S	SBWEST00	6	4	V/4	X	X		
2	1.21.08	0945		X	S	SBEAST00	6	4	V/4	X	X		
3	1.21.08	1145		X	S	Brickpit1	6	4	V/4	X	X	X	X

Container Type: P-Poly G-Glass S-Sterile V-VOA | Matrix: S-Soil SD-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present ✓ Yes ___ No Internal Use Only

Seals Intact ___ Yes ___ No NA: ___ [ ] Pickup

Cooler Temp: 4.7 [ ] Technicians_____

Preservation Code: 1- NP, 2- HCl, 3- H_2SO_4, 4- HNO_3, 5- NaOH, 6- MeOH, 7- Asorbic Acid, 8- ZnAct, 9-_____

Sampled by: Phil Muller

Comments:

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
Phil Muller	1.21.08 1302	J. Davis	1-21-08 1302				
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 samples were collected in accordance with MADEP CAM VII A

Please fax all changes to Chain of Custody in writing.

1 (White) Lab Copy 2 (Yellow) Client Receipt

10/26/04 A

ESS Laboratory
Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

PROJECT NARRATIVE

David Heislein
MACTEC Engineering & Consulting, Inc.
107 Audubon Road
Wakefield, MA 01880

RE: Providence Gorham Site
ESS Laboratory Work Order Number: 0801264

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 Project Narrative, the entire report has been paginated. The ESS Laboratory Certifications sheet is the final report page. 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 mailed. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

Date: January 28, 2008

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 may be used instead of automated integration because it produces more accurate results. All ICP Metals were analyzed using the established linear dynamic range to determine acceptable analytical results.

ESS Laboratory certifies that the test results meet the requirements of NELAC, except where noted within this project narrative.

Sample Receipt
The following sample(s) were received on January 23, 2008 for the analyses specified on the enclosed Chain of Custody Record.

Laboratory ID	Matrix	Client SampleID
0801264-01	Soil	Brick Confirm

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0801264

PROJECT NARRATIVE

8270C Semi-Volatile Organic Compounds

BA82325-BS1	**Blank Spike recovery is below lower control limit.** 1,1-Biphenyl, Benzoic Acid, Pyridine
BA82325-BSD1	**Blank Spike recovery is below lower control limit.** 1,1-Biphenyl, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Aniline, Benzoic Acid, bis(2-Chloroethoxy)methane, bis(2-Chloroethyl)ether, bis(2-chloroisopropyl)Ether, Hexachlorobutadiene, Hexachlorocyclopentadiene, Hexachloroethane, N-Nitrosodimethylamine, Pyridine
BA82325-BSD1	**Relative percent difference for duplicate is outside of criteria.** 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Benzoic Acid, bis(2-Chloroethyl)ether, Hexachloroethane, N-Nitrosodimethylamine, Pyridine
BA82325-MS1	**Matrix Spike recovery is below lower control limit.** 1,1-Biphenyl, Benzoic Acid, Pyridine
BA82325-MSD1	**Matrix Spike recovery is below lower control limit.** Benzoic Acid, Pyridine
BRA0208-CCV1	**Continuing Calibration recovery is below lower control limit.** Benzoic Acid

No other observations noted.

End of Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site
Client Sample ID: Brick Confirm
Date Sampled: 01/23/08 11:10
Percent Solids: 94
Initial Volume: 20.4
Final Volume: 1
Extraction Method: 3541

ESS Laboratory Work Order: 0801264
ESS Laboratory Sample ID: 0801264-01
Sample Matrix: Soil
Analyst: SEP
Prepared: 01/23/08

8100M Total Petroleum Hydrocarbons

Analyte	Results	Units	MRL	RI - RES DEC Limit	DF	Analyzed
Total Petroleum Hydrocarbons	ND	mg/kg dry	39.1	500	1	01/24/08

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

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site
Client Sample ID: Brick Confirm
Date Sampled: 01/23/08 11:10
Percent Solids: 94
Initial Volume: 14.1
Final Volume: 0.5
Extraction Method: 3541

ESS Laboratory Work Order: 0801264
ESS Laboratory Sample ID: 0801264-01
Sample Matrix: Soil
Analyst: VSC
Prepared: 01/23/08

8270C Semi-Volatile Organic Compounds

Analyte	Results	Units	MRL	RI - RES DEC Limit	DF	Analyzed
1,1-Biphenyl	ND	mg/kg dry	0.377	0.8	1	01/24/08
1,2,4-Trichlorobenzene	ND	mg/kg dry	0.377	96	1	01/24/08
1,2-Dichlorobenzene	ND	mg/kg dry	0.377	510	1	01/24/08
1,3-Dichlorobenzene	ND	mg/kg dry	0.377	430	1	01/24/08
1,4-Dichlorobenzene	ND	mg/kg dry	0.377	27	1	01/24/08
2,3,4,6-Tetrachlorophenol	ND	mg/kg dry	1.89		1	01/24/08
2,4,5-Trichlorophenol	ND	mg/kg dry	0.377	330	1	01/24/08
2,4,6-Trichlorophenol	ND	mg/kg dry	0.377	58	1	01/24/08
2,4-Dichlorophenol	ND	mg/kg dry	0.377	30	1	01/24/08
2,4-Dimethylphenol	ND	mg/kg dry	0.377	1400	1	01/24/08
2,4-Dinitrophenol	ND	mg/kg dry	1.89	160	1	01/24/08
2,4-Dinitrotoluene	ND	mg/kg dry	0.377	0.9	1	01/24/08
2,6-Dinitrotoluene	ND	mg/kg dry	0.377		1	01/24/08
2-Chloronaphthalene	ND	mg/kg dry	0.377		1	01/24/08
2-Chlorophenol	ND	mg/kg dry	0.377	50	1	01/24/08
2-Methylnaphthalene	ND	mg/kg dry	0.377	123	1	01/24/08
2-Methylphenol	ND	mg/kg dry	0.377		1	01/24/08
2-Nitroaniline	ND	mg/kg dry	0.377		1	01/24/08
2-Nitrophenol	ND	mg/kg dry	0.377		1	01/24/08
3,3'-Dichlorobenzidine	ND	mg/kg dry	0.755	1.4	1	01/24/08
3+4-Methylphenol	ND	mg/kg dry	0.755		1	01/24/08
3-Nitroaniline	ND	mg/kg dry	0.377		1	01/24/08
4,6-Dinitro-2-Methylphenol	ND	mg/kg dry	1.89		1	01/24/08
4-Bromophenyl-phenylether	ND	mg/kg dry	0.377		1	01/24/08
4-Chloro-3-Methylphenol	ND	mg/kg dry	0.377		1	01/24/08
4-Chloroaniline	ND	mg/kg dry	0.755	310	1	01/24/08
4-Chloro-phenyl-phenyl ether	ND	mg/kg dry	0.377		1	01/24/08
4-Nitroaniline	ND	mg/kg dry	0.377		1	01/24/08
4-Nitrophenol	ND	mg/kg dry	1.89		1	01/24/08
Acenaphthene	ND	mg/kg dry	0.377	43	1	01/24/08
Acenaphthylene	ND	mg/kg dry	0.377	23	1	01/24/08
Acetophenone	ND	mg/kg dry	0.755		1	01/24/08
Aniline	ND	mg/kg dry	1.89		1	01/24/08
Anthracene	ND	mg/kg dry	0.377	35	1	01/24/08
Azobenzene	ND	mg/kg dry	0.377		1	01/24/08

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site
Client Sample ID: Brick Confirm
Date Sampled: 01/23/08 11:10
Percent Solids: 94
Initial Volume: 14.1
Final Volume: 0.5
Extraction Method: 3541

ESS Laboratory Work Order: 0801264
ESS Laboratory Sample ID: 0801264-01
Sample Matrix: Soil
Analyst: VSC
Prepared: 01/23/08

8270C Semi-Volatile Organic Compounds

Benzo(a)anthracene	ND	mg/kg dry	0.377	0.9	1	01/24/08
Benzo(a)pyrene	ND	mg/kg dry	0.189	0.4	1	01/24/08
Benzo(b)fluoranthene	ND	mg/kg dry	0.377	0.9	1	01/24/08
Benzo(g,h,i)perylene	ND	mg/kg dry	0.377	0.8	1	01/24/08
Benzo(k)fluoranthene	ND	mg/kg dry	0.377	0.9	1	01/24/08
Benzoic Acid	ND	mg/kg dry	1.89		1	01/24/08
Benzyl Alcohol	ND	mg/kg dry	0.377		1	01/24/08
bis(2-Chloroethoxy)methane	ND	mg/kg dry	0.377		1	01/24/08
bis(2-Chloroethyl)ether	ND	mg/kg dry	0.377	0.6	1	01/24/08
bis(2-chloroisopropyl)Ether	ND	mg/kg dry	0.377	9.1	1	01/24/08
bis(2-Ethylhexyl)phthalate	ND	mg/kg dry	0.377	46	1	01/24/08
Butylbenzylphthalate	ND	mg/kg dry	0.377		1	01/24/08
Carbazole	ND	mg/kg dry	0.377		1	01/24/08
Chrysene	ND	mg/kg dry	0.189	0.4	1	01/24/08
Dibenzo(a,h)Anthracene	ND	mg/kg dry	0.189	0.4	1	01/24/08
Dibenzofuran	ND	mg/kg dry	0.377		1	01/24/08
Diethylphthalate	ND	mg/kg dry	0.377	340	1	01/24/08
Dimethylphthalate	ND	mg/kg dry	0.377	1900	1	01/24/08
Di-n-butylphthalate	ND	mg/kg dry	0.377		1	01/24/08
Di-n-octylphthalate	ND	mg/kg dry	0.377		1	01/24/08
Fluoranthene	ND	mg/kg dry	0.377	20	1	01/24/08
Fluorene	ND	mg/kg dry	0.377	28	1	01/24/08
Hexachlorobenzene	ND	mg/kg dry	0.189	0.4	1	01/24/08
Hexachlorobutadiene	ND	mg/kg dry	0.377	8.2	1	01/24/08
Hexachlorocyclopentadiene	ND	mg/kg dry	1.89		1	01/24/08
Hexachloroethane	ND	mg/kg dry	0.377	46	1	01/24/08
Indeno(1,2,3-cd)Pyrene	ND	mg/kg dry	0.377	0.9	1	01/24/08
Isophorone	ND	mg/kg dry	0.377		1	01/24/08
Naphthalene	ND	mg/kg dry	0.377	54	1	01/24/08
Nitrobenzene	ND	mg/kg dry	0.377		1	01/24/08
N-Nitrosodimethylamine	ND	mg/kg dry	0.377		1	01/24/08
N-Nitroso-Di-n-Propylamine	ND	mg/kg dry	0.377		1	01/24/08
N-nitrosodiphenylamine	ND	mg/kg dry	0.377		1	01/24/08
Pentachlorophenol	ND	mg/kg dry	1.89	5.3	1	01/24/08
Phenanthrene	ND	mg/kg dry	0.377	40	1	01/24/08
Phenol	ND	mg/kg dry	0.377	6000	1	01/24/08

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site
Client Sample ID: Brick Confirm
Date Sampled: 01/23/08 11:10
Percent Solids: 94
Initial Volume: 14.1
Final Volume: 0.5
Extraction Method: 3541

ESS Laboratory Work Order: 0801264
ESS Laboratory Sample ID: 0801264-01
Sample Matrix: Soil
Analyst: VSC
Prepared: 01/23/08

8270C Semi-Volatile Organic Compounds

Pyrene	ND	mg/kg dry	0.377	13	1	01/24/08
Pyridine	ND	mg/kg dry	1.89		1	01/24/08

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichlorobenzene-d4	*56 %*		*30-130*
Surrogate: 2,4,6-Tribromophenol	*57 %*		*30-130*
Surrogate: 2-Chlorophenol-d4	*50 %*		*30-130*
Surrogate: 2-Fluorobiphenyl	*57 %*		*30-130*
Surrogate: 2-Fluorophenol	*48 %*		*30-130*
Surrogate: Nitrobenzene-d5	*50 %*		*30-130*
Surrogate: Phenol-d6	*67 %*		*30-130*
Surrogate: p-Terphenyl-d14	*73 %*		*30-130*

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0801264

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8100M Total Petroleum Hydrocarbons										
Batch BA82324 - 3541										
Blank										
Decane (C10)	ND	0.25	mg/kg wet							
Docosane (C22)	ND	0.25	mg/kg wet							
Dodecane (C12)	ND	0.25	mg/kg wet							
Eicosane (C20)	ND	0.25	mg/kg wet							
Hexacosane (C26)	ND	0.25	mg/kg wet							
Hexadecane (C16)	ND	0.25	mg/kg wet							
Nonadecane (C19)	ND	0.25	mg/kg wet							
Nonane (C9)	ND	0.25	mg/kg wet							
Octacosane (C28)	ND	0.25	mg/kg wet							
Octadecane (C18)	ND	0.25	mg/kg wet							
Tetracosane (C24)	ND	0.25	mg/kg wet							
Tetradecane (C14)	ND	0.25	mg/kg wet							
Total Petroleum Hydrocarbons	ND	37.5	mg/kg wet							
Triacontane (C30)	ND	0.25	mg/kg wet							
Surrogate: O-Terphenyl	*4.34*		mg/kg wet	*5.000*		*87*	*40-140*			
LCS										
Decane (C10)	1.84	0.25	mg/kg wet	2.500		73	40-140			
Docosane (C22)	2.45	0.25	mg/kg wet	2.500		98	40-140			
Dodecane (C12)	2.09	0.25	mg/kg wet	2.500		84	40-140			
Eicosane (C20)	2.43	0.25	mg/kg wet	2.500		97	40-140			
Hexacosane (C26)	2.44	0.25	mg/kg wet	2.500		98	40-140			
Hexadecane (C16)	2.33	0.25	mg/kg wet	2.500		93	40-140			
Nonadecane (C19)	2.52	0.25	mg/kg wet	2.500		101	40-140			
Nonane (C9)	1.40	0.25	mg/kg wet	2.500		56	30-140			
Octacosane (C28)	2.44	0.25	mg/kg wet	2.500		98	40-140			
Octadecane (C18)	2.40	0.25	mg/kg wet	2.500		96	40-140			
Tetracosane (C24)	2.58	0.25	mg/kg wet	2.500		103	40-140			
Tetradecane (C14)	2.22	0.25	mg/kg wet	2.500		89	40-140			
Triacontane (C30)	2.47	0.25	mg/kg wet	2.500		99	40-140			
Surrogate: O-Terphenyl	*4.39*		mg/kg wet	*5.000*		*88*	*40-140*			
LCS Dup										
Decane (C10)	1.92	0.25	mg/kg wet	2.500		77	40-140	5	50	
Docosane (C22)	2.46	0.25	mg/kg wet	2.500		98	40-140	0.3	50	
Dodecane (C12)	2.19	0.25	mg/kg wet	2.500		88	40-140	5	50	
Eicosane (C20)	2.46	0.25	mg/kg wet	2.500		98	40-140	1	50	
Hexacosane (C26)	2.42	0.25	mg/kg wet	2.500		97	40-140	0.5	50	
Hexadecane (C16)	2.35	0.25	mg/kg wet	2.500		94	40-140	1	50	
Nonadecane (C19)	2.53	0.25	mg/kg wet	2.500		101	40-140	0.4	50	
Nonane (C9)	1.49	0.25	mg/kg wet	2.500		60	30-140	6	50	
Octacosane (C28)	2.45	0.25	mg/kg wet	2.500		98	40-140	0.3	50	
Octadecane (C18)	2.44	0.25	mg/kg wet	2.500		98	40-140	2	50	
Tetracosane (C24)	2.50	0.25	mg/kg wet	2.500		100	40-140	3	50	
Tetradecane (C14)	2.29	0.25	mg/kg wet	2.500		92	40-140	3	50	

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0801264

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8100M Total Petroleum Hydrocarbons										
Batch BA82324 - 3541										
Triacontane (C30)	2.46	0.25	mg/kg wet	2.500		98	40-140	0.6	50	
Surrogate: O-Terphenyl	*4.21*		mg/kg wet	*5.000*		*84*	*40-140*			
8270C Semi-Volatile Organic Compounds										
Batch BA82325 - 3541										
Blank										
1,1-Biphenyl	ND	0.250	mg/kg wet							
1,2,4-Trichlorobenzene	ND	0.250	mg/kg wet							
1,2-Dichlorobenzene	ND	0.250	mg/kg wet							
1,3-Dichlorobenzene	ND	0.250	mg/kg wet							
1,4-Dichlorobenzene	ND	0.250	mg/kg wet							
2,3,4,6-Tetrachlorophenol	ND	1.25	mg/kg wet							
2,4,5-Trichlorophenol	ND	0.250	mg/kg wet							
2,4,6-Trichlorophenol	ND	0.250	mg/kg wet							
2,4-Dichlorophenol	ND	0.250	mg/kg wet							
2,4-Dimethylphenol	ND	0.250	mg/kg wet							
2,4-Dinitrophenol	ND	1.25	mg/kg wet							
2,4-Dinitrotoluene	ND	0.250	mg/kg wet							
2,6-Dinitrotoluene	ND	0.250	mg/kg wet							
2-Chloronaphthalene	ND	0.250	mg/kg wet							
2-Chlorophenol	ND	0.250	mg/kg wet							
2-Methylnaphthalene	ND	0.250	mg/kg wet							
2-Methylphenol	ND	0.250	mg/kg wet							
2-Nitroaniline	ND	0.250	mg/kg wet							
2-Nitrophenol	ND	0.250	mg/kg wet							
3,3'-Dichlorobenzidine	ND	0.500	mg/kg wet							
3+4-Methylphenol	ND	0.500	mg/kg wet							
3-Nitroaniline	ND	0.250	mg/kg wet							
4,6-Dinitro-2-Methylphenol	ND	1.25	mg/kg wet							
4-Bromophenyl-phenylether	ND	0.250	mg/kg wet							
4-Chloro-3-Methylphenol	ND	0.250	mg/kg wet							
4-Chloroaniline	ND	0.500	mg/kg wet							
4-Chloro-phenyl-phenyl ether	ND	0.250	mg/kg wet							
4-Nitroaniline	ND	0.250	mg/kg wet							
4-Nitrophenol	ND	1.25	mg/kg wet							
Acenaphthene	ND	0.250	mg/kg wet							
Acenaphthylene	ND	0.250	mg/kg wet							
Acetophenone	ND	0.500	mg/kg wet							
Aniline	ND	1.25	mg/kg wet							
Anthracene	ND	0.250	mg/kg wet							
Azobenzene	ND	0.250	mg/kg wet							
Benzo(a)anthracene	ND	0.250	mg/kg wet							
Benzo(a)pyrene	ND	0.125	mg/kg wet							
Benzo(b)fluoranthene	ND	0.250	mg/kg wet							
Benzo(g,h,i)perylene	ND	0.250	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0801264

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8270C Semi-Volatile Organic Compounds										
Batch BA82325 - 3541										
Benzo(k)fluoranthene	ND	0.250	mg/kg wet							
Benzoic Acid	ND	1.25	mg/kg wet							
Benzyl Alcohol	ND	0.250	mg/kg wet							
bis(2-Chloroethoxy)methane	ND	0.250	mg/kg wet							
bis(2-Chloroethyl)ether	ND	0.250	mg/kg wet							
bis(2-chloroisopropyl)Ether	ND	0.250	mg/kg wet							
bis(2-Ethylhexyl)phthalate	ND	0.250	mg/kg wet							
Butylbenzylphthalate	ND	0.250	mg/kg wet							
Carbazole	ND	0.250	mg/kg wet							
Chrysene	ND	0.125	mg/kg wet							
Dibenzo(a,h)Anthracene	ND	0.125	mg/kg wet							
Dibenzofuran	ND	0.250	mg/kg wet							
Diethylphthalate	ND	0.250	mg/kg wet							
Dimethylphthalate	ND	0.250	mg/kg wet							
Di-n-butylphthalate	ND	0.250	mg/kg wet							
Di-n-octylphthalate	ND	0.250	mg/kg wet							
Fluoranthene	ND	0.250	mg/kg wet							
Fluorene	ND	0.250	mg/kg wet							
Hexachlorobenzene	ND	0.125	mg/kg wet							
Hexachlorobutadiene	ND	0.250	mg/kg wet							
Hexachlorocyclopentadiene	ND	1.25	mg/kg wet							
Hexachloroethane	ND	0.250	mg/kg wet							
Indeno(1,2,3-cd)Pyrene	ND	0.250	mg/kg wet							
Isophorone	ND	0.250	mg/kg wet							
Naphthalene	ND	0.250	mg/kg wet							
Nitrobenzene	ND	0.250	mg/kg wet							
N-Nitrosodimethylamine	ND	0.250	mg/kg wet							
N-Nitroso-Di-n-Propylamine	ND	0.250	mg/kg wet							
N-nitrosodiphenylamine	ND	0.250	mg/kg wet							
Pentachlorophenol	ND	1.25	mg/kg wet							
Phenanthrene	ND	0.250	mg/kg wet							
Phenol	ND	0.250	mg/kg wet							
Pyrene	ND	0.250	mg/kg wet							
Pyridine	ND	1.25	mg/kg wet							
Surrogate: 1,2-Dichlorobenzene-d4	*1.73*		mg/kg wet	*2.500*		*69*	*30-130*			
Surrogate: 2,4,6-Tribromophenol	*2.14*		mg/kg wet	*3.750*		*57*	*30-130*			
Surrogate: 2-Chlorophenol-d4	*2.14*		mg/kg wet	*3.750*		*57*	*30-130*			
Surrogate: 2-Fluorobiphenyl	*1.47*		mg/kg wet	*2.500*		*59*	*30-130*			
Surrogate: 2-Fluorophenol	*2.15*		mg/kg wet	*3.750*		*57*	*30-130*			
Surrogate: Nitrobenzene-d5	*1.47*		mg/kg wet	*2.500*		*59*	*30-130*			
Surrogate: Phenol-d6	*2.91*		mg/kg wet	*3.750*		*78*	*30-130*			
Surrogate: p-Terphenyl-d14	*1.79*		mg/kg wet	*2.500*		*72*	*30-130*			
LCS										
1,1-Biphenyl	0.916	0.250	mg/kg wet	2.500		37	40-140			B-
1,2,4-Trichlorobenzene	1.32	0.250	mg/kg wet	2.500		53	40-140			
1,2-Dichlorobenzene	1.27	0.250	mg/kg wet	2.500		51	40-140			

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0801264

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8270C Semi-Volatile Organic Compounds										
Batch BA82325 - 3541										
1,3-Dichlorobenzene	1.18	0.250	mg/kg wet	2.500		47	40-140			
1,4-Dichlorobenzene	1.21	0.250	mg/kg wet	2.500		49	40-140			
2,3,4,6-Tetrachlorophenol	2.15	1.25	mg/kg wet	2.500		86	30-130			
2,4,5-Trichlorophenol	1.99	0.250	mg/kg wet	2.500		80	30-130			
2,4,6-Trichlorophenol	1.86	0.250	mg/kg wet	2.500		75	30-130			
2,4-Dichlorophenol	1.65	0.250	mg/kg wet	2.500		66	30-130			
2,4-Dimethylphenol	1.58	0.250	mg/kg wet	2.500		63	30-130			
2,4-Dinitrophenol	1.93	1.25	mg/kg wet	2.500		77	30-130			
2,4-Dinitrotoluene	2.14	0.250	mg/kg wet	2.500		86	40-140			
2,6-Dinitrotoluene	1.97	0.250	mg/kg wet	2.500		79	40-140			
2-Chloronaphthalene	1.50	0.250	mg/kg wet	2.500		60	40-140			
2-Chlorophenol	1.31	0.250	mg/kg wet	2.500		52	30-130			
2-Methylnaphthalene	1.53	0.250	mg/kg wet	2.500		61	40-140			
2-Methylphenol	1.58	0.250	mg/kg wet	2.500		63	30-130			
2-Nitroaniline	1.74	0.250	mg/kg wet	2.500		70	40-140			
2-Nitrophenol	1.41	0.250	mg/kg wet	2.500		57	30-130			
3,3'-Dichlorobenzidine	2.08	0.500	mg/kg wet	2.500		83	40-140			
3+4-Methylphenol	2.72	0.500	mg/kg wet	5.000		54	30-130			
3-Nitroaniline	2.11	0.250	mg/kg wet	2.500		84	40-140			
4,6-Dinitro-2-Methylphenol	2.23	1.25	mg/kg wet	2.500		89	30-130			
4-Bromophenyl-phenylether	1.85	0.250	mg/kg wet	2.500		74	40-140			
4-Chloro-3-Methylphenol	1.90	0.250	mg/kg wet	2.500		76	30-130			
4-Chloroaniline	1.39	0.500	mg/kg wet	2.500		56	40-140			
4-Chloro-phenyl-phenyl ether	2.00	0.250	mg/kg wet	2.500		80	40-140			
4-Nitroaniline	2.10	0.250	mg/kg wet	2.500		84	40-140			
4-Nitrophenol	2.09	1.25	mg/kg wet	2.500		84	30-130			
Acenaphthene	1.79	0.250	mg/kg wet	2.500		72	40-140			
Acenaphthylene	1.76	0.250	mg/kg wet	2.500		70	40-140			
Acetophenone	1.48	0.500	mg/kg wet	2.500		59	40-140			
Aniline	1.15	1.25	mg/kg wet	2.500		46	40-140			
Anthracene	1.91	0.250	mg/kg wet	2.500		76	40-140			
Azobenzene	1.82	0.250	mg/kg wet	2.500		73	40-140			
Benzo(a)anthracene	2.13	0.250	mg/kg wet	2.500		85	40-140			
Benzo(a)pyrene	1.96	0.125	mg/kg wet	2.500		79	40-140			
Benzo(b)fluoranthene	2.15	0.250	mg/kg wet	2.500		86	40-140			
Benzo(g,h,i)perylene	1.96	0.250	mg/kg wet	2.500		79	40-140			
Benzo(k)fluoranthene	2.01	0.250	mg/kg wet	2.500		80	40-140			
Benzoic Acid	0.288	1.25	mg/kg wet	2.500		12	40-140			B-
Benzyl Alcohol	1.57	0.250	mg/kg wet	2.500		63	40-140			
bis(2-Chloroethoxy)methane	1.13	0.250	mg/kg wet	2.500		45	40-140			
bis(2-Chloroethyl)ether	1.25	0.250	mg/kg wet	2.500		50	40-140			
bis(2-chloroisopropyl)Ether	1.19	0.250	mg/kg wet	2.500		48	40-140			
bis(2-Ethylhexyl)phthalate	2.18	0.250	mg/kg wet	2.500		87	40-140			
Butylbenzylphthalate	2.13	0.250	mg/kg wet	2.500		85	40-140			
Carbazole	2.08	0.250	mg/kg wet	2.500		83	40-140			
Chrysene	2.14	0.125	mg/kg wet	2.500		86	40-140			

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0801264

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8270C Semi-Volatile Organic Compounds										
Batch BA82325 - 3541										
Dibenzo(a,h)Anthracene	1.97	0.125	mg/kg wet	2.500		79	40-140			
Dibenzofuran	1.83	0.250	mg/kg wet	2.500		73	40-140			
Diethylphthalate	1.99	0.250	mg/kg wet	2.500		80	40-140			
Dimethylphthalate	2.02	0.250	mg/kg wet	2.500		81	40-140			
Di-n-butylphthalate	1.97	0.250	mg/kg wet	2.500		79	40-140			
Di-n-octylphthalate	1.94	0.250	mg/kg wet	2.500		77	40-140			
Fluoranthene	2.10	0.250	mg/kg wet	2.500		84	40-140			
Fluorene	1.79	0.250	mg/kg wet	2.500		72	40-140			
Hexachlorobenzene	1.80	0.125	mg/kg wet	2.500		72	40-140			
Hexachlorobutadiene	1.25	0.250	mg/kg wet	2.500		50	40-140			
Hexachlorocyclopentadiene	1.13	1.25	mg/kg wet	2.500		45	40-140			
Hexachloroethane	1.16	0.250	mg/kg wet	2.500		47	40-140			
Indeno(1,2,3-cd)Pyrene	1.95	0.250	mg/kg wet	2.500		78	40-140			
Isophorone	1.47	0.250	mg/kg wet	2.500		59	40-140			
Naphthalene	1.32	0.250	mg/kg wet	2.500		53	40-140			
Nitrobenzene	1.23	0.250	mg/kg wet	2.500		49	40-140			
N-Nitrosodimethylamine	1.11	0.250	mg/kg wet	2.500		45	40-140			
N-Nitroso-Di-n-Propylamine	1.12	0.250	mg/kg wet	2.500		45	40-140			
N-nitrosodiphenylamine	1.95	0.250	mg/kg wet	2.500		78	40-140			
Pentachlorophenol	2.48	1.25	mg/kg wet	2.500		99	30-130			
Phenanthrene	1.91	0.250	mg/kg wet	2.500		76	40-140			
Phenol	1.32	0.250	mg/kg wet	2.500		53	30-130			
Pyrene	2.03	0.250	mg/kg wet	2.500		81	40-140			
Pyridine	0.434	1.25	mg/kg wet	2.500		17	40-140			B-
Surrogate: 1,2-Dichlorobenzene-d4	*1.22*		mg/kg wet	*2.500*		*49*	*30-130*			
Surrogate: 2,4,6-Tribromophenol	*2.83*		mg/kg wet	*3.750*		*75*	*30-130*			
Surrogate: 2-Chlorophenol-d4	*1.86*		mg/kg wet	*3.750*		*49*	*30-130*			
Surrogate: 2-Fluorobiphenyl	*1.63*		mg/kg wet	*2.500*		*65*	*30-130*			
Surrogate: 2-Fluorophenol	*1.77*		mg/kg wet	*3.750*		*47*	*30-130*			
Surrogate: Nitrobenzene-d5	*1.33*		mg/kg wet	*2.500*		*53*	*30-130*			
Surrogate: Phenol-d6	*2.39*		mg/kg wet	*3.750*		*64*	*30-130*			
Surrogate: p-Terphenyl-d14	*2.07*		mg/kg wet	*2.500*		*83*	*30-130*			
LCS Dup										
1,1-Biphenyl	0.780	0.250	mg/kg wet	2.500		31	40-140	16	30	B-
1,2,4-Trichlorobenzene	1.04	0.250	mg/kg wet	2.500		42	40-140	23	30	
1,2-Dichlorobenzene	0.857	0.250	mg/kg wet	2.500		34	40-140	39	30	B-, D+
1,3-Dichlorobenzene	0.804	0.250	mg/kg wet	2.500		32	40-140	38	30	B-, D+
1,4-Dichlorobenzene	0.842	0.250	mg/kg wet	2.500		34	40-140	36	30	B-, D+
2,3,4,6-Tetrachlorophenol	1.83	1.25	mg/kg wet	2.500		73	30-130	16	30	
2,4,5-Trichlorophenol	1.83	0.250	mg/kg wet	2.500		73	30-130	8	30	
2,4,6-Trichlorophenol	1.62	0.250	mg/kg wet	2.500		65	30-130	14	30	
2,4-Dichlorophenol	1.42	0.250	mg/kg wet	2.500		57	30-130	16	30	
2,4-Dimethylphenol	1.34	0.250	mg/kg wet	2.500		54	30-130	16	30	
2,4-Dinitrophenol	1.55	1.25	mg/kg wet	2.500		62	30-130	22	30	
2,4-Dinitrotoluene	1.85	0.250	mg/kg wet	2.500		74	40-140	15	30	
2,6-Dinitrotoluene	1.70	0.250	mg/kg wet	2.500		68	40-140	15	30	

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0801264

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8270C Semi-Volatile Organic Compounds										
Batch BA82325 - 3541										
2-Chloronaphthalene	1.28	0.250	mg/kg wet	2.500		51	40-140	16	30	
2-Chlorophenol	0.972	0.250	mg/kg wet	2.500		39	30-130	29	30	
2-Methylnaphthalene	1.27	0.250	mg/kg wet	2.500		51	40-140	18	30	
2-Methylphenol	1.28	0.250	mg/kg wet	2.500		51	30-130	21	30	
2-Nitroaniline	1.45	0.250	mg/kg wet	2.500		58	40-140	19	30	
2-Nitrophenol	1.13	0.250	mg/kg wet	2.500		45	30-130	22	30	
3,3´-Dichlorobenzidine	1.80	0.500	mg/kg wet	2.500		72	40-140	14	30	
3+4-Methylphenol	2.25	0.500	mg/kg wet	5.000		45	30-130	19	30	
3-Nitroaniline	1.83	0.250	mg/kg wet	2.500		73	40-140	14	30	
4,6-Dinitro-2-Methylphenol	1.87	1.25	mg/kg wet	2.500		75	30-130	17	30	
4-Bromophenyl-phenylether	1.60	0.250	mg/kg wet	2.500		64	40-140	15	30	
4-Chloro-3-Methylphenol	1.66	0.250	mg/kg wet	2.500		66	30-130	14	30	
4-Chloroaniline	1.15	0.500	mg/kg wet	2.500		46	40-140	19	30	
4-Chloro-phenyl-phenyl ether	1.70	0.250	mg/kg wet	2.500		68	40-140	16	30	
4-Nitroaniline	1.85	0.250	mg/kg wet	2.500		74	40-140	13	30	
4-Nitrophenol	1.79	1.25	mg/kg wet	2.500		72	30-130	16	30	
Acenaphthene	1.55	0.250	mg/kg wet	2.500		62	40-140	14	30	
Acenaphthylene	1.51	0.250	mg/kg wet	2.500		60	40-140	16	30	
Acetophenone	1.14	0.500	mg/kg wet	2.500		46	40-140	26	30	
Aniline	0.862	1.25	mg/kg wet	2.500		34	40-140	29	30	B-
Anthracene	1.64	0.250	mg/kg wet	2.500		65	40-140	15	30	
Azobenzene	1.59	0.250	mg/kg wet	2.500		64	40-140	13	30	
Benzo(a)anthracene	1.86	0.250	mg/kg wet	2.500		74	40-140	14	30	
Benzo(a)pyrene	1.70	0.125	mg/kg wet	2.500		68	40-140	15	30	
Benzo(b)fluoranthene	1.69	0.250	mg/kg wet	2.500		68	40-140	24	30	
Benzo(g,h,i)perylene	1.67	0.250	mg/kg wet	2.500		67	40-140	16	30	
Benzo(k)fluoranthene	1.89	0.250	mg/kg wet	2.500		76	40-140	6	30	
Benzoic Acid	0.176	1.25	mg/kg wet	2.500		7	40-140	48	30	B-, D+
Benzyl Alcohol	1.24	0.250	mg/kg wet	2.500		50	40-140	23	30	
bis(2-Chloroethoxy)methane	0.838	0.250	mg/kg wet	2.500		34	40-140	30	30	B-
bis(2-Chloroethyl)ether	0.910	0.250	mg/kg wet	2.500		36	40-140	31	30	B-, D+
bis(2-chloroisopropyl)Ether	0.904	0.250	mg/kg wet	2.500		36	40-140	28	30	B-
bis(2-Ethylhexyl)phthalate	1.93	0.250	mg/kg wet	2.500		77	40-140	12	30	
Butylbenzylphthalate	1.86	0.250	mg/kg wet	2.500		74	40-140	14	30	
Carbazole	1.80	0.250	mg/kg wet	2.500		72	40-140	14	30	
Chrysene	1.89	0.125	mg/kg wet	2.500		75	40-140	13	30	
Dibenzo(a,h)Anthracene	1.72	0.125	mg/kg wet	2.500		69	40-140	13	30	
Dibenzofuran	1.59	0.250	mg/kg wet	2.500		64	40-140	14	30	
Diethylphthalate	1.72	0.250	mg/kg wet	2.500		69	40-140	14	30	
Dimethylphthalate	1.73	0.250	mg/kg wet	2.500		69	40-140	16	30	
Di-n-butylphthalate	1.70	0.250	mg/kg wet	2.500		68	40-140	14	30	
Di-n-octylphthalate	1.67	0.250	mg/kg wet	2.500		67	40-140	15	30	
Fluoranthene	1.81	0.250	mg/kg wet	2.500		72	40-140	15	30	
Fluorene	1.57	0.250	mg/kg wet	2.500		63	40-140	13	30	
Hexachlorobenzene	1.57	0.125	mg/kg wet	2.500		63	40-140	14	30	
Hexachlorobutadiene	0.954	0.250	mg/kg wet	2.500		38	40-140	27	30	B-

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0801264

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8270C Semi-Volatile Organic Compounds										
Batch BA82325 - 3541										
Hexachlorocyclopentadiene	0.898	1.25	mg/kg wet	2.500		36	40-140	23	30	B-
Hexachloroethane	0.812	0.250	mg/kg wet	2.500		32	40-140	36	30	B-, D+
Indeno(1,2,3-cd)Pyrene	1.68	0.250	mg/kg wet	2.500		67	40-140	15	30	
Isophorone	1.25	0.250	mg/kg wet	2.500		50	40-140	17	30	
Naphthalene	1.05	0.250	mg/kg wet	2.500		42	40-140	22	30	
Nitrobenzene	0.994	0.250	mg/kg wet	2.500		40	40-140	21	30	
N-Nitrosodimethylamine	0.735	0.250	mg/kg wet	2.500		29	40-140	41	30	B-, D+
N-Nitroso-Di-n-Propylamine	1.01	0.250	mg/kg wet	2.500		40	40-140	11	30	
N-nitrosodiphenylamine	1.68	0.250	mg/kg wet	2.500		67	40-140	15	30	
Pentachlorophenol	2.13	1.25	mg/kg wet	2.500		85	30-130	15	30	
Phenanthrene	1.62	0.250	mg/kg wet	2.500		65	40-140	16	30	
Phenol	1.02	0.250	mg/kg wet	2.500		41	30-130	26	30	
Pyrene	1.79	0.250	mg/kg wet	2.500		72	40-140	12	30	
Pyridine	0.270	1.25	mg/kg wet	2.500		11	40-140	47	30	B-, D+
Surrogate: 1,2-Dichlorobenzene-d4	*0.836*		mg/kg wet	*2.500*		*33*	*30-130*			
Surrogate: 2,4,6-Tribromophenol	*2.43*		mg/kg wet	*3.750*		*65*	*30-130*			
Surrogate: 2-Chlorophenol-d4	*1.43*		mg/kg wet	*3.750*		*38*	*30-130*			
Surrogate: 2-Fluorobiphenyl	*1.44*		mg/kg wet	*2.500*		*57*	*30-130*			
Surrogate: 2-Fluorophenol	*1.31*		mg/kg wet	*3.750*		*35*	*30-130*			
Surrogate: Nitrobenzene-d5	*1.04*		mg/kg wet	*2.500*		*42*	*30-130*			
Surrogate: Phenol-d6	*1.91*		mg/kg wet	*3.750*		*51*	*30-130*			
Surrogate: p-Terphenyl-d14	*1.85*		mg/kg wet	*2.500*		*74*	*30-130*			
Matrix Spike **Source: 0801264-01**										
1,1-Biphenyl	1.40	0.357	mg/kg dry	3.570	ND	39	40-140			M-
1,2,4-Trichlorobenzene	2.16	0.357	mg/kg dry	3.570	ND	61	40-140			
1,2-Dichlorobenzene	2.13	0.357	mg/kg dry	3.570	ND	60	40-140			
1,3-Dichlorobenzene	1.93	0.357	mg/kg dry	3.570	ND	54	40-140			
1,4-Dichlorobenzene	1.99	0.357	mg/kg dry	3.570	ND	56	40-140			
2,3,4,6-Tetrachlorophenol	2.76	1.79	mg/kg dry	3.570	ND	77	30-130			
2,4,5-Trichlorophenol	2.92	0.357	mg/kg dry	3.570	ND	82	30-130			
2,4,6-Trichlorophenol	2.77	0.357	mg/kg dry	3.570	ND	77	30-130			
2,4-Dichlorophenol	2.63	0.357	mg/kg dry	3.570	ND	74	30-130			
2,4-Dimethylphenol	2.41	0.357	mg/kg dry	3.570	ND	67	30-130			
2,4-Dinitrophenol	1.45	1.79	mg/kg dry	3.570	ND	41	30-130			
2,4-Dinitrotoluene	3.05	0.357	mg/kg dry	3.570	ND	85	40-140			
2,6-Dinitrotoluene	2.83	0.357	mg/kg dry	3.570	ND	79	40-140			
2-Chloronaphthalene	2.27	0.357	mg/kg dry	3.570	ND	64	40-140			
2-Chlorophenol	2.11	0.357	mg/kg dry	3.570	ND	59	30-130			
2-Methylnaphthalene	2.45	0.357	mg/kg dry	3.570	ND	69	40-140			
2-Methylphenol	2.54	0.357	mg/kg dry	3.570	ND	71	30-130			
2-Nitroaniline	2.78	0.357	mg/kg dry	3.570	ND	78	40-140			
2-Nitrophenol	2.27	0.357	mg/kg dry	3.570	ND	64	30-130			
3,3'-Dichlorobenzidine	3.18	0.714	mg/kg dry	3.570	ND	89	40-140			
3+4-Methylphenol	3.93	0.714	mg/kg dry	7.140	ND	55	30-130			
3-Nitroaniline	3.09	0.357	mg/kg dry	3.570	ND	87	40-140			
4,6-Dinitro-2-Methylphenol	2.48	1.79	mg/kg dry	3.570	ND	70	30-130			

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0801264

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8270C Semi-Volatile Organic Compounds										
Batch BA82325 - 3541										
4-Bromophenyl-phenylether	2.64	0.357	mg/kg dry	3.570	ND	74	40-140			
4-Chloro-3-Methylphenol	2.86	0.357	mg/kg dry	3.570	ND	80	30-130			
4-Chloroaniline	2.25	0.714	mg/kg dry	3.570	ND	63	40-140			
4-Chloro-phenyl-phenyl ether	2.92	0.357	mg/kg dry	3.570	ND	82	40-140			
4-Nitroaniline	2.99	0.357	mg/kg dry	3.570	ND	84	40-140			
4-Nitrophenol	2.84	1.79	mg/kg dry	3.570	ND	80	30-130			
Acenaphthene	2.68	0.357	mg/kg dry	3.570	ND	75	40-140			
Acenaphthylene	2.63	0.357	mg/kg dry	3.570	ND	74	40-140			
Acetophenone	2.39	0.714	mg/kg dry	3.570	ND	67	40-140			
Aniline	1.83	1.79	mg/kg dry	3.570	ND	51	40-140			
Anthracene	2.70	0.357	mg/kg dry	3.570	ND	76	40-140			
Azobenzene	2.64	0.357	mg/kg dry	3.570	ND	74	40-140			
Benzo(a)anthracene	3.05	0.357	mg/kg dry	3.570	ND	85	40-140			
Benzo(a)pyrene	2.78	0.179	mg/kg dry	3.570	ND	78	40-140			
Benzo(b)fluoranthene	3.08	0.357	mg/kg dry	3.570	ND	86	40-140			
Benzo(g,h,I)perylene	2.77	0.357	mg/kg dry	3.570	ND	78	40-140			
Benzo(k)fluoranthene	2.72	0.357	mg/kg dry	3.570	ND	76	40-140			
Benzoic Acid	ND	1.79	mg/kg dry	3.570	ND		40-140			M-
Benzyl Alcohol	2.46	0.357	mg/kg dry	3.570	ND	69	40-140			
bis(2-Chloroethoxy)methane	1.83	0.357	mg/kg dry	3.570	ND	51	40-140			
bis(2-Chloroethyl)ether	2.34	0.357	mg/kg dry	3.570	ND	66	40-140			
bis(2-chloroisopropyl)Ether	1.90	0.357	mg/kg dry	3.570	ND	53	40-140			
bis(2-Ethylhexyl)phthalate	3.08	0.357	mg/kg dry	3.570	ND	86	40-140			
Butylbenzylphthalate	3.01	0.357	mg/kg dry	3.570	ND	84	40-140			
Carbazole	2.93	0.357	mg/kg dry	3.570	ND	82	40-140			
Chrysene	3.04	0.179	mg/kg dry	3.570	ND	85	40-140			
Dibenzo(a,h)Anthracene	2.81	0.179	mg/kg dry	3.570	ND	79	40-140			
Dibenzofuran	2.74	0.357	mg/kg dry	3.570	ND	77	40-140			
Diethylphthalate	2.76	0.357	mg/kg dry	3.570	ND	77	40-140			
Dimethylphthalate	2.88	0.357	mg/kg dry	3.570	ND	81	40-140			
Di-n-butylphthalate	2.79	0.357	mg/kg dry	3.570	ND	78	40-140			
Di-n-octylphthalate	2.80	0.357	mg/kg dry	3.570	ND	78	40-140			
Fluoranthene	2.95	0.357	mg/kg dry	3.570	ND	83	40-140			
Fluorene	2.58	0.357	mg/kg dry	3.570	ND	72	40-140			
Hexachlorobenzene	2.60	0.179	mg/kg dry	3.570	ND	73	40-140			
Hexachlorobutadiene	2.05	0.357	mg/kg dry	3.570	ND	57	40-140			
Hexachlorocyclopentadiene	1.78	1.79	mg/kg dry	3.570	ND	50	40-140			
Hexachloroethane	1.89	0.357	mg/kg dry	3.570	ND	53	40-140			
Indeno(1,2,3-cd)Pyrene	2.80	0.357	mg/kg dry	3.570	ND	78	40-140			
Isophorone	2.31	0.357	mg/kg dry	3.570	ND	65	40-140			
Naphthalene	2.07	0.357	mg/kg dry	3.570	ND	58	40-140			
Nitrobenzene	2.11	0.357	mg/kg dry	3.570	ND	59	40-140			
N-Nitrosodimethylamine	1.82	0.357	mg/kg dry	3.570	ND	51	40-140			
N-Nitroso-Di-n-Propylamine	2.01	0.357	mg/kg dry	3.570	ND	56	40-140			
N-nitrosodiphenylamine	2.78	0.357	mg/kg dry	3.570	ND	78	40-140			
Pentachlorophenol	2.73	1.79	mg/kg dry	3.570	ND	76	30-130			

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0801264

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8270C Semi-Volatile Organic Compounds										
Batch BA82325 - 3541										
Phenanthrene	2.70	0.357	mg/kg dry	3.570	ND	76	40-140			
Phenol	2.48	0.357	mg/kg dry	3.570	ND	69	30-130			
Pyrene	2.88	0.357	mg/kg dry	3.570	ND	81	40-140			
Pyridine	0.748	1.79	mg/kg dry	3.570	ND	21	40-140			M-
Surrogate: 1,2-Dichlorobenzene-d4	*1.98*		mg/kg dry	*3.570*		*56*	*30-130*			
Surrogate: 2,4,6-Tribromophenol	*3.89*		mg/kg dry	*5.355*		*73*	*30-130*			
Surrogate: 2-Chlorophenol-d4	*2.93*		mg/kg dry	*5.355*		*55*	*30-130*			
Surrogate: 2-Fluorobiphenyl	*2.44*		mg/kg dry	*3.570*		*68*	*30-130*			
Surrogate: 2-Fluorophenol	*2.83*		mg/kg dry	*5.355*		*53*	*30-130*			
Surrogate: Nitrobenzene-d5	*2.08*		mg/kg dry	*3.570*		*58*	*30-130*			
Surrogate: Phenol-d6	*3.69*		mg/kg dry	*5.355*		*69*	*30-130*			
Surrogate: p-Terphenyl-d14	*2.89*		mg/kg dry	*3.570*		*81*	*30-130*			
Matrix Spike Dup Source: 0801264-01										
1,1-Biphenyl	1.47	0.364	mg/kg dry	3.643	ND	40	40-140	3	30	
1,2,4-Trichlorobenzene	2.34	0.364	mg/kg dry	3.643	ND	64	40-140	6	30	
1,2-Dichlorobenzene	2.30	0.364	mg/kg dry	3.643	ND	63	40-140	6	30	
1,3-Dichlorobenzene	2.09	0.364	mg/kg dry	3.643	ND	57	40-140	6	30	
1,4-Dichlorobenzene	2.19	0.364	mg/kg dry	3.643	ND	60	40-140	8	30	
2,3,4,6-Tetrachlorophenol	3.05	1.83	mg/kg dry	3.643	ND	84	30-130	8	30	
2,4,5-Trichlorophenol	3.06	0.364	mg/kg dry	3.643	ND	84	30-130	3	30	
2,4,6-Trichlorophenol	2.91	0.364	mg/kg dry	3.643	ND	80	30-130	3	30	
2,4-Dichlorophenol	2.72	0.364	mg/kg dry	3.643	ND	75	30-130	1	30	
2,4-Dimethylphenol	2.45	0.364	mg/kg dry	3.643	ND	67	30-130	0.03	30	
2,4-Dinitrophenol	1.84	1.83	mg/kg dry	3.643	ND	51	30-130	22	30	
2,4-Dinitrotoluene	3.25	0.364	mg/kg dry	3.643	ND	89	40-140	4	30	
2,6-Dinitrotoluene	3.05	0.364	mg/kg dry	3.643	ND	84	40-140	5	30	
2-Chloronaphthalene	2.34	0.364	mg/kg dry	3.643	ND	64	40-140	0.7	30	
2-Chlorophenol	2.22	0.364	mg/kg dry	3.643	ND	61	30-130	3	30	
2-Methylnaphthalene	2.59	0.364	mg/kg dry	3.643	ND	71	40-140	3	30	
2-Methylphenol	2.70	0.364	mg/kg dry	3.643	ND	74	30-130	4	30	
2-Nitroaniline	2.92	0.364	mg/kg dry	3.643	ND	80	40-140	3	30	
2-Nitrophenol	2.45	0.364	mg/kg dry	3.643	ND	67	30-130	6	30	
3,3'-Dichlorobenzidine	3.28	0.729	mg/kg dry	3.643	ND	90	40-140	1	30	
3+4-Methylphenol	4.06	0.729	mg/kg dry	7.287	ND	56	30-130	1	30	
3-Nitroaniline	3.19	0.364	mg/kg dry	3.643	ND	88	40-140	1	30	
4,6-Dinitro-2-Methylphenol	2.95	1.83	mg/kg dry	3.643	ND	81	30-130	15	30	
4-Bromophenyl-phenylether	2.87	0.364	mg/kg dry	3.643	ND	79	40-140	6	30	
4-Chloro-3-Methylphenol	2.88	0.364	mg/kg dry	3.643	ND	79	30-130	2	30	
4-Chloroaniline	2.27	0.729	mg/kg dry	3.643	ND	62	40-140	1	30	
4-Chloro-phenyl-phenyl ether	3.05	0.364	mg/kg dry	3.643	ND	84	40-140	2	30	
4-Nitroaniline	3.22	0.364	mg/kg dry	3.643	ND	88	40-140	5	30	
4-Nitrophenol	3.04	1.83	mg/kg dry	3.643	ND	84	30-130	5	30	
Acenaphthene	2.80	0.364	mg/kg dry	3.643	ND	77	40-140	2	30	
Acenaphthylene	2.77	0.364	mg/kg dry	3.643	ND	76	40-140	3	30	
Acetophenone	2.58	0.729	mg/kg dry	3.643	ND	71	40-140	5	30	
Aniline	1.95	1.83	mg/kg dry	3.643	ND	53	40-140	4	30	

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0801264

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8270C Semi-Volatile Organic Compounds										
Batch BA82325 - 3541										
Anthracene	2.90	0.364	mg/kg dry	3.643	ND	80	40-140	5	30	
Azobenzene	2.80	0.364	mg/kg dry	3.643	ND	77	40-140	4	30	
Benzo(a)anthracene	3.13	0.364	mg/kg dry	3.643	ND	86	40-140	0.5	30	
Benzo(a)pyrene	2.83	0.183	mg/kg dry	3.643	ND	78	40-140	0.09	30	
Benzo(b)fluoranthene	3.13	0.364	mg/kg dry	3.643	ND	86	40-140	0.7	30	
Benzo(g,h,i)perylene	2.90	0.364	mg/kg dry	3.643	ND	80	40-140	3	30	
Benzo(k)fluoranthene	2.98	0.364	mg/kg dry	3.643	ND	82	40-140	7	30	
Benzoic Acid	ND	1.83	mg/kg dry	3.643	ND		40-140		30	M-
Benzyl Alcohol	2.58	0.364	mg/kg dry	3.643	ND	71	40-140	3	30	
bis(2-Chloroethoxy)methane	1.99	0.364	mg/kg dry	3.643	ND	55	40-140	6	30	
bis(2-Chloroethyl)ether	2.22	0.364	mg/kg dry	3.643	ND	61	40-140	7	30	
bis(2-chloroisopropyl)Ether	2.08	0.364	mg/kg dry	3.643	ND	57	40-140	7	30	
bis(2-Ethylhexyl)phthalate	3.18	0.364	mg/kg dry	3.643	ND	87	40-140	1	30	
Butylbenzylphthalate	3.11	0.364	mg/kg dry	3.643	ND	85	40-140	1	30	
Carbazole	3.07	0.364	mg/kg dry	3.643	ND	84	40-140	2	30	
Chrysene	3.15	0.183	mg/kg dry	3.643	ND	87	40-140	2	30	
Dibenzo(a,h)Anthracene	2.89	0.183	mg/kg dry	3.643	ND	79	40-140	0.9	30	
Dibenzofuran	2.85	0.364	mg/kg dry	3.643	ND	78	40-140	2	30	
Diethylphthalate	2.90	0.364	mg/kg dry	3.643	ND	80	40-140	3	30	
Dimethylphthalate	3.01	0.364	mg/kg dry	3.643	ND	83	40-140	2	30	
Di-n-butylphthalate	2.95	0.364	mg/kg dry	3.643	ND	81	40-140	4	30	
Di-n-octylphthalate	2.86	0.364	mg/kg dry	3.643	ND	79	40-140	0.2	30	
Fluoranthene	3.08	0.364	mg/kg dry	3.643	ND	85	40-140	2	30	
Fluorene	2.72	0.364	mg/kg dry	3.643	ND	75	40-140	3	30	
Hexachlorobenzene	2.72	0.183	mg/kg dry	3.643	ND	75	40-140	3	30	
Hexachlorobutadiene	2.22	0.364	mg/kg dry	3.643	ND	61	40-140	6	30	
Hexachlorocyclopentadiene	2.03	1.83	mg/kg dry	3.643	ND	56	40-140	11	30	
Hexachloroethane	2.07	0.364	mg/kg dry	3.643	ND	57	40-140	7	30	
Indeno(1,2,3-cd)Pyrene	2.90	0.364	mg/kg dry	3.643	ND	80	40-140	1	30	
Isophorone	2.49	0.364	mg/kg dry	3.643	ND	68	40-140	5	30	
Naphthalene	2.21	0.364	mg/kg dry	3.643	ND	61	40-140	4	30	
Nitrobenzene	2.31	0.364	mg/kg dry	3.643	ND	63	40-140	7	30	
N-Nitrosodimethylamine	1.98	0.364	mg/kg dry	3.643	ND	54	40-140	6	30	
N-Nitroso-Di-n-Propylamine	2.23	0.364	mg/kg dry	3.643	ND	61	40-140	9	30	
N-nitrosodiphenylamine	2.92	0.364	mg/kg dry	3.643	ND	80	40-140	3	30	
Pentachlorophenol	3.35	1.83	mg/kg dry	3.643	ND	92	30-130	18	30	
Phenanthrene	2.88	0.364	mg/kg dry	3.643	ND	79	40-140	4	30	
Phenol	2.75	0.364	mg/kg dry	3.643	ND	75	30-130	8	30	
Pyrene	2.99	0.364	mg/kg dry	3.643	ND	82	40-140	2	30	
Pyridine	0.823	1.83	mg/kg dry	3.643	ND	23	40-140	8	30	M-
Surrogate: 1,2-Dichlorobenzene-d4	*2.08*		mg/kg dry	*3.643*		*57*	*30-130*			
Surrogate: 2,4,6-Tribromophenol	*4.09*		mg/kg dry	*5.465*		*75*	*30-130*			
Surrogate: 2-Chlorophenol-d4	*3.15*		mg/kg dry	*5.465*		*58*	*30-130*			
Surrogate: 2-Fluorobiphenyl	*2.56*		mg/kg dry	*3.643*		*70*	*30-130*			
Surrogate: 2-Fluorophenol	*3.11*		mg/kg dry	*5.465*		*57*	*30-130*			
Surrogate: Nitrobenzene-d5	*2.25*		mg/kg dry	*3.643*		*62*	*30-130*			

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0801264

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8270C Semi-Volatile Organic Compounds										
Batch BA82325 - 3541										
Surrogate: Phenol-d6	*3.84*		mg/kg dry	*5.465*		*70*	*30-130*			
Surrogate: p-Terphenyl-d14	*2.95*		mg/kg dry	*3.643*		*81*	*30-130*			

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0801264

Notes and Definitions

U	Analyte included in the analysis, but not detected
M-	Matrix Spike recovery is below lower control limit.
D+	Relative percent difference for duplicate is outside of criteria.
C-	Continuing Calibration recovery is below lower control limit.
B-	Blank Spike recovery is below lower control limit.
ND	Analyte NOT DETECTED above the detection limit
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting 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.

CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.
Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0801264

ESS LABORATORY CERTIFICATIONS

U.S. Army Corps of Engineers
Soil and Water

Navy Installation Restoration QA Program
Soil and Water

Rhode Island: A-179

Connecticut: PH-0750

Maine: RI002

Massachusetts: M-RI002

New Hampshire (NELAP accredited): 242405
Potable Water
Non Potable Water

New York (NELAP accredited): 11313
Potable Water
Non Potable Water
Solid and Hazardous Waste

United States Department of Agriculture
Soil Permit: S-54210

New Jersey (NELAP accredited): RI002
Potable Water
Non Potable Water
Soil and Hazardous Waste

Maryland: 301
Potable Water

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

Page 1 of 1

Turn Time: X Standard Other ____
If faster than 5 days, prior approval by laboratory is required #____
State where samples were collected from: MA (RI) CT NH NJ NY ME Other ____
Is this project for any of the following: MA-MCP Navy USACE Other ____

Reporting Limits: RI Residential
ESS LAB PROJECT ID: 0801264
Electronic Deliverable: X Yes ___ No
Format: Excel__ Access__ PDF__ Other EQUIS EZ EDD

~~Co. Name~~ Contact	Project #	Project Name (20 Char. or less)
Dave Heislein	3650035041.15	Gorham
~~Contact Person~~ Company: MACTEC Engineering	Address: 107 Audubon Rd. Suite 301	
City: Wakefield State: MA Zip: 01880	PO#	
Telephone #: 781 245 6606	Fax #	Email Address: deheislein@mactec.com

ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Pres Code	Number of Containers	Type of Containers	Write Required Analysis: SVOC	TPH
1	1.23.08	1110		X	S	Brick confirm	NP	1	4	X	X

Container Type: P-Poly G-Glass S-Sterile V-VOA | Matrix: S-Soil SD-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present: ✓ Yes ___ No
Seals Intact: ___ Yes ___ No NA: ___
Cooler Temp: 5.7

Internal Use Only
[ ] Pickup
[ ] Technicians____

Preservation Code: 1- NP, 2- HCl, 3- H_2SO_4, 4- HNO_3, 5- NaOH, 6- MeOH, 7- Asorbic Acid, 8- ZnAct, 9- ____

Sampled by: Phil Muller

Comments:

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
Phil Muller	1.23.08 1200	[illegible]	1230811200				
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 samples were collected in accordance with MADEP CAM VII A

Please fax all changes to Chain of Custody in writing.

1 (White) Lab Copy 2 (Yellow) Client Receipt

10/26/04 A