

Geotechnical and Environmental Site Investigation Report

FY16 eMMRP Energy Project #4
Winslow and Beaumont Avenue Water System Repairs
Portsmouth Naval Shipyard
Kittery, York County, Maine 04005

July 9, 2015

Terracon Project No. J3147114

Prepared for:

Joint Venture

Casco Bay Engineering/CLD Consulting Engineers, LLC
Portland, Maine

Prepared by:

Terracon Consultants, Inc.
Westbrook, Maine

terracon.com

Terracon

Environmental



Facilities



Geotechnical



Materials

July 9, 2015



JV Casco Bay Engineering/CLD Consulting Engineers
c/o Casco Bay Engineering
424 Fore Street #3A
Portland, ME 04101

Attn: Ms. Carolyn Bird, P.E., Principal
P: (207) 842 2800
E: carolynb@casco bayengineering.com

Re: Geotechnical and Environmental Site Investigation Report
FY16 eMMRP Energy Project #4
Winslow and Beaumont Avenue Water System Repairs
Portsmouth Naval Shipyard
Kittery, York County, Maine 04005
Terracon Project No. J3147114

Dear Ms Bird:

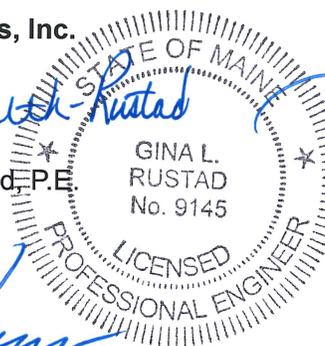
Terracon Consultants, Inc. is pleased to submit the enclosed Geotechnical and Environmental Site Investigation Report for the above-referenced site. This investigation was performed in general accordance with Exhibit 7 – Environmental and Hazardous Material Sampling and Testing Requirements, and the scope of work presented in our June 24, 2015 Scope of Work for Geotechnical and Environmental Services.

We appreciate the opportunity to be of service to you on this project. If there are questions regarding this report or if we may be of further assistance, please contact us.

Sincerely,

Terracon Consultants, Inc.


Gina L. Gulseth-Rustad, P.E.
Project Manager




Wendell "Wally" Shedd
Office Manager


Lawrence J. Dwyer, P.E.
Authorized Project Reviewer

Attachment: Geotechnical and Environmental Site Investigation Report

Terracon Consultants, Inc. 4 Thomas Drive, Unit 3, Westbrook, ME 04092
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**GEOTECHNICAL AND ENVIRONMENTAL SITE INVESTIGATION
REPORT
FY16 eMMRP ENERGY PROJECT #4
WINSLOW AND BEAUMONT AVENUE WATER SYSTEM REPAIRS
PORTSMOUTH NAVAL SHIPYARD
KITTERY, YORK COUNTY, MAINE 04005**

Terracon Project No. J3147114

July 9, 2015

1.0 INTRODUCTION

Terracon Consultants, Inc. (Terracon) completed a Geotechnical and Environmental Site Investigation (SI) to support FY16 eMMRP Energy Project #4 at the Portsmouth Naval Shipyard (PNS), Winslow and Beaumont Avenue Water System Repairs. Services were provided through Terracon's successful participation with the Joint Venture (JV), consisting of Casco Bay Engineering-CLD Consulting Engineers, LLC, for an indefinite-delivery/indefinite-quantity (IDIQ), architect-engineering contract for design and engineering services in support of utility and infrastructure projects primarily in the Naval Facilities Engineering Command (NAVFAC) Mid-Atlantic Public Works Department (PWD) Maine Area of Responsibility (AOR).

The location of the site is illustrated on Exhibit A-1 in Appendix A. The general layout of the site and sampling locations are illustrated on Exhibit A-2 in Appendix A. Soil boring logs are presented in Appendix A and an analytical data summary table is provided in Appendix B. Appendix C contains supporting documentation related to visual soil descriptions and Appendix D contains the laboratory analytical report.

1.1 Project Description

As part of the FY16 eMMRP Energy Project #4 scope, PNS plans to repair and relocate its Winslow and Beaumont Avenues water system corridor. Relocation of the water system will require soil excavation and either on-site re-use or off-site disposal of excess soils. Terracon was retained by the JV to perform geotechnical and environmental sampling along the proposed replacement corridor alignment to document existing soil and bedrock conditions, collect samples for chemical analysis, and provide geotechnical and environmental recommendations for construction based on our findings.

1.2 Scope of Services

Terracon completed a subsurface investigation in the area of Project #4 – Winslow and Beaumont Avenue Water System Repairs. The objective of the investigation was to evaluate subsurface conditions to determine if adverse impacts were evident in site soil due to historical operations at PNS that would require special soil management during excavation and

installation of the new water system piping. The investigation was also used to evaluate subsurface soil conditions, including visual classification and in-situ density to evaluate geotechnical re-use of soil.

The scope of services included ten soil borings along the proposed alignment of the replacement water system. Collected soil samples were classified through visual observation, field screened for the presence of volatile organic compounds (VOCs), and analyzed in an off-site laboratory for contaminants of concern.

1.3 Scope Limitations

Findings, conclusions, and recommendations resulting from our services are based upon information derived from the on-site activities and other services performed under this scope; such information is subject to change over time. Certain indicators of the presence of hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, non-detectable, or not present during our services, and we cannot represent that the site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those identified during this investigation. Subsurface conditions may vary from those encountered at specific borings or during other surveys, tests, assessments, investigations, or exploratory services; the data, interpretations, findings, and our recommendations are based solely upon data obtained at the time and within the scope of services.

1.4 Reliance

This report is prepared for the exclusive use and reliance of JV - Casco Bay Engineering/CLD Consulting Engineers, LLC. Use or reliance by any other party is prohibited without the written authorization of the JV and Terracon.

Reliance on the SI report by JV - Casco Bay Engineering/CLD Consulting Engineers, LLC and all authorized parties will be subject to the terms, conditions, and limitations stated in this report and Terracon's contract. The limitation of liability defined in the contract is the aggregate limit of Terracon's liability to JV - Casco Bay Engineering/CLD Consulting Engineers, LLC and all relying parties.

Any unauthorized distribution or reuse is at the client's sole risk. Notwithstanding the foregoing, reliance by authorized parties will be subject to the terms, conditions, and limitations stated in the MSA.

2.0 FIELD INVESTIGATION

2.1 Soil Borings and Sampling

Terracon completed ten soil borings (B-1 through B-10) on June 1, and 2, 2015 within the proposed alignment of the replacement water system to evaluate subsurface conditions and the presence or absence of site-related contamination in project area soil. The approximate locations of the borings are shown on the attached Boring Location Plan (Exhibit A-2). Exhibit A-3 describes the field drilling and sampling procedures.

2.2 Laboratory Analytical Program

Soil samples were placed into laboratory supplied, pre-preserved sample containers. The sample containers were placed on ice, along with chain of custody documentation, and delivered to Accutest Laboratories of Marlborough, Massachusetts for laboratory analysis. In accordance with the Maine Department of Environmental Protection (MEDEP) requirements and guidelines, the soil samples were analyzed for the following compounds:

- Benzene, Toluene, Ethyl Benzene, and Xylene (BTEX)
- Total Petroleum Hydrocarbons (TPH) using the GC/FID Method
- Polycyclic Aromatic Hydrocarbons (PAHs)
- Polychlorinated Biphenyls (PCBs)
- Pesticides and Herbicides
- Full RCRA 8 Metals and Mercury
- Toxicity Characteristic Leaching Procedure (TCLP) RCRA 8 Metals

3.0 SUBSURFACE CONDITIONS

Test borings typically indicated 6 inches of asphalt at the surface, except at B-1 where 12 inches of asphalt was noted. In general, subsurface conditions were observed to be somewhat heterogeneous across the project area, with an aggregate base underlying the asphalt in B-3, B-5, and B-6 and variable soils from silt to silty sand underlying asphalt at other boring locations. The varying pavement support conditions are consistent with the history of development in the project area.

3.1 Typical Geologic Profile

Based on the results of the explorations and observations at the time of fieldwork, subsurface conditions on the project site can be generalized as follows:

Geotechnical and Environmental Site Investigation

Portsmouth Naval Shipyard – FY16 eMMRP Energy Project #4

July 9, 2015 ■ Terracon Project No. J3147114



Description	Approximate Depth to Bottom of Stratum (feet)	Material Encountered	Consistency / Relative Density
Asphalt	0.5 to 1.0	Asphalt	Not applicable
Fill	2 to 12	Poorly- to well-graded, angular gravel with sand and silt to silty sand, brown to black.	Loose to Dense
Native	>10	Sand with silt and gravel (SM), also lean clay (CL) with silt, light brown to olive brown.	Loose to Medium Dense and Stiff

The Natural Resources Conservation Service online sources identify soil in the vicinity of the site to be Urban Land, consistent with historical development and observed subsurface conditions. The *Bedrock Geologic Map of Maine (1985)* indicates bedrock underlying the site consists of an Ordovician-age metasedimentary rock of the Merrimack Group in the Kittery Formation.

Conditions encountered at each exploration location are indicated on the individual exploration logs in Appendix A of this report. Stratification boundaries on the exploration logs represent the approximate location of changes in soil types; in-situ, the transition between materials may be gradual. Further details of the explorations can be found on the exploration logs.

Auger refusal on presumed bedrock was observed at six of the ten borings. The estimated depth to bedrock, from the existing ground surface, is indicated on the boring logs in Appendix A and is presented in the table below.

Boring Location	Depth to Bedrock (feet)	Depth to Groundwater during Drilling (feet)
B-1	5.9	4.5
B-2	2.0	Not encountered
B-3	3.0	Not encountered
B-4	> 10.0	3.0
B-5	3.2	Not encountered
B-6	> 10.0	Not encountered
B-7	> 12.0	10.0
B-8	6.0	3.0
B-9	1.5	Not encountered
B-10	> 9.0	5.0

3.2 Hydrogeology

The estimated depth to groundwater during drilling is indicated on the boring logs in Appendix A and presented in the table above. Groundwater levels were encountered during drilling at depths ranging from 3 to 10 feet below existing grade. This variability suggests groundwater is perched in preferential zones in the subsurface and should be expected during excavation.

3.3 Soil Contaminant Characterization

The soil analytical results identified low-level concentrations of PAHs in samples collected from B-4, B-5, B-6, B-7, and B-8. In general, PAH concentrations were higher in samples collected from relatively shallow depths (1 to 5 feet) compared to samples collected from deeper depths (5 to 9 feet). This is likely indicative of the inclusion of asphalt in the sample during sample collection as a result of surface conditions. Detections of diesel range organics (DRO) coincided well with detections of PAHs in the samples. Concentrations of detected PAHs did not exceed MEDEP Remedial Action Guidelines (RAGs) for the construction worker scenario.

Elevated concentrations of metals, including arsenic, barium, chromium, lead, and mercury were also identified in each sample analyzed for metals. Most notably, was the concentration of lead in the sample from 3 to 5 feet in B-7 of 602 milligrams per kilogram (mg/kg); however, it did not exceed the MEDEP RAG for the construction worker scenario of 950 mg/kg.

Low levels of the pesticides 4,4'-DDE and 4,4'-DDT were detected in samples from B-4, B-5, and B-6. Boring B-5 contained the highest concentrations of pesticides and were several orders of magnitude lower than applicable guidelines. The presence of pesticides is likely due to historical pesticide use at the PNS.

Concentrations of BTEX and PCB compounds were all below the laboratory detection limits and are not included on the Table in Appendix B.

4.0 FINDINGS AND RECOMMENDATIONS

Based on the results of field observations, subsurface soil in the area of the proposed alignment of the replacement water system consist of medium dense sand and gravel with varying amounts of silt. Silt and clay soils were identified in B-8. Analytical results indicate low-level concentrations of semi-volatile and inorganic compounds; however, concentrations do not exceed applicable MEDEP regulatory criteria.

4.1 Site Preparation

Based on shallow refusal depths, we assume rock excavation will be required within the limits of the proposed water system alignment. We recommend removing bedrock to provide at least 6 inches of bedding surrounding the proposed water line. Non-explosive methods for excavating the bedrock, such as hydraulic breaker or demolition hammer, with or without pre-drilling, may be considered. We did not obtain core samples of the rock in the boreholes. The *Bedrock Geologic Map of Maine (1985)* indicates bedrock underlying the site consists of a metasedimentary rock, which can likely be excavated using a hydraulic breaker or demolition hammer in conjunction with drilling.

4.2 Dewatering

Dewatering of perched groundwater may be required during excavation of the replacement water system trench. If dewatering is necessary, the contractor should select a dewatering method to lower groundwater at least 1 foot below the excavation subgrade in order to minimize surface disturbance during placement of utility trench bedding. Dewatering, if required, can likely be accomplished using filtered pumps placed in crushed stone. If ¾-inch crushed stone is used, a geotextile separation fabric (Mirafi 140N, or equivalent) should be placed between the crushed stone and native soil.

4.3 Material Types

Excavated on-site soils are anticipated to consist primarily of fill material, comprised of aggregate base and granular material with varying amounts of silt. Based on analytical results excavated soil may be re-used as common backfill material in the water system trenches, provided it meets the gradation requirements and can be adequately compacted. Soil with elevated fines content will be sensitive to moisture, and compaction requirements will be difficult to achieve when the material is wet. Therefore, during wet environments, silty soils may be unsuitable for reuse.

Imported fill should meet the criteria defined below:

Fill Type ¹	USCS Classification	Acceptable Location for Placement
Structural/Bedding Fill	GW, GW-GM, SW, SW-SM ² , SP, GP	All locations and elevations. Excavated soil will not likely be suitable for reuse as structural/bedding fill.
Common Fill	Varies ³	Common fill may be used to backfill utility trenches. Excavated soil may be reused as common fill, provided it is free of organic matter and can be adequately compacted.
Crushed Stone	GP	For use in wet subgrades and as drainage fill. Should be uniform ¾-inch angular crushed stone.

-
1. Compacted fill should consist of approved materials that are free of organic matter and debris. Frozen material should not be used. Fill should not be placed on a frozen subgrade.
-

2. Imported structural fill should meet the following gradation:

Percent Passing by Weight	
Sieve Size	Structural Fill
6"	100
3"	70 – 100
2"	(100)*
¾"	45 – 95
No. 4	30 – 90
No. 10	25 – 80
No. 40	10 – 50
No. 200	0 – 12

* Maximum 2-inch particle size within 12 inches of the underside of footings or slabs

3. Common fill should have a maximum particle size of 6 inches and no more than 25 percent by weight passing the US No. 200 sieve.
-

Analytical results indicate excavated soil should be suitable for re-use and excess soil should not require special handling if off-site disposal is required. However, visual and olfactory observation of soil should be used to evaluate the color, consistency, and odor during excavation. If changes in subsurface conditions are observed, such as significant color changes, presence of oily liquid, or notable noxious odors, the impacted soil should be segregated for testing and the geotechnical engineer should be notified.

4.4 Utility Trench Backfill

Trench excavations should be made with sufficient working space to permit construction including backfill placement and compaction. If backfilled with relatively clean granular material, utility trenches should be capped with at least 12 inches of cohesive fill in unpaved areas to reduce the infiltration and preferential conveyance of surface water through the trench backfill. Alternatively, trenches should be backfilled with material that approximately matches the permeability characteristics of the surrounding soil. Fill placed as backfill for utilities located below pavement base and subbase should consist of compacted common fill, structural fill, or suitable bedding material.

4.5 Compaction Requirements

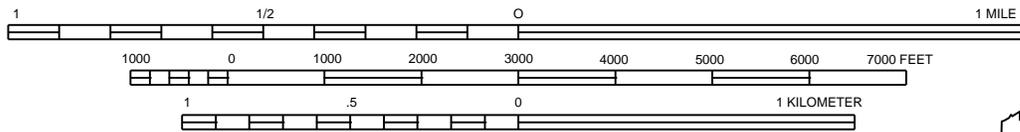
Item	Description
Fill Lift Thickness	8 inches or less in loose thickness
Compaction Requirements ¹	95% maximum modified Proctor dry density (ASTM D1557, Method C)
Moisture Content – Granular Material	Workable moisture levels

1. We recommend testing fill for moisture content and compaction during placement. If the results of in-place density tests indicate the specified moisture or compaction limits have not been met, the area represented by the test should be reworked and retested, as required, until the specified moisture and compaction requirements are achieved.

APPENDIX A
FIELD EXPLORATION



SCALE: 1:24 000



CONTOUR INTERVAL 20 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929



QUADRANGLE LOCATION

SOURCE:
USGS KITTERY, ME
1995

Project Mngr:	GLG	Project No.	J3157114
Drawn By:	MCR	Scale:	AS SHOWN
Checked By:	GLG	File No.	J3157114.dwg
Approved By:	LJD	Date:	July 2015

© Thomas Data, Suite 3
PH: (207)828-5374

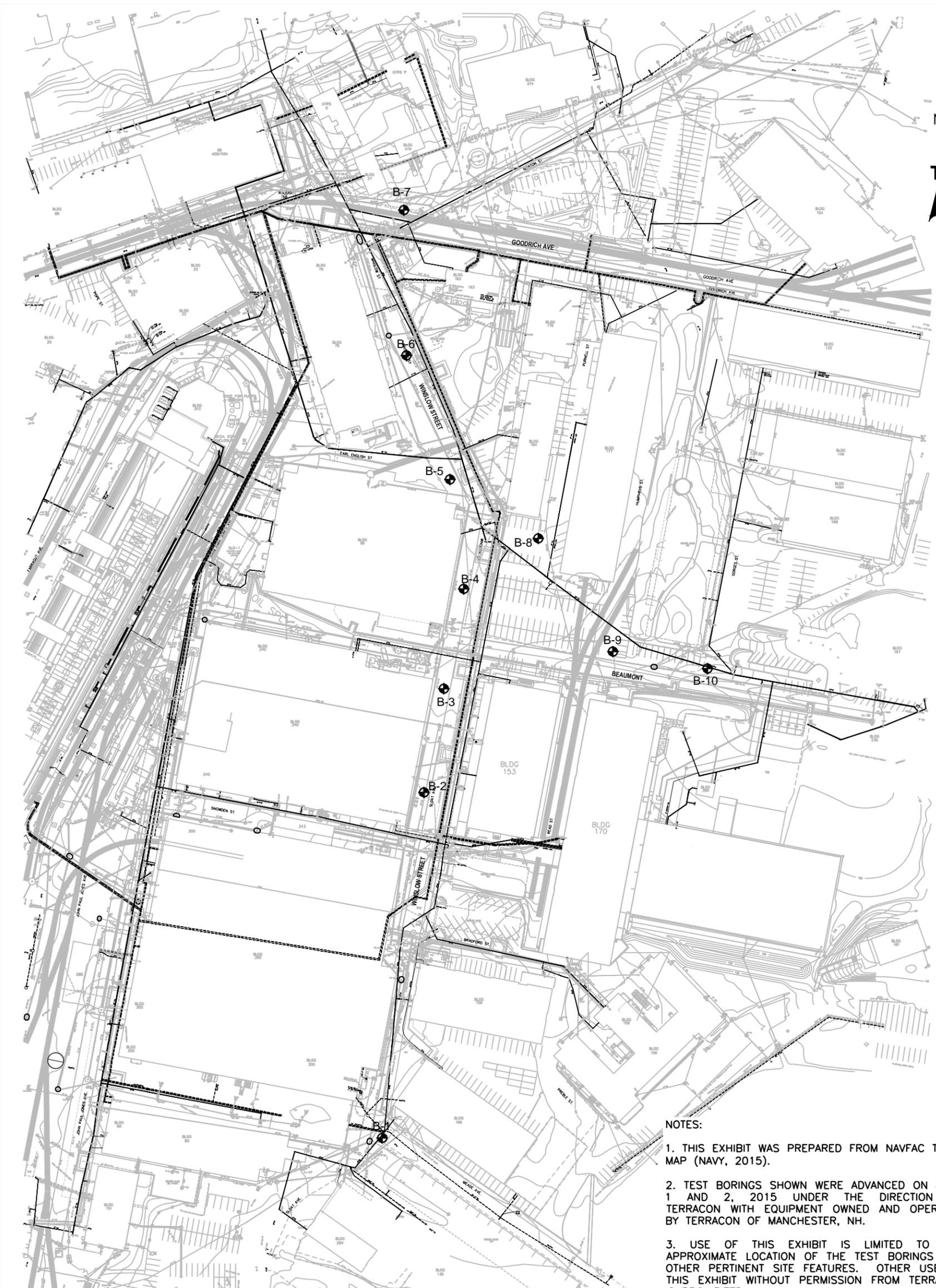
Westbrook, ME 04097
Fax: (207)828-5374

SITE LOCATION MAP

FY16 eMMRP ENERGY PROJECT #4
PORTSMOUTH NAVAL SHIPYARD
KITTERY, MAINE

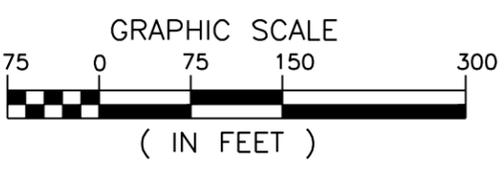
EXHIBIT

A-1



NOTES:

1. THIS EXHIBIT WAS PREPARED FROM NAVFAC TOTAL MAP (NAVY, 2015).
2. TEST BORINGS SHOWN WERE ADVANCED ON JUNE 1 AND 2, 2015 UNDER THE DIRECTION OF TERRACON WITH EQUIPMENT OWNED AND OPERATED BY TERRACON OF MANCHESTER, NH.
3. USE OF THIS EXHIBIT IS LIMITED TO THE APPROXIMATE LOCATION OF THE TEST BORINGS AND OTHER PERTINENT SITE FEATURES. OTHER USE OF THIS EXHIBIT WITHOUT PERMISSION FROM TERRACON IS PROHIBITED.



LEGEND

B-1 APPROXIMATE TEST BORING LOCATION

Project Mngr:	GLG	Project No.	J3157114
Drawn By:	MCR	Scale:	As shown
Checked By:	GLG	File No.	J3157114.dwg
Approved By:	LJD	Date:	July 2015

4 Thomas Drive, Suite 3 Westbrook, ME 04092
PH: (207) 828-5374 Fax: (207) 828-5374

BORING LOCATION PLAN
FY16 eMMRP ENERGY PROJECT #4
PORTSMOUTH NAVAL SHIPYARD
KITTERY, MAINE

EXHIBIT
A-2

Field Exploration Description

Terracon completed ten soil borings (B-1 through B-10) on June 1, and 2, 2015 within the proposed alignment of the replacement water system to evaluate subsurface conditions and the presence or absence of site-related contamination in project area soil. The approximate locations of the borings are shown on the attached Boring Location Plan (Exhibit A-2).

Borings were advanced using a CME-75 truck-mounted drill rig with 4¼-inch hollow-stem augers. The borings proposed completion depth was 10 feet below existing grade; however, auger refusal was encountered in several of the borings at depths less than 10 feet, on presumed bedrock. Borings were backfilled with auger cuttings and the surface finished with asphalt cold patch following completion of sampling activities.

The split-barrel sampling procedure was used to obtain soil samples in the test borings, using an automatic hammer. In this test, the number of blows required to advance a standard 2-inch-outside-diameter, split-barrel sampler from 6 to 18 inches penetration by means of a 140-pound safety hammer with a free fall of 30 inches, is the Standard Penetration Test (SPT) resistance value “N”. This “N” value is used to estimate the *in-situ* relative density of cohesionless soils and consistency of cohesive soils.

Soil samples were screened with a photoionization detector (PID) for the presence of total volatile organic compounds (TVOCs). PID readings are provided on the boring logs in Appendix A. PID readings and the observed relative moisture contents were used to determine the interval for soil sample collection.

A Terracon field engineer prepared field logs of the borings, which included visual classifications of the materials encountered during drilling, as well as our field engineer’s interpretation of the subsurface conditions between samples. Information provided on the boring logs includes soil descriptions, relative density and/or consistency evaluations, boring depth, sampling intervals, and groundwater conditions. Descriptive classifications of the soils indicated on the boring logs are in accordance with the enclosed General Notes and the Unified Soil Classification System. Also shown are estimated Unified Soil Classification Symbols. A brief description of this classification system is attached to this report in Appendix C. All classification was by visual/manual procedures.

BORING LOG NO. B-1

PROJECT: FY16 eMMRP Energy Project #4

**CLIENT: JV-Casco Bay Engineering/
CLD Consulting Engineers, LLC**

**SITE: Portsmouth Naval Shipyard
Kittery, Maine**

GRAPHIC LOG	LOCATION See Exhibit A-2	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (in.)	FIELD TEST RESULTS	PID (ppmv)
	DEPTH						
1.0	12-inches asphalt						
5.9	<p>FILL - SILTY SAND, trace gravel, reddish-brown, medium dense, damp, well graded</p> <p>Sample B1-S1-03 (3-5 feet)</p> <p>Wet at 4.5 feet Refusal at 5.9 feet, augered to 6.2 feet on presumed bedrock</p>	5	▽	X	12	7-8-9-10 N=17	<1.9
				X	12	7-9-6-11 N=15	<1.9
				X		10-50/4"	<1.9
	Boring terminated on presumed bedrock at 6.2 Feet						

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
4-inch diam. hollow stem augers

Abandonment Method:
Boring backfilled with soil cuttings, sand and asphalt
patched upon completion.

See Appendix C for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

▽ 4.5' WD



Boring Started: 6/1/2015

Boring Completed: 6/1/2015

Drill Rig: CME-75

Driller: Terracon/Peter

Project No.: J3147114

Exhibit: A-4

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL_J3147114.GPJ

BORING LOG NO. B-2

PROJECT: FY16 eMMRP Energy Project #4

**CLIENT: JV-Casco Bay Engineering/
CLD Consulting Engineers, LLC**

**SITE: Portsmouth Naval Shipyard
Kittery, Maine**

GRAPHIC LOG	LOCATION See Exhibit A-2	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (in.)	FIELD TEST RESULTS	PID (ppmv)
	DEPTH						
	0.5 6-inches of asphalt						
	FILL - POORLY GRADED GRAVEL , angular, gray, (AGGREGATE BASE) Roller bit through gravel to auger refusal						
	2.0 Boring terminated on presumed bedrock at 2 Feet						

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
4-inch diam. hollow stem augers

Abandonment Method:
Boring backfilled with soil cuttings, sand and asphalt
patched upon completion.

See Appendix C for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

No free water observed



Boring Started: 6/1/2015

Boring Completed: 6/1/2015

Drill Rig: CME-75

Driller: Terracon/Peter

Project No.: J3147114

Exhibit: A-5

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL_J3147114.GPJ

BORING LOG NO. B-3

PROJECT: FY16 eMMRP Energy Project #4

**CLIENT: JV-Casco Bay Engineering/
CLD Consulting Engineers, LLC**

**SITE: Portsmouth Naval Shipyard
Kittery, Maine**

GRAPHIC LOG	LOCATION See Exhibit A-2	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (in.)	FIELD TEST RESULTS	PID (ppmv)
	DEPTH						
0.5	6-inches asphalt						
2.0	FILL - POORLY GRADED GRAVEL , angular, gray, (AGGREGATE BASE)						<1.9
3.0	GRAVELLY SILT (ML) , dark brown, very dense, damp Sample B-3-S1-02 (2-3 feet)			X		15-50/2"	<1.9
	Boring terminated on presumed bedrock at 3 Feet						

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
4-inch diam. hollow stem augers

Abandonment Method:
Boring backfilled with soil cuttings, sand and asphalt patched upon completion.

See Appendix C for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

No free water observed



Boring Started: 6/1/2015

Boring Completed: 6/1/2015

Drill Rig: CME-75

Driller: Terracon/Peter

Project No.: J3147114

Exhibit: A-6

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL. J3147114.GPJ

BORING LOG NO. B-4

PROJECT: FY16 eMMRP Energy Project #4

**CLIENT: JV-Casco Bay Engineering/
CLD Consulting Engineers, LLC**

**SITE: Portsmouth Naval Shipyard
Kittery, Maine**

GRAPHIC LOG	LOCATION See Exhibit A-2	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (in.)	FIELD TEST RESULTS	PID (ppmv)
	DEPTH						
0.5	6-inches asphalt						
3.2	FILL - SILT , with clay, trace angular gravel, olive-brown, stiff, damp Sample B4-S1-01 (1-3 feet)		▽		16	5-5-4-5 N=9	<1.9
6.0	SILTY SAND WITH GRAVEL (SM) , gray to brown, loose, wet	5			6	4-4-4-4 N=8	<1.9
10.0	POORLY GRADED SAND (SP) , light brown, medium dense, wet Sample B4-S2-06 (6-8 feet)	10			18	6-7-11-12 N=18	<1.9
						11-11-13-14 N=24	<1.9
	Boring Terminated at 10 Feet						

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
4-inch diam. hollow stem augers

Abandonment Method:
Boring backfilled with soil cuttings, sand and asphalt
patched upon completion.

See Appendix C for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

▽ 3' WD



Boring Started: 6/1/2015

Boring Completed: 6/1/2015

Drill Rig: CME-75

Driller: Terracon/Peter

Project No.: J3147114

Exhibit: A-7

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL_J3147114.GPJ

BORING LOG NO. B-5

PROJECT: FY16 eMMRP Energy Project #4

**CLIENT: JV-Casco Bay Engineering/
CLD Consulting Engineers, LLC**

**SITE: Portsmouth Naval Shipyard
Kittery, Maine**

GRAPHIC LOG	LOCATION See Exhibit A-2	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (in.)	FIELD TEST RESULTS	PID (ppmv)
	DEPTH						
	0.5 6-inches asphalt						
	FILL - WELL GRADED GRAVEL WITH SAND , brown, dense, (AGGREGATE BASE)						
	Sample B5-S1-02 (1-3 feet)			X	9	9-11-21-25/0"	<1.9
	3.2						
	Auger refusal on presumed bedrock at 3.2 Feet						

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
4-inch diam. hollow stem augers

Abandonment Method:
Boring backfilled with soil cuttings, sand and asphalt patched upon completion.

See Appendix C for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

No free water observed



Boring Started: 6/2/2015

Boring Completed: 6/2/2015

Drill Rig: CME-75

Driller: Terracon/Peter

Project No.: J3147114

Exhibit: A-8

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL_J3147114.GPJ

BORING LOG NO. B-6

PROJECT: FY16 eMMRP Energy Project #4

**CLIENT: JV-Casco Bay Engineering/
CLD Consulting Engineers, LLC**

**SITE: Portsmouth Naval Shipyard
Kittery, Maine**

GRAPHIC LOG	LOCATION See Exhibit A-2	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (in.)	FIELD TEST RESULTS	PID (ppmv)
	DEPTH						
0.5	6-inches asphalt						
3.0	FILL - WELL GRADED GRAVEL WITH SAND , brown, dense, (AGGREGATE BASE)			10		11-18-16-20 N=34	0.0
5.0	FILL - WELL GRADED GRAVEL , black, medium dense			4		3-4-6-4 N=10	0.0
7.0	Sample B6-S2-03 (3-5 feet)			0		5-5-5-6 N=10	0.0
10.0	Sample B6-S2-08 (8-10 feet)			6		8-8-6-10 N=14	0.0
	Boring Terminated at 10 Feet	10					

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
4-inch diam. hollow stem augers

Abandonment Method:
Boring backfilled with soil cuttings, sand and asphalt patched upon completion.

See Appendix C for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

No free water observed



Boring Started: 6/2/2015

Drill Rig: CME-75

Project No.: J3147114

Boring Completed: 6/2/2015

Driller: Terracon/Peter

Exhibit: A-9

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL. J3147114.GPJ

BORING LOG NO. B-7

PROJECT: FY16 eMMRP Energy Project #4

**CLIENT: JV-Casco Bay Engineering/
CLD Consulting Engineers, LLC**

**SITE: Portsmouth Naval Shipyard
Kittery, Maine**

GRAPHIC LOG	LOCATION See Exhibit A-2	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (in.)	FIELD TEST RESULTS	PID (ppmv)
	DEPTH						
	0.5 6-inches asphalt						
	FILL - POORLY GRADED SAND , black, medium dense			X	10	7-17-11-5 N=28	0.0
	3.0						
	FILL - POORLY GRADED GRAVEL , olive, loose to medium dense			X	6	5-6-20-22 N=26	0.0
	Sample B7-S1-03 (3-5 feet)	5					
				X	0	3-2-3-3 N=5	0.2
				X	0	2-2-2-5 N=4	0.0
		10	▽				
				X	0.1	6-19-15-8 N=34	0.0
	12.0						
	Boring Terminated at 12 Feet						

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
4-inch diam. hollow stem augers

Abandonment Method:
Boring backfilled with soil cuttings, sand and asphalt
patched upon completion.

See Appendix C for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

▽ 10' WD



Boring Started: 6/2/2015

Boring Completed: 6/2/2015

Drill Rig: CME-75

Driller: Terracon/Peter

Project No.: J3147114

Exhibit: A-10

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL. J3147114.GPJ

BORING LOG NO. B-8

PROJECT: FY16 eMMRP Energy Project #4

**CLIENT: JV-Casco Bay Engineering/
CLD Consulting Engineers, LLC**

**SITE: Portsmouth Naval Shipyard
Kittery, Maine**

GRAPHIC LOG	LOCATION See Exhibit A-2	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (in.)	FIELD TEST RESULTS	PID (ppmv)
	DEPTH						
	0.5 6-inches asphalt						
	FILL - SANDY SILT , black, loose Sample B8-S1-02 (2-4 feet)	4.0	▽	X	18	5-2-2-2 N=4	0.3
	LEAN CLAY WITH SILT (CL) , olive-brown, medium stiff Sample B8-S1-03 (3-5 feet)	4.0 6.0		X	18	2-3-4-6 N=7	0.4
	Auger refusal on presumed bedrock at 6 Feet						

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
4-inch diam. hollow stem augers

Abandonment Method:
Boring backfilled with soil cuttings, sand and asphalt
patched upon completion.

See Appendix C for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

▽ 3' WD



Boring Started: 6/2/2015

Boring Completed: 6/2/2015

Drill Rig: CME-75

Driller: Terracon/Peter

Project No.: J3147114

Exhibit: A-11

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL_J3147114.GPJ

BORING LOG NO. B-9

PROJECT: FY16 eMMRP Energy Project #4

**CLIENT: JV-Casco Bay Engineering/
CLD Consulting Engineers, LLC**

**SITE: Portsmouth Naval Shipyard
Kittery, Maine**

GRAPHIC LOG	LOCATION See Exhibit A-2	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (in.)	FIELD TEST RESULTS	PID (ppmv)
	DEPTH						
	0.5 6-inches of asphalt						
	1.5 FILL - POORLY GRADED GRAVEL , angular, gray, (AGGREGATE BASE) Roller bit through gravel to auger refusal						
	Boring terminated on presumed bedrock at 1.5 Feet						

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
4-inch diam. hollow stem augers

Abandonment Method:
Boring backfilled with soil cuttings, sand and asphalt patched upon completion.

See Appendix C for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

No free water observed



Boring Started: 6/1/2015

Boring Completed: 6/1/2015

Drill Rig: CME-75

Driller: Terracon/Peter

Project No.: J3147114

Exhibit: A-12

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL_J3147114.GPJ

BORING LOG NO. B-10

PROJECT: FY16 eMMRP Energy Project #4

**CLIENT: JV-Casco Bay Engineering/
CLD Consulting Engineers, LLC**

**SITE: Portsmouth Naval Shipyard
Kittery, Maine**

GRAPHIC LOG	LOCATION See Exhibit A-2	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (in.)	FIELD TEST RESULTS	PID (ppmv)
	DEPTH						
0.5	6-inches asphalt						
FILL - POORLY GRADED SAND WITH SILT, loose to medium dense							
	Sample B10-S1-05 (5-7 feet)	5	▽	X	12	3-4-4-6 N=8	<1.9
				X	18	6-7-8-8 N=15	<1.9
7.0	POORLY GRADED SAND (SP), medium dense						
	Sample B10-S2-07 (7-9 feet)			X	12	9-9-13-2 N=22	<1.9
9.0	Boring Terminated at 9 Feet						

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
4-inch diam. hollow stem augers

Abandonment Method:
Boring backfilled with soil cuttings, sand and asphalt patched upon completion.

See Appendix C for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

▽ 5' WD



Boring Started: 6/1/2015

Boring Completed: 6/1/2015

Drill Rig: CME-75

Driller: Terracon/Peter

Project No.: J3147114

Exhibit: A-13

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL_J3147114.GPJ

APPENDIX B
SUMMARY OF SOIL ANALYTICAL RESULTS

Exhibit B-1
Summary of Soil Analytical Results - Hits Only
Geotechnical and Environmental Site Investigation Report
FY16 eMMRP Energy Project #4

Terracon Project No. J3147114

Chemical ¹	Units	MEDEP RAGs Soil Construction Worker	MEDEP TCLP Limits	Date Sample ID Depth (ft) PID (ppmv)	6/1/2015	6/1/2015	6/1/2015	6/1/2015	6/2/2015	6/2/2015	6/2/2015	6/2/2015	6/2/2015	6/2/2015	6/1/2015	6/1/2015
					B1-S1-03 3-5 <1.9	B3-S1-02 2-3 <1.9	B4-S1-01 1-3 <1.9	B4-S2-06 6-8 <1.9	B5-S1-02 1-3 <1.9	B6-S1-03 3-5 <1.9	B6-S2-08 8-10 <1.9	B7-S1-03 3-5 <1.9	B8-S1-02 2-4 0.3	B8-S2-04 4-6 0.4	B10-S1-05 5-7 <1.9	B10-S2-07 7-9 <1.9
Metals, Total																
Arsenic	mg/kg	42	-		11.1	n/a	12.9	10.3	18.3	8.2	n/a	17.9	13.5	10.7	15.3	14.2
Barium	mg/kg	10,000	-		30.2	n/a	57.7	12.3	70.1	79.3	n/a	100	102	117	29	14.1
Cadmium	mg/kg	19	-		< 0.35	n/a	<0.39	<0.41	<0.34	<0.35	n/a	<0.34	<0.40	<0.36	<0.39	<0.38
Chromium	mg/kg	2,800	-		27.6	n/a	50.2	8.2	53.1	51.4	n/a	43.7	48.4	50.5	13.1	8.1
Lead	mg/kg	950	-		8.4	n/a	23.1	3	73.8	74.3	n/a	602	31.8	17.1	5.4	3.4
Mercury	mg/kg	930	-		<0.035	n/a	0.051	<0.036	0.58	0.12	n/a	0.42	0.41	0.04	<0.038	<0.036
Selenium	mg/kg	1	-		<0.88	n/a	<0.97	<1	<0.85	<0.86	n/a	<0.85	<0.99	<0.89	<0.97	<0.96
Silver	mg/kg	1,500	-		<0.44	n/a	<0.49	<0.51	<0.43	<0.43	n/a	<0.43	<0.49	<0.44	<0.49	<0.48
Metals, TCLP																
Arsenic	mg/L	-	5		<0.010	n/a	<0.010	<0.010	<0.010	<0.010	n/a	<0.010	0.036	<0.010	<0.010	<0.010
Barium	mg/L	-	100		<0.5	n/a	<0.5	<0.5	0.53	0.54	n/a	0.51	0.66	<0.5	<0.5	<0.5
Cadmium	mg/L	-	1		<0.0040	n/a	<0.0040	<0.0040	0.0045	<0.0040	n/a	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
Chromium	mg/L	-	5		0.011	n/a	<0.010	<0.010	<0.010	<0.010	n/a	<0.010	<0.010	<0.010	<0.010	<0.010
Lead	mg/L	-	5		<0.010	n/a	<0.010	<0.010	0.066	0.082	n/a	0.75	0.21	0.012	<0.010	<0.010
Mercury	mg/L	-	0		<0.00020	n/a	<0.00020	<0.00020	<0.00020	<0.00020	n/a	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Selenium	mg/L	-	1		<0.025	n/a	<0.025	<0.025	<0.025	<0.025	n/a	<0.025	<0.025	<0.025	<0.025	<0.025
Silver	mg/L	-	5		<0.0050	n/a	<0.0050	<0.0050	<0.0050	<0.0050	n/a	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
TPH																
TPH - GRO (VOA)	mg/kg	-	-		<6.2	<6.9	<8.2	<8.7	<7.8	<7.9	<8.0	<7.5	<11	<7.6	<9.6	<9.7
TPH - DRO (Semi-VOA)	mg/kg	-	-		18.6	n/a	111	<21	256	170	n/a	133	83.8	33.5	<22	<20
Semi-Volatiles By SW846 8081B																
4,4'-DDE	µg/kg	980,000	-		<5.6	n/a	<6.0	<6.0	5.7	<5.4	n/a	<5.5	<6.5	<5.9	<6.7	<6.1
4-4'-DDT	µg/kg	140,000	-		<5.6	n/a	6.7	<6.0	28.5	6.2	n/a	<5.5	<6.5	<5.9	<6.7	<6.1
Semivolatiles By SW846 8270D																
Acenaphthene	µg/kg	9,800,000	-		<110	n/a	<120	<120	<520	<110	n/a	<110	<130	<110	<130	<120
Acenaphthylene	µg/kg	10,000,000	-		<110	n/a	<120	<120	<520	<110	n/a	<110	<130	<110	<130	<120
Anthracene	µg/kg	3,800,000	-		<110	n/a	<120	<120	<520	140	n/a	<110	<130	<110	<130	<120
Benz(a)anthracene	µg/kg	430,000	-		<110	n/a	135	<120	693	757	n/a	186	<130	<110	<130	<120
Benzo(a)pyrene	µg/kg	43,000	-		<110	n/a	175	<120	737	757	n/a	207	<130	<110	<130	<120
Benzo(b)fluoranthene	µg/kg	430,000	-		<110	n/a	167	<120	817	628	n/a	226	<130	<110	<130	<120
Benzo(ghi)perylene	µg/kg	10,000,000	-		<110	n/a	168	<120	653	460	n/a	156	<130	<110	<130	<120
Benzo(k)fluoranthene	µg/kg	4,300,000	-		<110	n/a	155	<120	562	634	n/a	162	<130	<110	<130	<120
Chrysene	µg/kg	10,000,000	-		<110	n/a	161	<120	762	757	n/a	278	166	<110	<130	<120
Dibenz(a,h)anthracene	µg/kg	43,000	-		<110	n/a	<120	<120	<520	190	n/a	<110	<130	<110	<130	<120

Exhibit B-1
Summary of Soil Analytical Results - Hits Only
Geotechnical and Environmental Site Investigation Report
FY16 eMMRP Energy Project #4

Terracon Project No. J3147114

Chemical ¹	Units	MEDEP RAGs Soil Construction Worker	MEDEP TCLP Limits	Date Sample ID Depth (ft) PID (ppmv)	6/1/2015	6/1/2015	6/1/2015	6/1/2015	6/2/2015	6/2/2015	6/2/2015	6/2/2015	6/2/2015	6/2/2015	6/1/2015	6/1/2015
					B1-S1-03 3-5 <1.9	B3-S1-02 2-3 <1.9	B4-S1-01 1-3 <1.9	B4-S2-06 6-8 <1.9	B5-S1-02 1-3 <1.9	B6-S1-03 3-5 <1.9	B6-S2-08 8-10 <1.9	B7-S1-03 3-5 <1.9	B8-S1-02 2-4 0.3	B8-S2-04 4-6 0.4	B10-S1-05 5-7 <1.9	B10-S2-07 7-9 <1.9
Fluoranthene	µg/kg	10,000,000	-		<110	n/a	241	<120	1900	978	n/a	253	272	<110	<130	<120
Fluorene	µg/kg	10,000,000	-		<110	n/a	<120	<120	<520	<110	n/a	<110	<130	<110	<130	<120
Indeno(1,2,3-cd)pyrene	µg/kg	430,000	-		<110	n/a	130	<120	548	416	n/a	126	<130	<110	<130	<120
2-Methylnaphthalene	µg/kg	10,000,000	-		<110	n/a	<120	<120	<520	<110	n/a	<110	<130	<110	<130	<120
Naphthalene	µg/kg	10,000,000	-		<110	n/a	<120	<120	<520	<110	n/a	<110	<130	<110	<130	<120
Phenanthrene	µg/kg	8,900,000	-		<110	n/a	132	<120	1590	357	n/a	260	233	<110	<130	<120
Pyrene	µg/kg	10,000,000	-		<110	n/a	213	<120	1610	1030	n/a	250	238	<110	<130	<120

¹ Table presents only chemicals that were detected above the laboratory detection limit in at least one sample. Compounds with no detections above the laboratory detection limit (e.g., benzene, toluene, ethylbenzene, xylene) are not included on the table.

Notes:

MEDEP = Maine Department of Environmental Protection
ft = feet
ppmv = parts per million by volume
RAGs = Remedial Action Guidelines
mg/kg = milligrams per kilogram
µg/kg = micrograms per kilogram
- = no promulgated criteria available
TCLP = Toxicity Characteristic Leaching Procedure

TPH = Total Petroleum Hydrocarbons
GRO = Gasoline Range Organics
DRO = Diesel Range Organics
n/a = not analyzed
Bkgd = background
< = result less than the laboratory detection limit

Result Detected
Result Exceeds Criteria

APPENDIX C
SUPPORTING DOCUMENTS

GENERAL NOTES

DRILLING & SAMPLING SYMBOLS:

SS:	Split Spoon - 1-3/8" I.D., 2" O.D., unless otherwise noted	HS:	Hollow Stem Auger
ST:	Thin-Walled Tube – 2" O.D., 3" O.D., unless otherwise noted	PA:	Power Auger (Solid Stem)
RS:	Ring Sampler - 2.42" I.D., 3" O.D., unless otherwise noted	HA:	Hand Auger
DB:	Diamond Bit Coring - 4", N, B	RB:	Rock Bit
BS:	Bulk Sample or Auger Sample	WB:	Wash Boring or Mud Rotary

The number of blows required to advance a standard 2-inch O.D. split-spoon sampler (SS) typically the middle 12 inches of the total 24-inch penetration with a 140-pound hammer falling 30 inches is considered the "Standard Penetration" or "N-value".

WATER LEVEL MEASUREMENT SYMBOLS:

WL:	Water Level	WS:	While Sampling	BCR:	Before Casing Removal
WCI:	Wet Cave in	WD:	While Drilling	ACR:	After Casing Removal
DCI:	Dry Cave in	AB:	After Boring	N/E:	Not Encountered

Water levels indicated on the boring logs are the levels measured in the borings at the times indicated. Groundwater levels at other times and other locations across the site could vary. In pervious soils, the indicated levels may reflect the location of groundwater. In low permeability soils, the accurate determination of groundwater levels may not be possible with only short-term observations.

DESCRIPTIVE SOIL CLASSIFICATION: Soil classification is based on the Unified Soil Classification System. Coarse Grained Soils have more than 50% of their dry weight retained on a #200 sieve; their principal descriptors are: boulders, cobbles, gravel or sand. Fine Grained Soils have less than 50% of their dry weight retained on a #200 sieve; they are principally described as clays if they are plastic, and silts if they are slightly plastic or non-plastic. Major constituents may be added as modifiers and minor constituents may be added according to the relative proportions based on grain size. In addition to gradation, coarse-grained soils are defined on the basis of their in-place relative density and fine-grained soils on the basis of their consistency.

CONSISTENCY OF FINE-GRAINED SOILS

<u>Unconfined</u> <u>Compressive</u> <u>Strength, Qu, psf</u>	<u>Standard Penetration</u> <u>or N-value (SS)</u> <u>Blows/Ft.</u>	<u>Consistency</u>
< 500	0 - 1	Very Soft
500 – 1,000	2 - 4	Soft
1,000 – 2,000	4 - 8	Medium Stiff
2,000 – 4,000	8 - 15	Stiff
4,000 – 8,000	15 - 30	Very Stiff
8,000+	> 30	Hard

RELATIVE DENSITY OF COARSE-GRAINED SOILS

<u>Standard Penetration</u> <u>or N-value (SS)</u> <u>Blows/Ft.</u>	<u>Relative Density</u>
0 – 3	Very Loose
4 – 9	Loose
10 – 29	Medium Dense
30 – 50	Dense
> 50	Very Dense

RELATIVE PROPORTIONS OF SAND AND GRAVEL

<u>Descriptive Term(s)</u> <u>of other constituents</u>	<u>Percent of</u> <u>Dry Weight</u>
Trace	< 15
With	15 – 29
Modifier	≥ 30

GRAIN SIZE TERMINOLOGY

<u>Major Component</u> <u>of Sample</u>	<u>Particle Size</u>
Boulders	Over 12 in. (300mm)
Cobbles	12 in. to 3 in. (300mm to 75mm)
Gravel	3 in. to #4 sieve (75mm to
Sand	#4 to #200 sieve (4.75 to 0.075mm)
Silt or Clay	Passing #200 Sieve (0.075mm)

RELATIVE PROPORTIONS OF FINES

<u>Descriptive Term(s)</u> <u>of other constituents</u>	<u>Percent of</u> <u>Dry Weight</u>
Trace	< 5
With	5 – 12
Modifier	> 12

PLASTICITY DESCRIPTION

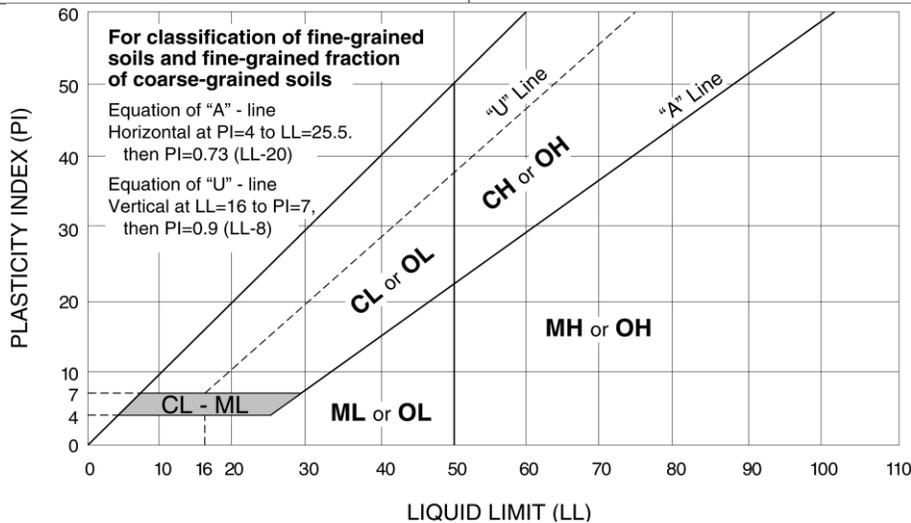
<u>Term</u>	<u>Plasticity</u> <u>Index</u>
Non-plastic	0
Low	1-10
Medium	11-30
High	> 30

UNIFIED SOIL CLASSIFICATION SYSTEM

Criteria for Assigning Group Symbols and Group Names Using Laboratory Tests ^A				Soil Classification		
				Group Symbol	Group Name ^B	
Coarse Grained Soils: More than 50% retained on No. 200 sieve	Gravels: More than 50% of coarse fraction retained on No. 4 sieve	Clean Gravels: Less than 5% fines ^C	$Cu \geq 4$ and $1 \leq Cc \leq 3$ ^E	GW	Well-graded gravel ^F	
		Gravels with Fines: More than 12% fines ^C	Fines classify as ML or MH	GM	Silty gravel ^{F,G,H}	
			Fines classify as CL or CH	GC	Clayey gravel ^{F,G,H}	
		Sands: 50% or more of coarse fraction passes No. 4 sieve	Clean Sands: Less than 5% fines ^D	$Cu \geq 6$ and $1 \leq Cc \leq 3$ ^E	SW	Well-graded sand ^I
	Sands with Fines: More than 12% fines ^D		Fines classify as ML or MH	SM	Silty sand ^{G,H,I}	
			Fines Classify as CL or CH	SC	Clayey sand ^{G,H,I}	
	Fine-Grained Soils: 50% or more passes the No. 200 sieve		Silts and Clays: Liquid limit less than 50	Inorganic:	$PI > 7$ and plots on or above "A" line ^J	CL
		$PI < 4$ or plots below "A" line ^J			ML	Silt ^{K,L,M}
Organic:		Liquid limit - oven dried		< 0.75	OL	Organic clay ^{K,L,M,N}
		Liquid limit - not dried			OM	Organic silt ^{K,L,M,O}
Silts and Clays: Liquid limit 50 or more		Inorganic:	PI plots on or above "A" line	CH	Fat clay ^{K,L,M}	
			PI plots below "A" line	MH	Elastic Silt ^{K,L,M}	
		Organic:	Liquid limit - oven dried	< 0.75	OH	Organic clay ^{K,L,M,P}
			Liquid limit - not dried		OM	Organic silt ^{K,L,M,Q}
Highly organic soils:	Primarily organic matter, dark in color, and organic odor			PT	Peat	

- ^A Based on the material passing the 3-in. (75-mm) sieve
- ^B If field sample contained cobbles or boulders, or both, add "with cobbles or boulders, or both" to group name.
- ^C Gravels with 5 to 12% fines require dual symbols: GW-GM well-graded gravel with silt, GW-GC well-graded gravel with clay, GP-GM poorly graded gravel with silt, GP-GC poorly graded gravel with clay.
- ^D Sands with 5 to 12% fines require dual symbols: SW-SM well-graded sand with silt, SW-SC well-graded sand with clay, SP-SM poorly graded sand with silt, SP-SC poorly graded sand with clay
- ^E $Cu = D_{60}/D_{10}$ $Cc = \frac{(D_{30})^2}{D_{10} \times D_{60}}$
- ^F If soil contains $\geq 15\%$ sand, add "with sand" to group name.
- ^G If fines classify as CL-ML, use dual symbol GC-GM, or SC-SM.

- ^H If fines are organic, add "with organic fines" to group name.
- ^I If soil contains $\geq 15\%$ gravel, add "with gravel" to group name.
- ^J If Atterberg limits plot in shaded area, soil is a CL-ML, silty clay.
- ^K If soil contains 15 to 29% plus No. 200, add "with sand" or "with gravel," whichever is predominant.
- ^L If soil contains $\geq 30\%$ plus No. 200 predominantly sand, add "sandy" to group name.
- ^M If soil contains $\geq 30\%$ plus No. 200, predominantly gravel, add "gravelly" to group name.
- ^N $PI \geq 4$ and plots on or above "A" line.
- ^O $PI < 4$ or plots below "A" line.
- ^P PI plots on or above "A" line.
- ^Q PI plots below "A" line.



APPENDIX D
LABORATORY ANALYTICAL REPORTS

Technical Report for

Terracon Consultants, Inc.

PNSY Facility, Kittery, ME

J3147114

Accutest Job Number: MC39046

Sampling Dates: 06/01/15 - 06/02/15

Report to:

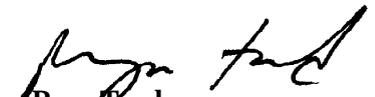
**Terracon Consultants, Inc.
77 Sundial Avenue Suite 401W
Manchester, NH 03103
glgulseth@terracon.com**

ATTN: Gina Gulseth

Total number of pages in report: 108



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.



Reza Fand
Lab Director

Client Service contact: Frank DAgostino 508-481-6200

Certifications: MA (M-MA136,SW846 NELAC) CT (PH-0109) NH (250210) RI (00071) ME (MA00136) FL (E87579) NY (11791) NJ (MA926) PA (6801121) ND (R-188) CO MN (11546AA) NC (653) IL (002337) WI (399080220)
DoD ELAP (L-A-B L2235)

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Test results relate only to samples analyzed.

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Sample Summary

Terracon Consultants, Inc.

Job No: MC39046

PNSY Facility, Kittery, ME
 Project No: J3147114

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
MC39046-1	06/01/15	11:20	GLMR06/03/15	SO	Soil	B1-S1-03
MC39046-1A	06/01/15	11:20	GLMR06/03/15	SO	Soil	B1-S1-03
MC39046-2	06/01/15	12:05	GLMR06/03/15	SO	Soil	B3-S1-02
MC39046-3	06/01/15	12:00	GLMR06/03/15	SO	Soil	B4-S1-01
MC39046-3A	06/01/15	12:00	GLMR06/03/15	SO	Soil	B4-S1-01
MC39046-4	06/01/15	12:30	GLMR06/03/15	SO	Soil	B4-S2-06
MC39046-4A	06/01/15	12:30	GLMR06/03/15	SO	Soil	B4-S2-06
MC39046-5	06/02/15	09:25	GLMR06/03/15	SO	Soil	B5-S1-02
MC39046-5A	06/02/15	09:25	GLMR06/03/15	SO	Soil	B5-S1-02
MC39046-6	06/02/15	09:00	GLMR06/03/15	SO	Soil	B6-S1-03
MC39046-6A	06/02/15	09:00	GLMR06/03/15	SO	Soil	B6-S1-03
MC39046-7	06/02/15	09:11	GLMR06/03/15	SO	Soil	B6-S2-08
MC39046-8	06/02/15	08:25	GLMR06/03/15	SO	Soil	B7-S1-03

Soil samples reported on a dry weight basis unless otherwise indicated on result page.



Sample Summary

(continued)

Terracon Consultants, Inc.

Job No: MC39046

PNSY Facility, Kittery, ME

Project No: J3147114

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
MC39046-8A	06/02/15	08:25	GLMR06/03/15	SO	Soil	B7-S1-03
MC39046-9	06/02/15	07:45	GLMR06/03/15	SO	Soil	B8-S1-02
MC39046-9A	06/02/15	07:45	GLMR06/03/15	SO	Soil	B8-S1-02
MC39046-10	06/02/15	08:00	GLMR06/03/15	SO	Soil	B8-S2-04
MC39046-10A	06/02/15	08:00	GLMR06/03/15	SO	Soil	B8-S2-04
MC39046-11	06/01/15	13:15	GLMR06/03/15	SO	Soil	B10-S1-05
MC39046-11A	06/01/15	13:15	GLMR06/03/15	SO	Soil	B10-S1-05
MC39046-12	06/01/15	13:30	GLMR06/03/15	SO	Soil	B10-S2-07
MC39046-12A	06/01/15	13:30	GLMR06/03/15	SO	Soil	B10-S2-07

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Summary of Hits

Job Number: MC39046
Account: Terracon Consultants, Inc.
Project: PNSY Facility, Kittery, ME
Collected: 06/01/15 thru 06/02/15

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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MC39046-1 B1-S1-03

TPH-DRO (Semi-VOA)	18.6	18			mg/kg	SW846-8015
Arsenic	11.1	0.88			mg/kg	SW846 6010C
Barium	30.2	4.4			mg/kg	SW846 6010C
Chromium	27.6	0.88			mg/kg	SW846 6010C
Lead	8.4	0.88			mg/kg	SW846 6010C

MC39046-1A B1-S1-03

Chromium	0.011	0.010			mg/l	SW846 6010C
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MC39046-2 B3-S1-02

No hits reported in this sample.

MC39046-3 B4-S1-01

Benzo(a)anthracene	135	120			ug/kg	SW846 8270D
Benzo(a)pyrene	175	120			ug/kg	SW846 8270D
Benzo(b)fluoranthene	167	120			ug/kg	SW846 8270D
Benzo(g,h,i)perylene	168	120			ug/kg	SW846 8270D
Benzo(k)fluoranthene	155	120			ug/kg	SW846 8270D
Chrysene	161	120			ug/kg	SW846 8270D
Fluoranthene	241	120			ug/kg	SW846 8270D
Indeno(1,2,3-cd)pyrene	130	120			ug/kg	SW846 8270D
Phenanthrene	132	120			ug/kg	SW846 8270D
Pyrene	213	120			ug/kg	SW846 8270D
4,4'-DDT	6.7	6.0			ug/kg	SW846 8081B
TPH-DRO (Semi-VOA)	111	20			mg/kg	SW846-8015
Arsenic	12.9	0.97			mg/kg	SW846 6010C
Barium	57.7	4.9			mg/kg	SW846 6010C
Chromium	50.2	0.97			mg/kg	SW846 6010C
Lead	23.1	0.97			mg/kg	SW846 6010C
Mercury	0.051	0.037			mg/kg	SW846 7471B

MC39046-3A B4-S1-01

No hits reported in this sample.

MC39046-4 B4-S2-06

Arsenic	10.3	1.0			mg/kg	SW846 6010C
Barium	12.3	5.1			mg/kg	SW846 6010C
Chromium	8.2	1.0			mg/kg	SW846 6010C

Summary of Hits

Job Number: MC39046
Account: Terracon Consultants, Inc.
Project: PNSY Facility, Kittery, ME
Collected: 06/01/15 thru 06/02/15

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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Lead		3.0	1.0		mg/kg	SW846 6010C
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MC39046-4A B4-S2-06

No hits reported in this sample.

MC39046-5 B5-S1-02

Benzo(a)anthracene ^a	693	520		ug/kg	SW846 8270D
Benzo(a)pyrene ^a	737	520		ug/kg	SW846 8270D
Benzo(b)fluoranthene ^a	817	520		ug/kg	SW846 8270D
Benzo(g,h,i)perylene ^a	653	520		ug/kg	SW846 8270D
Benzo(k)fluoranthene ^a	562	520		ug/kg	SW846 8270D
Chrysene ^a	762	520		ug/kg	SW846 8270D
Fluoranthene ^a	1900	520		ug/kg	SW846 8270D
Indeno(1,2,3-cd)pyrene ^a	548	520		ug/kg	SW846 8270D
Phenanthrene ^a	1590	520		ug/kg	SW846 8270D
Pyrene ^a	1610	520		ug/kg	SW846 8270D
4,4' -DDE	5.7	5.2		ug/kg	SW846 8081B
4,4' -DDT	28.5	5.2		ug/kg	SW846 8081B
TPH-DRO (Semi-VOA)	256	17		mg/kg	SW846-8015
Arsenic	18.3	0.85		mg/kg	SW846 6010C
Barium	70.1	4.3		mg/kg	SW846 6010C
Chromium	53.1	0.85		mg/kg	SW846 6010C
Lead	73.8	0.85		mg/kg	SW846 6010C
Mercury	0.58	0.034		mg/kg	SW846 7471B

MC39046-5A B5-S1-02

Barium	0.53	0.50		mg/l	SW846 6010C
Cadmium	0.0045	0.0040		mg/l	SW846 6010C
Lead	0.066	0.010		mg/l	SW846 6010C

MC39046-6 B6-S1-03

Anthracene	140	110		ug/kg	SW846 8270D
Benzo(a)anthracene	757	110		ug/kg	SW846 8270D
Benzo(a)pyrene	757	110		ug/kg	SW846 8270D
Benzo(b)fluoranthene	628	110		ug/kg	SW846 8270D
Benzo(g,h,i)perylene	460	110		ug/kg	SW846 8270D
Benzo(k)fluoranthene	634	110		ug/kg	SW846 8270D
Chrysene	757	110		ug/kg	SW846 8270D
Dibenzo(a,h)anthracene	190	110		ug/kg	SW846 8270D
Fluoranthene	978	110		ug/kg	SW846 8270D
Indeno(1,2,3-cd)pyrene	416	110		ug/kg	SW846 8270D

Summary of Hits

Job Number: MC39046
Account: Terracon Consultants, Inc.
Project: PNSY Facility, Kittery, ME
Collected: 06/01/15 thru 06/02/15

Lab Sample ID	Client Sample ID	Result/ Analyte	RL	MDL	Units	Method
		Phenanthrene	357	110	ug/kg	SW846 8270D
		Pyrene	1030	110	ug/kg	SW846 8270D
		4,4'-DDT ^b	6.2	5.4	ug/kg	SW846 8081B
		TPH-DRO (Semi-VOA)	170	18	mg/kg	SW846-8015
		Arsenic	8.2	0.86	mg/kg	SW846 6010C
		Barium	79.3	4.3	mg/kg	SW846 6010C
		Chromium	51.4	0.86	mg/kg	SW846 6010C
		Lead	74.3	0.86	mg/kg	SW846 6010C
		Mercury	0.12	0.033	mg/kg	SW846 7471B
MC39046-6A B6-S1-03						
		Barium	0.54	0.50	mg/l	SW846 6010C
		Lead	0.082	0.010	mg/l	SW846 6010C
MC39046-7 B6-S2-08						
No hits reported in this sample.						
MC39046-8 B7-S1-03						
		Benzo(a)anthracene	186	110	ug/kg	SW846 8270D
		Benzo(a)pyrene	207	110	ug/kg	SW846 8270D
		Benzo(b)fluoranthene	226	110	ug/kg	SW846 8270D
		Benzo(g,h,i)perylene	156	110	ug/kg	SW846 8270D
		Benzo(k)fluoranthene	162	110	ug/kg	SW846 8270D
		Chrysene	278	110	ug/kg	SW846 8270D
		Fluoranthene	253	110	ug/kg	SW846 8270D
		Indeno(1,2,3-cd)pyrene	126	110	ug/kg	SW846 8270D
		Phenanthrene	260	110	ug/kg	SW846 8270D
		Pyrene	250	110	ug/kg	SW846 8270D
		TPH-DRO (Semi-VOA)	133	19	mg/kg	SW846-8015
		Arsenic	17.9	0.85	mg/kg	SW846 6010C
		Barium	100	4.3	mg/kg	SW846 6010C
		Chromium	43.7	0.85	mg/kg	SW846 6010C
		Lead	602	0.85	mg/kg	SW846 6010C
		Mercury	0.42	0.031	mg/kg	SW846 7471B
MC39046-8A B7-S1-03						
		Barium	0.51	0.50	mg/l	SW846 6010C
		Lead	0.75	0.010	mg/l	SW846 6010C

Summary of Hits

Job Number: MC39046
Account: Terracon Consultants, Inc.
Project: PNSY Facility, Kittery, ME
Collected: 06/01/15 thru 06/02/15

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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MC39046-9 B8-S1-02

Chrysene	166	130		ug/kg	SW846 8270D
Fluoranthene	272	130		ug/kg	SW846 8270D
Phenanthrene	233	130		ug/kg	SW846 8270D
Pyrene	238	130		ug/kg	SW846 8270D
TPH-DRO (Semi-VOA)	83.8	22		mg/kg	SW846-8015
Arsenic	13.5	0.99		mg/kg	SW846 6010C
Barium	102	4.9		mg/kg	SW846 6010C
Chromium	48.4	0.99		mg/kg	SW846 6010C
Lead	31.8	0.99		mg/kg	SW846 6010C
Mercury	0.41	0.039		mg/kg	SW846 7471B

MC39046-9A B8-S1-02

Arsenic	0.036	0.010		mg/l	SW846 6010C
Barium	0.66	0.50		mg/l	SW846 6010C
Lead	0.21	0.010		mg/l	SW846 6010C

MC39046-10 B8-S2-04

TPH-DRO (Semi-VOA)	33.5	20		mg/kg	SW846-8015
Arsenic	10.7	0.89		mg/kg	SW846 6010C
Barium	117	4.4		mg/kg	SW846 6010C
Chromium	50.5	0.89		mg/kg	SW846 6010C
Lead	17.1	0.89		mg/kg	SW846 6010C
Mercury	0.040	0.037		mg/kg	SW846 7471B

MC39046-10A B8-S2-04

Lead	0.012	0.010		mg/l	SW846 6010C
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MC39046-11 B10-S1-05

Arsenic	15.3	0.97		mg/kg	SW846 6010C
Barium	29.0	4.9		mg/kg	SW846 6010C
Chromium	13.1	0.97		mg/kg	SW846 6010C
Lead	5.4	0.97		mg/kg	SW846 6010C

MC39046-11A B10-S1-05

No hits reported in this sample.

Summary of Hits

Job Number: MC39046
Account: Terracon Consultants, Inc.
Project: PNSY Facility, Kittery, ME
Collected: 06/01/15 thru 06/02/15

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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MC39046-12 B10-S2-07

Arsenic	14.2	0.96			mg/kg	SW846 6010C
Barium	14.1	4.8			mg/kg	SW846 6010C
Chromium	8.1	0.96			mg/kg	SW846 6010C
Lead	3.4	0.96			mg/kg	SW846 6010C

MC39046-12A B10-S2-07

No hits reported in this sample.

- (a) Elevated RL due to dilution required for matrix interference.
- (b) Confirmation value > 40% RPD.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID: B1-S1-03		
Lab Sample ID: MC39046-1		Date Sampled: 06/01/15
Matrix: SO - Soil		Date Received: 06/03/15
Method: SW846 8260C		Percent Solids: 87.8
Project: PNSY Facility, Kittery, ME		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	K88452.D	1	06/04/15	JM	n/a	n/a	MSK2752
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	10.3 g	10.0 ml	100 ul
Run #2			

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	31	ug/kg	
108-88-3	Toluene	ND	310	ug/kg	
100-41-4	Ethylbenzene	ND	120	ug/kg	
1330-20-7	Xylene (total)	ND	120	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		65-141%
2037-26-5	Toluene-D8	98%		65-129%
460-00-4	4-Bromofluorobenzene	101%		63-137%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B1-S1-03		Date Sampled: 06/01/15
Lab Sample ID: MC39046-1		Date Received: 06/03/15
Matrix: SO - Soil		Percent Solids: 87.8
Method: SW846 8270D SW846 3546		
Project: PNSY Facility, Kittery, ME		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W22383.D	1	06/08/15	KD	06/03/15	OP43283	MSW952
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	20.5 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	110	ug/kg	
208-96-8	Acenaphthylene	ND	110	ug/kg	
120-12-7	Anthracene	ND	110	ug/kg	
56-55-3	Benzo(a)anthracene	ND	110	ug/kg	
50-32-8	Benzo(a)pyrene	ND	110	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	110	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	110	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	110	ug/kg	
218-01-9	Chrysene	ND	110	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	110	ug/kg	
206-44-0	Fluoranthene	ND	110	ug/kg	
86-73-7	Fluorene	ND	110	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	110	ug/kg	
91-57-6	2-Methylnaphthalene	ND	110	ug/kg	
91-20-3	Naphthalene	ND	110	ug/kg	
85-01-8	Phenanthrene	ND	110	ug/kg	
129-00-0	Pyrene	ND	110	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	72%		17-118%
321-60-8	2-Fluorobiphenyl	80%		27-121%
1718-51-0	Terphenyl-d14	98%		39-142%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.1
3

Client Sample ID: B1-S1-03	Date Sampled: 06/01/15
Lab Sample ID: MC39046-1	Date Received: 06/03/15
Matrix: SO - Soil	Percent Solids: 87.8
Method: SW846 8015	
Project: PNSY Facility, Kittery, ME	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BD70299.D	1	06/04/15	AF	n/a	n/a	GBD3388
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	10.3 g	10.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (VOA)	ND	6.2	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
	2,3,4-Trifluorotoluene	108%		62-131%	

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B1-S1-03		Date Sampled: 06/01/15
Lab Sample ID: MC39046-1		Date Received: 06/03/15
Matrix: SO - Soil		Percent Solids: 87.8
Method: SW846 8151 SW846 3550B		
Project: PNSY Facility, Kittery, ME		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ94304.D	1	06/08/15	NK	06/03/15	OP43262	GYZ7781
Run #2							

	Initial Weight	Final Volume
Run #1	30.5 g	5.0 ml
Run #2		

Herbicide List

CAS No.	Compound	Result	RL	Units	Q
94-75-7	2,4-D	ND	22	ug/kg	
93-72-1	2,4,5-TP (Silvex)	ND	22	ug/kg	
93-76-5	2,4,5-T	ND	22	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	133%		12-200%
19719-28-9	2,4-DCAA	104%		12-200%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B1-S1-03		Date Sampled: 06/01/15
Lab Sample ID: MC39046-1		Date Received: 06/03/15
Matrix: SO - Soil		Percent Solids: 87.8
Method: SW846 8081B SW846 3546		
Project: PNSY Facility, Kittery, ME		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE46211.D	1	06/09/15	NK	06/03/15	OP43286	GBE2336
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.3 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	Units	Q
309-00-2	Aldrin	ND	5.6	ug/kg	
319-84-6	alpha-BHC	ND	5.6	ug/kg	
319-85-7	beta-BHC	ND	5.6	ug/kg	
319-86-8	delta-BHC	ND	5.6	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	5.6	ug/kg	
5103-71-9	alpha-Chlordane	ND	5.6	ug/kg	
5103-74-2	gamma-Chlordane	ND	5.6	ug/kg	
60-57-1	Dieldrin	ND	5.6	ug/kg	
72-54-8	4,4'-DDD	ND	5.6	ug/kg	
72-55-9	4,4'-DDE	ND	5.6	ug/kg	
50-29-3	4,4'-DDT	ND	5.6	ug/kg	
72-20-8	Endrin	ND	5.6	ug/kg	
1031-07-8	Endosulfan sulfate	ND	5.6	ug/kg	
7421-93-4	Endrin aldehyde	ND	5.6	ug/kg	
959-98-8	Endosulfan-I	ND	5.6	ug/kg	
33213-65-9	Endosulfan-II	ND	5.6	ug/kg	
76-44-8	Heptachlor	ND	5.6	ug/kg	
1024-57-3	Heptachlor epoxide	ND	5.6	ug/kg	
72-43-5	Methoxychlor	ND	5.6	ug/kg	
53494-70-5	Endrin ketone	ND	5.6	ug/kg	
8001-35-2	Toxaphene	ND	56	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	86%		10-143%
877-09-8	Tetrachloro-m-xylene	77%		10-143%
2051-24-3	Decachlorobiphenyl	90%		10-172%
2051-24-3	Decachlorobiphenyl	91%		10-172%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B1-S1-03		Date Sampled: 06/01/15
Lab Sample ID: MC39046-1		Date Received: 06/03/15
Matrix: SO - Soil		Percent Solids: 87.8
Method: SW846 8082A SW846 3546		
Project: PNSY Facility, Kittery, ME		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK48719.D	1	06/08/15	NK	06/03/15	OP43285	GBK1522
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.8 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	27	ug/kg	
11104-28-2	Aroclor 1221	ND	27	ug/kg	
11141-16-5	Aroclor 1232	ND	27	ug/kg	
53469-21-9	Aroclor 1242	ND	27	ug/kg	
12672-29-6	Aroclor 1248	ND	27	ug/kg	
11097-69-1	Aroclor 1254	ND	27	ug/kg	
11096-82-5	Aroclor 1260	ND	27	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	100%		35-136%
877-09-8	Tetrachloro-m-xylene	95%		35-136%
2051-24-3	Decachlorobiphenyl	113%		24-171%
2051-24-3	Decachlorobiphenyl	110%		24-171%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.1
3

Client Sample ID: B1-S1-03	Date Sampled: 06/01/15
Lab Sample ID: MC39046-1	Date Received: 06/03/15
Matrix: SO - Soil	Percent Solids: 87.8
Method: SW846-8015 SW846 3546	
Project: PNSY Facility, Kittery, ME	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CR510.D	1	06/06/15	TA	06/03/15	OP43280	GCR1039
Run #2							

Run #	Initial Weight	Final Volume
Run #1	15.8 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH-DRO (Semi-VOA)	18.6	18	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
84-15-1	o-Terphenyl	75%		40-140%	

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B1-S1-03	Date Sampled: 06/01/15
Lab Sample ID: MC39046-1	Date Received: 06/03/15
Matrix: SO - Soil	Percent Solids: 87.8
Project: PNSY Facility, Kittery, ME	

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analized By	Method	Prep Method
Arsenic	11.1	0.88	mg/kg	1	06/04/15	06/04/15 EAL	SW846 6010C ¹	SW846 3050B ³
Barium	30.2	4.4	mg/kg	1	06/04/15	06/04/15 EAL	SW846 6010C ¹	SW846 3050B ³
Cadmium	< 0.35	0.35	mg/kg	1	06/04/15	06/04/15 EAL	SW846 6010C ¹	SW846 3050B ³
Chromium	27.6	0.88	mg/kg	1	06/04/15	06/04/15 EAL	SW846 6010C ¹	SW846 3050B ³
Lead	8.4	0.88	mg/kg	1	06/04/15	06/04/15 EAL	SW846 6010C ¹	SW846 3050B ³
Mercury	< 0.035	0.035	mg/kg	1	06/06/15	06/08/15 EAL	SW846 7471B ²	SW846 7471B ⁴
Selenium	< 0.88	0.88	mg/kg	1	06/04/15	06/04/15 EAL	SW846 6010C ¹	SW846 3050B ³
Silver	< 0.44	0.44	mg/kg	1	06/04/15	06/04/15 EAL	SW846 6010C ¹	SW846 3050B ³

- (1) Instrument QC Batch: MA18182
- (2) Instrument QC Batch: MA18186
- (3) Prep QC Batch: MP24682
- (4) Prep QC Batch: MP24699

RL = Reporting Limit

Report of Analysis

32
3

Client Sample ID: B1-S1-03	Date Sampled: 06/01/15
Lab Sample ID: MC39046-1A	Date Received: 06/03/15
Matrix: SO - Soil	Percent Solids: 87.8
Project: PNSY Facility, Kittery, ME	

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 0.010	D004	5.0	0.010	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³
Barium	< 0.50	D005	100	0.50	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³
Cadmium	< 0.0040	D006	1.0	0.0040	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³
Chromium	0.011	D007	5.0	0.010	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³
Lead	< 0.010	D008	5.0	0.010	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³
Mercury	< 0.00020	D009	0.20	0.00020	mg/l	1	06/06/15	06/08/15 EAL	SW846 7470A ²	SW846 7470A ⁴
Selenium	< 0.025	D010	1.0	0.025	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³
Silver	< 0.0050	D011	5.0	0.0050	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³

- (1) Instrument QC Batch: MA18184
- (2) Instrument QC Batch: MA18187
- (3) Prep QC Batch: MP24692
- (4) Prep QC Batch: MP24698

RL = Reporting Limit
MCL = Maximum Contamination Level (40 CFR 261 6/96)

Report of Analysis

Client Sample ID: B3-S1-02		Date Sampled: 06/01/15
Lab Sample ID: MC39046-2		Date Received: 06/03/15
Matrix: SO - Soil		Percent Solids: n/a ^a
Method: SW846 8260C		
Project: PNSY Facility, Kittery, ME		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	K88453.D	1	06/04/15	JM	n/a	n/a	MSK2752
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	7.95 g	10.0 ml	100 ul
Run #2			

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	31	ug/kg	
108-88-3	Toluene	ND	310	ug/kg	
100-41-4	Ethylbenzene	ND	130	ug/kg	
1330-20-7	Xylene (total)	ND	130	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		65-141%
2037-26-5	Toluene-D8	98%		65-129%
460-00-4	4-Bromofluorobenzene	99%		63-137%

(a) All results reported on a wet weight basis.

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B3-S1-02	Date Sampled: 06/01/15
Lab Sample ID: MC39046-2	Date Received: 06/03/15
Matrix: SO - Soil	Percent Solids: n/a ^a
Method: SW846 8015	
Project: PNSY Facility, Kittery, ME	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BD70309.D	1	06/04/15	AF	n/a	n/a	GBD3388
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	7.26 g	10.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (VOA)	ND	6.9	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
	2,3,4-Trifluorotoluene	107%		62-131%	

(a) All results reported on a wet weight basis.

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B4-S1-01	
Lab Sample ID: MC39046-3	Date Sampled: 06/01/15
Matrix: SO - Soil	Date Received: 06/03/15
Method: SW846 8260C	Percent Solids: 82.8
Project: PNSY Facility, Kittery, ME	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	K88454.D	1	06/04/15	JM	n/a	n/a	MSK2752
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	8.46 g	10.0 ml	100 ul
Run #2			

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	41	ug/kg	
108-88-3	Toluene	ND	410	ug/kg	
100-41-4	Ethylbenzene	ND	160	ug/kg	
1330-20-7	Xylene (total)	ND	160	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		65-141%
2037-26-5	Toluene-D8	99%		65-129%
460-00-4	4-Bromofluorobenzene	98%		63-137%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B4-S1-01		Date Sampled: 06/01/15
Lab Sample ID: MC39046-3		Date Received: 06/03/15
Matrix: SO - Soil		Percent Solids: 82.8
Method: SW846 8270D SW846 3546		
Project: PNSY Facility, Kittery, ME		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W22384.D	1	06/08/15	KD	06/03/15	OP43283	MSW952
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	20.5 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	120	ug/kg	
208-96-8	Acenaphthylene	ND	120	ug/kg	
120-12-7	Anthracene	ND	120	ug/kg	
56-55-3	Benzo(a)anthracene	135	120	ug/kg	
50-32-8	Benzo(a)pyrene	175	120	ug/kg	
205-99-2	Benzo(b)fluoranthene	167	120	ug/kg	
191-24-2	Benzo(g,h,i)perylene	168	120	ug/kg	
207-08-9	Benzo(k)fluoranthene	155	120	ug/kg	
218-01-9	Chrysene	161	120	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	120	ug/kg	
206-44-0	Fluoranthene	241	120	ug/kg	
86-73-7	Fluorene	ND	120	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	130	120	ug/kg	
91-57-6	2-Methylnaphthalene	ND	120	ug/kg	
91-20-3	Naphthalene	ND	120	ug/kg	
85-01-8	Phenanthrene	132	120	ug/kg	
129-00-0	Pyrene	213	120	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	74%		17-118%
321-60-8	2-Fluorobiphenyl	83%		27-121%
1718-51-0	Terphenyl-d14	98%		39-142%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

3.4
3

Client Sample ID: B4-S1-01	Date Sampled: 06/01/15
Lab Sample ID: MC39046-3	Date Received: 06/03/15
Matrix: SO - Soil	Percent Solids: 82.8
Method: SW846 8015	
Project: PNSY Facility, Kittery, ME	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BD70310.D	1	06/04/15	AF	n/a	n/a	GBD3388
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	8.46 g	10.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (VOA)	ND	8.2	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
	2,3,4-Trifluorotoluene	102%		62-131%	

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B4-S1-01		
Lab Sample ID: MC39046-3		Date Sampled: 06/01/15
Matrix: SO - Soil		Date Received: 06/03/15
Method: SW846 8151 SW846 3550B		Percent Solids: 82.8
Project: PNSY Facility, Kittery, ME		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ94305.D	1	06/08/15	NK	06/03/15	OP43262	GYZ7781
Run #2							

	Initial Weight	Final Volume
Run #1	30.6 g	5.0 ml
Run #2		

Herbicide List

CAS No.	Compound	Result	RL	Units	Q
94-75-7	2,4-D	ND	24	ug/kg	
93-72-1	2,4,5-TP (Silvex)	ND	24	ug/kg	
93-76-5	2,4,5-T	ND	24	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	105%		12-200%
19719-28-9	2,4-DCAA	83%		12-200%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B4-S1-01		
Lab Sample ID: MC39046-3		Date Sampled: 06/01/15
Matrix: SO - Soil		Date Received: 06/03/15
Method: SW846 8081B SW846 3546		Percent Solids: 82.8
Project: PNSY Facility, Kittery, ME		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE46212.D	1	06/09/15	NK	06/03/15	OP43286	GBE2336
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	20.2 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	Units	Q
309-00-2	Aldrin	ND	6.0	ug/kg	
319-84-6	alpha-BHC	ND	6.0	ug/kg	
319-85-7	beta-BHC	ND	6.0	ug/kg	
319-86-8	delta-BHC	ND	6.0	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	6.0	ug/kg	
5103-71-9	alpha-Chlordane	ND	6.0	ug/kg	
5103-74-2	gamma-Chlordane	ND	6.0	ug/kg	
60-57-1	Dieldrin	ND	6.0	ug/kg	
72-54-8	4,4'-DDD	ND	6.0	ug/kg	
72-55-9	4,4'-DDE	ND	6.0	ug/kg	
50-29-3	4,4'-DDT	6.7	6.0	ug/kg	
72-20-8	Endrin	ND	6.0	ug/kg	
1031-07-8	Endosulfan sulfate	ND	6.0	ug/kg	
7421-93-4	Endrin aldehyde	ND	6.0	ug/kg	
959-98-8	Endosulfan-I	ND	6.0	ug/kg	
33213-65-9	Endosulfan-II	ND	6.0	ug/kg	
76-44-8	Heptachlor	ND	6.0	ug/kg	
1024-57-3	Heptachlor epoxide	ND	6.0	ug/kg	
72-43-5	Methoxychlor	ND	6.0	ug/kg	
53494-70-5	Endrin ketone	ND	6.0	ug/kg	
8001-35-2	Toxaphene	ND	60	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	90%		10-143%
877-09-8	Tetrachloro-m-xylene	84%		10-143%
2051-24-3	Decachlorobiphenyl	84%		10-172%
2051-24-3	Decachlorobiphenyl	105%		10-172%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B4-S1-01		
Lab Sample ID: MC39046-3		Date Sampled: 06/01/15
Matrix: SO - Soil		Date Received: 06/03/15
Method: SW846 8082A SW846 3546		Percent Solids: 82.8
Project: PNSY Facility, Kittery, ME		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK48720.D	1	06/08/15	NK	06/03/15	OP43285	GBK1522
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.3 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	30	ug/kg	
11104-28-2	Aroclor 1221	ND	30	ug/kg	
11141-16-5	Aroclor 1232	ND	30	ug/kg	
53469-21-9	Aroclor 1242	ND	30	ug/kg	
12672-29-6	Aroclor 1248	ND	30	ug/kg	
11097-69-1	Aroclor 1254	ND	30	ug/kg	
11096-82-5	Aroclor 1260	ND	30	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	99%		35-136%
877-09-8	Tetrachloro-m-xylene	89%		35-136%
2051-24-3	Decachlorobiphenyl	109%		24-171%
2051-24-3	Decachlorobiphenyl	99%		24-171%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.4
3

Client Sample ID: B4-S1-01	Date Sampled: 06/01/15
Lab Sample ID: MC39046-3	Date Received: 06/03/15
Matrix: SO - Soil	Percent Solids: 82.8
Method: SW846-8015 SW846 3546	
Project: PNSY Facility, Kittery, ME	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CR512.D	1	06/06/15	TA	06/03/15	OP43280	GCR1039
Run #2							

Run #	Initial Weight	Final Volume
Run #1	15.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH-DRO (Semi-VOA)	111	20	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
84-15-1	o-Terphenyl	96%		40-140%	

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B4-S1-01	Date Sampled: 06/01/15
Lab Sample ID: MC39046-3	Date Received: 06/03/15
Matrix: SO - Soil	Percent Solids: 82.8
Project: PNSY Facility, Kittery, ME	

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analysed By	Method	Prep Method
Arsenic	12.9	0.97	mg/kg	1	06/04/15	06/04/15	EAL SW846 6010C ¹	SW846 3050B ³
Barium	57.7	4.9	mg/kg	1	06/04/15	06/04/15	EAL SW846 6010C ¹	SW846 3050B ³
Cadmium	< 0.39	0.39	mg/kg	1	06/04/15	06/04/15	EAL SW846 6010C ¹	SW846 3050B ³
Chromium	50.2	0.97	mg/kg	1	06/04/15	06/04/15	EAL SW846 6010C ¹	SW846 3050B ³
Lead	23.1	0.97	mg/kg	1	06/04/15	06/04/15	EAL SW846 6010C ¹	SW846 3050B ³
Mercury	0.051	0.037	mg/kg	1	06/06/15	06/08/15	EAL SW846 7471B ²	SW846 7471B ⁴
Selenium	< 0.97	0.97	mg/kg	1	06/04/15	06/04/15	EAL SW846 6010C ¹	SW846 3050B ³
Silver	< 0.49	0.49	mg/kg	1	06/04/15	06/04/15	EAL SW846 6010C ¹	SW846 3050B ³

- (1) Instrument QC Batch: MA18182
- (2) Instrument QC Batch: MA18186
- (3) Prep QC Batch: MP24682
- (4) Prep QC Batch: MP24699

RL = Reporting Limit

Report of Analysis

35
3

Client Sample ID: B4-S1-01	Date Sampled: 06/01/15
Lab Sample ID: MC39046-3A	Date Received: 06/03/15
Matrix: SO - Soil	Percent Solids: 82.8
Project: PNSY Facility, Kittery, ME	

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 0.010	D004	5.0	0.010	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³
Barium	< 0.50	D005	100	0.50	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³
Cadmium	< 0.0040	D006	1.0	0.0040	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³
Chromium	< 0.010	D007	5.0	0.010	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³
Lead	< 0.010	D008	5.0	0.010	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³
Mercury	< 0.00020	D009	0.20	0.00020	mg/l	1	06/06/15	06/08/15 EAL	SW846 7470A ²	SW846 7470A ⁴
Selenium	< 0.025	D010	1.0	0.025	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³
Silver	< 0.0050	D011	5.0	0.0050	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³

- (1) Instrument QC Batch: MA18184
- (2) Instrument QC Batch: MA18187
- (3) Prep QC Batch: MP24692
- (4) Prep QC Batch: MP24698

RL = Reporting Limit
MCL = Maximum Contamination Level (40 CFR 261 6/96)

Report of Analysis

Client Sample ID: B4-S2-06		
Lab Sample ID: MC39046-4		Date Sampled: 06/01/15
Matrix: SO - Soil		Date Received: 06/03/15
Method: SW846 8260C		Percent Solids: 79.5
Project: PNSY Facility, Kittery, ME		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	K88455.D	1	06/04/15	JM	n/a	n/a	MSK2752
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	8.46 g	10.0 ml	100 ul
Run #2			

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	44	ug/kg	
108-88-3	Toluene	ND	440	ug/kg	
100-41-4	Ethylbenzene	ND	170	ug/kg	
1330-20-7	Xylene (total)	ND	170	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		65-141%
2037-26-5	Toluene-D8	98%		65-129%
460-00-4	4-Bromofluorobenzene	101%		63-137%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B4-S2-06		Date Sampled: 06/01/15
Lab Sample ID: MC39046-4		Date Received: 06/03/15
Matrix: SO - Soil		Percent Solids: 79.5
Method: SW846 8270D SW846 3546		
Project: PNSY Facility, Kittery, ME		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W22385.D	1	06/08/15	KD	06/03/15	OP43283	MSW952
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	20.9 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	120	ug/kg	
208-96-8	Acenaphthylene	ND	120	ug/kg	
120-12-7	Anthracene	ND	120	ug/kg	
56-55-3	Benzo(a)anthracene	ND	120	ug/kg	
50-32-8	Benzo(a)pyrene	ND	120	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	120	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	120	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	120	ug/kg	
218-01-9	Chrysene	ND	120	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	120	ug/kg	
206-44-0	Fluoranthene	ND	120	ug/kg	
86-73-7	Fluorene	ND	120	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	120	ug/kg	
91-57-6	2-Methylnaphthalene	ND	120	ug/kg	
91-20-3	Naphthalene	ND	120	ug/kg	
85-01-8	Phenanthrene	ND	120	ug/kg	
129-00-0	Pyrene	ND	120	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	68%		17-118%
321-60-8	2-Fluorobiphenyl	74%		27-121%
1718-51-0	Terphenyl-d14	95%		39-142%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B4-S2-06	
Lab Sample ID: MC39046-4	Date Sampled: 06/01/15
Matrix: SO - Soil	Date Received: 06/03/15
Method: SW846 8015	Percent Solids: 79.5
Project: PNSY Facility, Kittery, ME	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BD70311.D	1	06/04/15	AF	n/a	n/a	GBD3388
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	8.46 g	10.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (VOA)	ND	8.7	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
	2,3,4-Trifluorotoluene	108%		62-131%	

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.6
3

Client Sample ID: B4-S2-06	Date Sampled: 06/01/15
Lab Sample ID: MC39046-4	Date Received: 06/03/15
Matrix: SO - Soil	Percent Solids: 79.5
Method: SW846 8151 SW846 3550B	
Project: PNSY Facility, Kittery, ME	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ94306.D	1	06/08/15	NK	06/03/15	OP43262	GYZ7781
Run #2							

	Initial Weight	Final Volume
Run #1	30.7 g	5.0 ml
Run #2		

Herbicide List

CAS No.	Compound	Result	RL	Units	Q
94-75-7	2,4-D	ND	25	ug/kg	
93-72-1	2,4,5-TP (Silvex)	ND	25	ug/kg	
93-76-5	2,4,5-T	ND	25	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	100%		12-200%
19719-28-9	2,4-DCAA	73%		12-200%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.6
3

Client Sample ID: B4-S2-06		Date Sampled: 06/01/15
Lab Sample ID: MC39046-4		Date Received: 06/03/15
Matrix: SO - Soil		Percent Solids: 79.5
Method: SW846 8081B SW846 3546		
Project: PNSY Facility, Kittery, ME		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE46206.D	1	06/09/15	NK	06/03/15	OP43286	GBE2336
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	20.8 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	Units	Q
309-00-2	Aldrin	ND	6.0	ug/kg	
319-84-6	alpha-BHC	ND	6.0	ug/kg	
319-85-7	beta-BHC	ND	6.0	ug/kg	
319-86-8	delta-BHC	ND	6.0	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	6.0	ug/kg	
5103-71-9	alpha-Chlordane	ND	6.0	ug/kg	
5103-74-2	gamma-Chlordane	ND	6.0	ug/kg	
60-57-1	Dieldrin	ND	6.0	ug/kg	
72-54-8	4,4'-DDD	ND	6.0	ug/kg	
72-55-9	4,4'-DDE	ND	6.0	ug/kg	
50-29-3	4,4'-DDT	ND	6.0	ug/kg	
72-20-8	Endrin	ND	6.0	ug/kg	
1031-07-8	Endosulfan sulfate	ND	6.0	ug/kg	
7421-93-4	Endrin aldehyde	ND	6.0	ug/kg	
959-98-8	Endosulfan-I	ND	6.0	ug/kg	
33213-65-9	Endosulfan-II	ND	6.0	ug/kg	
76-44-8	Heptachlor	ND	6.0	ug/kg	
1024-57-3	Heptachlor epoxide	ND	6.0	ug/kg	
72-43-5	Methoxychlor	ND	6.0	ug/kg	
53494-70-5	Endrin ketone	ND	6.0	ug/kg	
8001-35-2	Toxaphene	ND	60	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	69%		10-143%
877-09-8	Tetrachloro-m-xylene	71%		10-143%
2051-24-3	Decachlorobiphenyl	81%		10-172%
2051-24-3	Decachlorobiphenyl	84%		10-172%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B4-S2-06		Date Sampled: 06/01/15
Lab Sample ID: MC39046-4		Date Received: 06/03/15
Matrix: SO - Soil		Percent Solids: 79.5
Method: SW846 8082A SW846 3546		
Project: PNSY Facility, Kittery, ME		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK48721.D	1	06/08/15	NK	06/03/15	OP43285	GBK1522
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	20.6 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	31	ug/kg	
11104-28-2	Aroclor 1221	ND	31	ug/kg	
11141-16-5	Aroclor 1232	ND	31	ug/kg	
53469-21-9	Aroclor 1242	ND	31	ug/kg	
12672-29-6	Aroclor 1248	ND	31	ug/kg	
11097-69-1	Aroclor 1254	ND	31	ug/kg	
11096-82-5	Aroclor 1260	ND	31	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	94%		35-136%
877-09-8	Tetrachloro-m-xylene	93%		35-136%
2051-24-3	Decachlorobiphenyl	99%		24-171%
2051-24-3	Decachlorobiphenyl	94%		24-171%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.6
3

Client Sample ID: B4-S2-06	Date Sampled: 06/01/15
Lab Sample ID: MC39046-4	Date Received: 06/03/15
Matrix: SO - Soil	Percent Solids: 79.5
Method: SW846-8015 SW846 3546	
Project: PNSY Facility, Kittery, ME	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CR503.D	1	06/06/15	TA	06/03/15	OP43280	GCR1039
Run #2							

Run #	Initial Weight	Final Volume
Run #1	15.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH-DRO (Semi-VOA)	ND	21	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
84-15-1	o-Terphenyl	96%		40-140%	

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

36
3

Client Sample ID: B4-S2-06	Date Sampled: 06/01/15
Lab Sample ID: MC39046-4	Date Received: 06/03/15
Matrix: SO - Soil	Percent Solids: 79.5
Project: PNSY Facility, Kittery, ME	

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analysed By	Method	Prep Method
Arsenic	10.3	1.0	mg/kg	1	06/04/15	06/04/15 EAL	SW846 6010C ¹	SW846 3050B ³
Barium	12.3	5.1	mg/kg	1	06/04/15	06/04/15 EAL	SW846 6010C ¹	SW846 3050B ³
Cadmium	< 0.41	0.41	mg/kg	1	06/04/15	06/04/15 EAL	SW846 6010C ¹	SW846 3050B ³
Chromium	8.2	1.0	mg/kg	1	06/04/15	06/04/15 EAL	SW846 6010C ¹	SW846 3050B ³
Lead	3.0	1.0	mg/kg	1	06/04/15	06/04/15 EAL	SW846 6010C ¹	SW846 3050B ³
Mercury	< 0.036	0.036	mg/kg	1	06/06/15	06/08/15 EAL	SW846 7471B ²	SW846 7471B ⁴
Selenium	< 1.0	1.0	mg/kg	1	06/04/15	06/04/15 EAL	SW846 6010C ¹	SW846 3050B ³
Silver	< 0.51	0.51	mg/kg	1	06/04/15	06/04/15 EAL	SW846 6010C ¹	SW846 3050B ³

- (1) Instrument QC Batch: MA18182
- (2) Instrument QC Batch: MA18186
- (3) Prep QC Batch: MP24682
- (4) Prep QC Batch: MP24699

RL = Reporting Limit

Report of Analysis

Client Sample ID: B4-S2-06	Date Sampled: 06/01/15
Lab Sample ID: MC39046-4A	Date Received: 06/03/15
Matrix: SO - Soil	Percent Solids: 79.5
Project: PNSY Facility, Kittery, ME	

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 0.010	D004	5.0	0.010	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³
Barium	< 0.50	D005	100	0.50	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³
Cadmium	< 0.0040	D006	1.0	0.0040	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³
Chromium	< 0.010	D007	5.0	0.010	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³
Lead	< 0.010	D008	5.0	0.010	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³
Mercury	< 0.00020	D009	0.20	0.00020	mg/l	1	06/06/15	06/08/15 EAL	SW846 7470A ²	SW846 7470A ⁴
Selenium	< 0.025	D010	1.0	0.025	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³
Silver	< 0.0050	D011	5.0	0.0050	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³

- (1) Instrument QC Batch: MA18184
- (2) Instrument QC Batch: MA18187
- (3) Prep QC Batch: MP24692
- (4) Prep QC Batch: MP24698

RL = Reporting Limit
MCL = Maximum Contamination Level (40 CFR 261 6/96)

Report of Analysis

Client Sample ID: B5-S1-02		Date Sampled: 06/02/15
Lab Sample ID: MC39046-5		Date Received: 06/03/15
Matrix: SO - Soil		Percent Solids: 93.1
Method: SW846 8260C		
Project: PNSY Facility, Kittery, ME		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	K88456.D	1	06/04/15	JM	n/a	n/a	MSK2752
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	7.09 g	10.0 ml	100 ul
Run #2			

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	40	ug/kg	
108-88-3	Toluene	ND	400	ug/kg	
100-41-4	Ethylbenzene	ND	160	ug/kg	
1330-20-7	Xylene (total)	ND	160	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		65-141%
2037-26-5	Toluene-D8	100%		65-129%
460-00-4	4-Bromofluorobenzene	100%		63-137%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B5-S1-02		Date Sampled: 06/02/15
Lab Sample ID: MC39046-5		Date Received: 06/03/15
Matrix: SO - Soil		Percent Solids: 93.1
Method: SW846 8270D SW846 3546		
Project: PNSY Facility, Kittery, ME		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	W22386.D	5	06/08/15	KD	06/03/15	OP43283	MSW952
Run #2							

	Initial Weight	Final Volume
Run #1	20.8 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	520	ug/kg	
208-96-8	Acenaphthylene	ND	520	ug/kg	
120-12-7	Anthracene	ND	520	ug/kg	
56-55-3	Benzo(a)anthracene	693	520	ug/kg	
50-32-8	Benzo(a)pyrene	737	520	ug/kg	
205-99-2	Benzo(b)fluoranthene	817	520	ug/kg	
191-24-2	Benzo(g,h,i)perylene	653	520	ug/kg	
207-08-9	Benzo(k)fluoranthene	562	520	ug/kg	
218-01-9	Chrysene	762	520	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	520	ug/kg	
206-44-0	Fluoranthene	1900	520	ug/kg	
86-73-7	Fluorene	ND	520	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	548	520	ug/kg	
91-57-6	2-Methylnaphthalene	ND	520	ug/kg	
91-20-3	Naphthalene	ND	520	ug/kg	
85-01-8	Phenanthrene	1590	520	ug/kg	
129-00-0	Pyrene	1610	520	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	71%		17-118%
321-60-8	2-Fluorobiphenyl	84%		27-121%
1718-51-0	Terphenyl-d14	99%		39-142%

(a) Elevated RL due to dilution required for matrix interference.

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B5-S1-02		
Lab Sample ID: MC39046-5		Date Sampled: 06/02/15
Matrix: SO - Soil		Date Received: 06/03/15
Method: SW846 8015		Percent Solids: 93.1
Project: PNSY Facility, Kittery, ME		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BD70312.D	1	06/04/15	AF	n/a	n/a	GBD3388
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	7.21 g	10.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (VOA)	ND	7.8	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
	2,3,4-Trifluorotoluene	109%		62-131%	

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B5-S1-02		
Lab Sample ID: MC39046-5		Date Sampled: 06/02/15
Matrix: SO - Soil		Date Received: 06/03/15
Method: SW846 8151 SW846 3550B		Percent Solids: 93.1
Project: PNSY Facility, Kittery, ME		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ94307.D	1	06/08/15	NK	06/03/15	OP43262	GYZ7781
Run #2							

	Initial Weight	Final Volume
Run #1	30.2 g	5.0 ml
Run #2		

Herbicide List

CAS No.	Compound	Result	RL	Units	Q
94-75-7	2,4-D	ND	21	ug/kg	
93-72-1	2,4,5-TP (Silvex)	ND	21	ug/kg	
93-76-5	2,4,5-T	ND	21	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	93%		12-200%
19719-28-9	2,4-DCAA	87%		12-200%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B5-S1-02	
Lab Sample ID: MC39046-5	Date Sampled: 06/02/15
Matrix: SO - Soil	Date Received: 06/03/15
Method: SW846 8081B SW846 3546	Percent Solids: 93.1
Project: PNSY Facility, Kittery, ME	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE46213.D	1	06/09/15	NK	06/03/15	OP43286	GBE2336
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.6 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	Units	Q
309-00-2	Aldrin	ND	5.2	ug/kg	
319-84-6	alpha-BHC	ND	5.2	ug/kg	
319-85-7	beta-BHC	ND	5.2	ug/kg	
319-86-8	delta-BHC	ND	5.2	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	5.2	ug/kg	
5103-71-9	alpha-Chlordane	ND	5.2	ug/kg	
5103-74-2	gamma-Chlordane	ND	5.2	ug/kg	
60-57-1	Dieldrin	ND	5.2	ug/kg	
72-54-8	4,4'-DDD	ND	5.2	ug/kg	
72-55-9	4,4'-DDE	5.7	5.2	ug/kg	
50-29-3	4,4'-DDT	28.5	5.2	ug/kg	
72-20-8	Endrin	ND	5.2	ug/kg	
1031-07-8	Endosulfan sulfate	ND	5.2	ug/kg	
7421-93-4	Endrin aldehyde	ND	5.2	ug/kg	
959-98-8	Endosulfan-I	ND	5.2	ug/kg	
33213-65-9	Endosulfan-II	ND	5.2	ug/kg	
76-44-8	Heptachlor	ND	5.2	ug/kg	
1024-57-3	Heptachlor epoxide	ND	5.2	ug/kg	
72-43-5	Methoxychlor	ND	5.2	ug/kg	
53494-70-5	Endrin ketone	ND	5.2	ug/kg	
8001-35-2	Toxaphene	ND	52	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	78%		10-143%
877-09-8	Tetrachloro-m-xylene	72%		10-143%
2051-24-3	Decachlorobiphenyl	80%		10-172%
2051-24-3	Decachlorobiphenyl	148%		10-172%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B5-S1-02		
Lab Sample ID: MC39046-5		Date Sampled: 06/02/15
Matrix: SO - Soil		Date Received: 06/03/15
Method: SW846 8082A SW846 3546		Percent Solids: 93.1
Project: PNSY Facility, Kittery, ME		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK48722.D	1	06/08/15	NK	06/03/15	OP43285	GBK1522
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.3 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	26	ug/kg	
11104-28-2	Aroclor 1221	ND	26	ug/kg	
11141-16-5	Aroclor 1232	ND	26	ug/kg	
53469-21-9	Aroclor 1242	ND	26	ug/kg	
12672-29-6	Aroclor 1248	ND	26	ug/kg	
11097-69-1	Aroclor 1254	ND	26	ug/kg	
11096-82-5	Aroclor 1260	ND	26	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	89%		35-136%
877-09-8	Tetrachloro-m-xylene	76%		35-136%
2051-24-3	Decachlorobiphenyl	99%		24-171%
2051-24-3	Decachlorobiphenyl	82%		24-171%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis



Client Sample ID: B5-S1-02	Date Sampled: 06/02/15
Lab Sample ID: MC39046-5	Date Received: 06/03/15
Matrix: SO - Soil	Percent Solids: 93.1
Method: SW846-8015 SW846 3546	
Project: PNSY Facility, Kittery, ME	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CR513.D	1	06/06/15	TA	06/03/15	OP43280	GCR1039
Run #2							

	Initial Weight	Final Volume
Run #1	15.4 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH-DRO (Semi-VOA)	256	17	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
84-15-1	o-Terphenyl	86%		40-140%	

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis



Client Sample ID: B5-S1-02 Lab Sample ID: MC39046-5 Matrix: SO - Soil Project: PNSY Facility, Kittery, ME	Date Sampled: 06/02/15 Date Received: 06/03/15 Percent Solids: 93.1
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Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analized By	Method	Prep Method
Arsenic	18.3	0.85	mg/kg	1	06/04/15	06/04/15	EAL SW846 6010C ¹	SW846 3050B ³
Barium	70.1	4.3	mg/kg	1	06/04/15	06/04/15	EAL SW846 6010C ¹	SW846 3050B ³
Cadmium	< 0.34	0.34	mg/kg	1	06/04/15	06/04/15	EAL SW846 6010C ¹	SW846 3050B ³
Chromium	53.1	0.85	mg/kg	1	06/04/15	06/04/15	EAL SW846 6010C ¹	SW846 3050B ³
Lead	73.8	0.85	mg/kg	1	06/04/15	06/04/15	EAL SW846 6010C ¹	SW846 3050B ³
Mercury	0.58	0.034	mg/kg	1	06/06/15	06/08/15	EAL SW846 7471B ²	SW846 7471B ⁴
Selenium	< 0.85	0.85	mg/kg	1	06/04/15	06/04/15	EAL SW846 6010C ¹	SW846 3050B ³
Silver	< 0.43	0.43	mg/kg	1	06/04/15	06/04/15	EAL SW846 6010C ¹	SW846 3050B ³

- (1) Instrument QC Batch: MA18182
- (2) Instrument QC Batch: MA18186
- (3) Prep QC Batch: MP24682
- (4) Prep QC Batch: MP24699

RL = Reporting Limit

Report of Analysis

Client Sample ID: B5-S1-02	Date Sampled: 06/02/15
Lab Sample ID: MC39046-5A	Date Received: 06/03/15
Matrix: SO - Soil	Percent Solids: 93.1
Project: PNSY Facility, Kittery, ME	

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 0.010	D004	5.0	0.010	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³
Barium	0.53	D005	100	0.50	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³
Cadmium	0.0045	D006	1.0	0.0040	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³
Chromium	< 0.010	D007	5.0	0.010	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³
Lead	0.066	D008	5.0	0.010	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³
Mercury	< 0.00020	D009	0.20	0.00020	mg/l	1	06/06/15	06/08/15 EAL	SW846 7470A ²	SW846 7470A ⁴
Selenium	< 0.025	D010	1.0	0.025	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³
Silver	< 0.0050	D011	5.0	0.0050	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³

- (1) Instrument QC Batch: MA18184
- (2) Instrument QC Batch: MA18187
- (3) Prep QC Batch: MP24692
- (4) Prep QC Batch: MP24698

RL = Reporting Limit
MCL = Maximum Contamination Level (40 CFR 261 6/96)

Report of Analysis

Client Sample ID: B6-S1-03	
Lab Sample ID: MC39046-6	Date Sampled: 06/02/15
Matrix: SO - Soil	Date Received: 06/03/15
Method: SW846 8260C	Percent Solids: 91.8
Project: PNSY Facility, Kittery, ME	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	K88457.D	1	06/04/15	JM	n/a	n/a	MSK2752
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	7.31 g	10.0 ml	100 ul
Run #2			

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	39	ug/kg	
108-88-3	Toluene	ND	390	ug/kg	
100-41-4	Ethylbenzene	ND	160	ug/kg	
1330-20-7	Xylene (total)	ND	160	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		65-141%
2037-26-5	Toluene-D8	99%		65-129%
460-00-4	4-Bromofluorobenzene	99%		63-137%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B6-S1-03		Date Sampled: 06/02/15
Lab Sample ID: MC39046-6		Date Received: 06/03/15
Matrix: SO - Soil		Percent Solids: 91.8
Method: SW846 8270D SW846 3546		
Project: PNSY Facility, Kittery, ME		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W22387.D	1	06/08/15	KD	06/03/15	OP43283	MSW952
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	20.7 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	110	ug/kg	
208-96-8	Acenaphthylene	ND	110	ug/kg	
120-12-7	Anthracene	140	110	ug/kg	
56-55-3	Benzo(a)anthracene	757	110	ug/kg	
50-32-8	Benzo(a)pyrene	757	110	ug/kg	
205-99-2	Benzo(b)fluoranthene	628	110	ug/kg	
191-24-2	Benzo(g,h,i)perylene	460	110	ug/kg	
207-08-9	Benzo(k)fluoranthene	634	110	ug/kg	
218-01-9	Chrysene	757	110	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	190	110	ug/kg	
206-44-0	Fluoranthene	978	110	ug/kg	
86-73-7	Fluorene	ND	110	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	416	110	ug/kg	
91-57-6	2-Methylnaphthalene	ND	110	ug/kg	
91-20-3	Naphthalene	ND	110	ug/kg	
85-01-8	Phenanthrene	357	110	ug/kg	
129-00-0	Pyrene	1030	110	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	59%		17-118%
321-60-8	2-Fluorobiphenyl	68%		27-121%
1718-51-0	Terphenyl-d14	83%		39-142%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B6-S1-03	
Lab Sample ID: MC39046-6	Date Sampled: 06/02/15
Matrix: SO - Soil	Date Received: 06/03/15
Method: SW846 8015	Percent Solids: 91.8
Project: PNSY Facility, Kittery, ME	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BD70313.D	1	06/04/15	AF	n/a	n/a	GBD3388
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	7.31 g	10.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (VOA)	ND	7.9	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
	2,3,4-Trifluorotoluene	110%		62-131%	

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B6-S1-03		Date Sampled: 06/02/15
Lab Sample ID: MC39046-6		Date Received: 06/03/15
Matrix: SO - Soil		Percent Solids: 91.8
Method: SW846 8151 SW846 3550B		
Project: PNSY Facility, Kittery, ME		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ94308.D	1	06/08/15	NK	06/03/15	OP43262	GYZ7781
Run #2							

	Initial Weight	Final Volume
Run #1	30.2 g	5.0 ml
Run #2		

Herbicide List

CAS No.	Compound	Result	RL	Units	Q
94-75-7	2,4-D	ND	22	ug/kg	
93-72-1	2,4,5-TP (Silvex)	ND	22	ug/kg	
93-76-5	2,4,5-T	ND	22	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	86%		12-200%
19719-28-9	2,4-DCAA	80%		12-200%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B6-S1-03		Date Sampled: 06/02/15
Lab Sample ID: MC39046-6		Date Received: 06/03/15
Matrix: SO - Soil		Percent Solids: 91.8
Method: SW846 8081B SW846 3546		
Project: PNSY Facility, Kittery, ME		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE46214.D	1	06/09/15	NK	06/03/15	OP43286	GBE2336
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	20.2 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	Units	Q
309-00-2	Aldrin	ND	5.4	ug/kg	
319-84-6	alpha-BHC	ND	5.4	ug/kg	
319-85-7	beta-BHC	ND	5.4	ug/kg	
319-86-8	delta-BHC	ND	5.4	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	5.4	ug/kg	
5103-71-9	alpha-Chlordane	ND	5.4	ug/kg	
5103-74-2	gamma-Chlordane	ND	5.4	ug/kg	
60-57-1	Dieldrin	ND	5.4	ug/kg	
72-54-8	4,4'-DDD	ND	5.4	ug/kg	
72-55-9	4,4'-DDE	ND	5.4	ug/kg	
50-29-3	4,4'-DDT ^a	6.2	5.4	ug/kg	
72-20-8	Endrin	ND	5.4	ug/kg	
1031-07-8	Endosulfan sulfate	ND	5.4	ug/kg	
7421-93-4	Endrin aldehyde	ND	5.4	ug/kg	
959-98-8	Endosulfan-I	ND	5.4	ug/kg	
33213-65-9	Endosulfan-II	ND	5.4	ug/kg	
76-44-8	Heptachlor	ND	5.4	ug/kg	
1024-57-3	Heptachlor epoxide	ND	5.4	ug/kg	
72-43-5	Methoxychlor	ND	5.4	ug/kg	
53494-70-5	Endrin ketone	ND	5.4	ug/kg	
8001-35-2	Toxaphene	ND	54	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	78%		10-143%
877-09-8	Tetrachloro-m-xylene	73%		10-143%
2051-24-3	Decachlorobiphenyl	84%		10-172%
2051-24-3	Decachlorobiphenyl	124%		10-172%

(a) Confirmation value > 40% RPD.

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B6-S1-03	
Lab Sample ID: MC39046-6	Date Sampled: 06/02/15
Matrix: SO - Soil	Date Received: 06/03/15
Method: SW846 8082A SW846 3546	Percent Solids: 91.8
Project: PNSY Facility, Kittery, ME	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK48723.D	1	06/08/15	NK	06/03/15	OP43285	GBK1522
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.6 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	27	ug/kg	
11104-28-2	Aroclor 1221	ND	27	ug/kg	
11141-16-5	Aroclor 1232	ND	27	ug/kg	
53469-21-9	Aroclor 1242	ND	27	ug/kg	
12672-29-6	Aroclor 1248	ND	27	ug/kg	
11097-69-1	Aroclor 1254	ND	27	ug/kg	
11096-82-5	Aroclor 1260	ND	27	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	97%		35-136%
877-09-8	Tetrachloro-m-xylene	86%		35-136%
2051-24-3	Decachlorobiphenyl	114%		24-171%
2051-24-3	Decachlorobiphenyl	95%		24-171%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B6-S1-03	Date Sampled: 06/02/15
Lab Sample ID: MC39046-6	Date Received: 06/03/15
Matrix: SO - Soil	Percent Solids: 91.8
Method: SW846-8015 SW846 3546	
Project: PNSY Facility, Kittery, ME	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CR514.D	1	06/06/15	TA	06/03/15	OP43280	GCR1039
Run #2							

	Initial Weight	Final Volume
Run #1	15.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH-DRO (Semi-VOA)	170	18	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
84-15-1	o-Terphenyl	72%		40-140%	

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B6-S1-03	Date Sampled: 06/02/15
Lab Sample ID: MC39046-6	Date Received: 06/03/15
Matrix: SO - Soil	Percent Solids: 91.8
Project: PNSY Facility, Kittery, ME	

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	8.2	0.86	mg/kg	1	06/04/15	06/04/15 EAL	SW846 6010C ¹	SW846 3050B ³
Barium	79.3	4.3	mg/kg	1	06/04/15	06/04/15 EAL	SW846 6010C ¹	SW846 3050B ³
Cadmium	< 0.35	0.35	mg/kg	1	06/04/15	06/04/15 EAL	SW846 6010C ¹	SW846 3050B ³
Chromium	51.4	0.86	mg/kg	1	06/04/15	06/04/15 EAL	SW846 6010C ¹	SW846 3050B ³
Lead	74.3	0.86	mg/kg	1	06/04/15	06/04/15 EAL	SW846 6010C ¹	SW846 3050B ³
Mercury	0.12	0.033	mg/kg	1	06/06/15	06/08/15 EAL	SW846 7471B ²	SW846 7471B ⁴
Selenium	< 0.86	0.86	mg/kg	1	06/04/15	06/04/15 EAL	SW846 6010C ¹	SW846 3050B ³
Silver	< 0.43	0.43	mg/kg	1	06/04/15	06/04/15 EAL	SW846 6010C ¹	SW846 3050B ³

- (1) Instrument QC Batch: MA18182
- (2) Instrument QC Batch: MA18186
- (3) Prep QC Batch: MP24682
- (4) Prep QC Batch: MP24699

RL = Reporting Limit

Report of Analysis

Client Sample ID: B6-S1-03	Date Sampled: 06/02/15
Lab Sample ID: MC39046-6A	Date Received: 06/03/15
Matrix: SO - Soil	Percent Solids: 91.8
Project: PNSY Facility, Kittery, ME	

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 0.010	D004	5.0	0.010	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³
Barium	0.54	D005	100	0.50	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³
Cadmium	< 0.0040	D006	1.0	0.0040	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³
Chromium	< 0.010	D007	5.0	0.010	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³
Lead	0.082	D008	5.0	0.010	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³
Mercury	< 0.00020	D009	0.20	0.00020	mg/l	1	06/06/15	06/08/15 EAL	SW846 7470A ²	SW846 7470A ⁴
Selenium	< 0.025	D010	1.0	0.025	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³
Silver	< 0.0050	D011	5.0	0.0050	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³

- (1) Instrument QC Batch: MA18184
- (2) Instrument QC Batch: MA18187
- (3) Prep QC Batch: MP24692
- (4) Prep QC Batch: MP24698

RL = Reporting Limit
MCL = Maximum Contamination Level (40 CFR 261 6/96)

Report of Analysis

Client Sample ID: B6-S2-08		Date Sampled: 06/02/15
Lab Sample ID: MC39046-7		Date Received: 06/03/15
Matrix: SO - Soil		Percent Solids: 91.8
Method: SW846 8260C		
Project: PNSY Facility, Kittery, ME		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	K88458.D	1	06/04/15	JM	n/a	n/a	MSK2752
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	7.25 g	10.0 ml	100 ul
Run #2			

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	40	ug/kg	
108-88-3	Toluene	ND	400	ug/kg	
100-41-4	Ethylbenzene	ND	160	ug/kg	
1330-20-7	Xylene (total)	ND	160	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		65-141%
2037-26-5	Toluene-D8	102%		65-129%
460-00-4	4-Bromofluorobenzene	100%		63-137%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B6-S2-08		Date Sampled: 06/02/15
Lab Sample ID: MC39046-7		Date Received: 06/03/15
Matrix: SO - Soil		Percent Solids: 91.8
Method: SW846 8015		
Project: PNSY Facility, Kittery, ME		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BD70314.D	1	06/04/15	AF	n/a	n/a	GBD3388
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	7.25 g	10.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (VOA)	ND	8.0	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
	2,3,4-Trifluorotoluene	105%		62-131%	

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B7-S1-03		Date Sampled: 06/02/15
Lab Sample ID: MC39046-8		Date Received: 06/03/15
Matrix: SO - Soil		Percent Solids: 89.8
Method: SW846 8260C		
Project: PNSY Facility, Kittery, ME		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	K88461.D	1	06/04/15	JM	n/a	n/a	MSK2752
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	7.89 g	10.0 ml	100 ul
Run #2			

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	38	ug/kg	
108-88-3	Toluene	ND	380	ug/kg	
100-41-4	Ethylbenzene	ND	150	ug/kg	
1330-20-7	Xylene (total)	ND	150	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		65-141%
2037-26-5	Toluene-D8	101%		65-129%
460-00-4	4-Bromofluorobenzene	99%		63-137%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B7-S1-03		Date Sampled: 06/02/15
Lab Sample ID: MC39046-8		Date Received: 06/03/15
Matrix: SO - Soil		Percent Solids: 89.8
Method: SW846 8270D SW846 3546		
Project: PNSY Facility, Kittery, ME		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W22388.D	1	06/08/15	KD	06/03/15	OP43283	MSW952
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	20.3 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	110	ug/kg	
208-96-8	Acenaphthylene	ND	110	ug/kg	
120-12-7	Anthracene	ND	110	ug/kg	
56-55-3	Benzo(a)anthracene	186	110	ug/kg	
50-32-8	Benzo(a)pyrene	207	110	ug/kg	
205-99-2	Benzo(b)fluoranthene	226	110	ug/kg	
191-24-2	Benzo(g,h,i)perylene	156	110	ug/kg	
207-08-9	Benzo(k)fluoranthene	162	110	ug/kg	
218-01-9	Chrysene	278	110	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	110	ug/kg	
206-44-0	Fluoranthene	253	110	ug/kg	
86-73-7	Fluorene	ND	110	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	126	110	ug/kg	
91-57-6	2-Methylnaphthalene	ND	110	ug/kg	
91-20-3	Naphthalene	ND	110	ug/kg	
85-01-8	Phenanthrene	260	110	ug/kg	
129-00-0	Pyrene	250	110	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	63%		17-118%
321-60-8	2-Fluorobiphenyl	77%		27-121%
1718-51-0	Terphenyl-d14	97%		39-142%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B7-S1-03	Date Sampled: 06/02/15
Lab Sample ID: MC39046-8	Date Received: 06/03/15
Matrix: SO - Soil	Percent Solids: 89.8
Method: SW846 8015	
Project: PNSY Facility, Kittery, ME	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BD70316.D	1	06/04/15	AF	n/a	n/a	GBD3388
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	7.98 g	10.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (VOA)	ND	7.5	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
	2,3,4-Trifluorotoluene	101%		62-131%	

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B7-S1-03	Date Sampled: 06/02/15
Lab Sample ID: MC39046-8	Date Received: 06/03/15
Matrix: SO - Soil	Percent Solids: 89.8
Method: SW846 8151 SW846 3550B	
Project: PNSY Facility, Kittery, ME	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ94309.D	1	06/08/15	NK	06/03/15	OP43262	GYZ7781
Run #2							

	Initial Weight	Final Volume
Run #1	30.7 g	5.0 ml
Run #2		

Herbicide List

CAS No.	Compound	Result	RL	Units	Q
94-75-7	2,4-D	ND	22	ug/kg	
93-72-1	2,4,5-TP (Silvex)	ND	22	ug/kg	
93-76-5	2,4,5-T	ND	22	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	124%		12-200%
19719-28-9	2,4-DCAA	94%		12-200%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B7-S1-03	
Lab Sample ID: MC39046-8	Date Sampled: 06/02/15
Matrix: SO - Soil	Date Received: 06/03/15
Method: SW846 8081B SW846 3546	Percent Solids: 89.8
Project: PNSY Facility, Kittery, ME	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE46217.D	1	06/09/15	NK	06/03/15	OP43286	GBE2336
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	20.4 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	Units	Q
309-00-2	Aldrin	ND	5.5	ug/kg	
319-84-6	alpha-BHC	ND	5.5	ug/kg	
319-85-7	beta-BHC	ND	5.5	ug/kg	
319-86-8	delta-BHC	ND	5.5	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	5.5	ug/kg	
5103-71-9	alpha-Chlordane	ND	5.5	ug/kg	
5103-74-2	gamma-Chlordane	ND	5.5	ug/kg	
60-57-1	Dieldrin	ND	5.5	ug/kg	
72-54-8	4,4' -DDD	ND	5.5	ug/kg	
72-55-9	4,4' -DDE	ND	5.5	ug/kg	
50-29-3	4,4' -DDT	ND	5.5	ug/kg	
72-20-8	Endrin	ND	5.5	ug/kg	
1031-07-8	Endosulfan sulfate	ND	5.5	ug/kg	
7421-93-4	Endrin aldehyde	ND	5.5	ug/kg	
959-98-8	Endosulfan-I	ND	5.5	ug/kg	
33213-65-9	Endosulfan-II	ND	5.5	ug/kg	
76-44-8	Heptachlor	ND	5.5	ug/kg	
1024-57-3	Heptachlor epoxide	ND	5.5	ug/kg	
72-43-5	Methoxychlor	ND	5.5	ug/kg	
53494-70-5	Endrin ketone	ND	5.5	ug/kg	
8001-35-2	Toxaphene	ND	55	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	66%		10-143%
877-09-8	Tetrachloro-m-xylene	70%		10-143%
2051-24-3	Decachlorobiphenyl	80%		10-172%
2051-24-3	Decachlorobiphenyl	85%		10-172%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B7-S1-03		Date Sampled: 06/02/15
Lab Sample ID: MC39046-8		Date Received: 06/03/15
Matrix: SO - Soil		Percent Solids: 89.8
Method: SW846 8082A SW846 3546		
Project: PNSY Facility, Kittery, ME		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK48724.D	1	06/08/15	NK	06/03/15	OP43285	GBK1522
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.3 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	27	ug/kg	
11104-28-2	Aroclor 1221	ND	27	ug/kg	
11141-16-5	Aroclor 1232	ND	27	ug/kg	
53469-21-9	Aroclor 1242	ND	27	ug/kg	
12672-29-6	Aroclor 1248	ND	27	ug/kg	
11097-69-1	Aroclor 1254	ND	27	ug/kg	
11096-82-5	Aroclor 1260	ND	27	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	89%		35-136%
877-09-8	Tetrachloro-m-xylene	86%		35-136%
2051-24-3	Decachlorobiphenyl	101%		24-171%
2051-24-3	Decachlorobiphenyl	87%		24-171%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B7-S1-03	Date Sampled: 06/02/15
Lab Sample ID: MC39046-8	Date Received: 06/03/15
Matrix: SO - Soil	Percent Solids: 89.8
Method: SW846-8015 SW846 3546	
Project: PNSY Facility, Kittery, ME	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CR515.D	1	06/06/15	TA	06/03/15	OP43280	GCR1039
Run #2							

	Initial Weight	Final Volume
Run #1	15.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH-DRO (Semi-VOA)	133	19	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
84-15-1	o-Terphenyl	97%		40-140%	

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B7-S1-03	Date Sampled: 06/02/15
Lab Sample ID: MC39046-8	Date Received: 06/03/15
Matrix: SO - Soil	Percent Solids: 89.8
Project: PNSY Facility, Kittery, ME	

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analysed By	Method	Prep Method
Arsenic	17.9	0.85	mg/kg	1	06/04/15	06/04/15 EAL	SW846 6010C ¹	SW846 3050B ³
Barium	100	4.3	mg/kg	1	06/04/15	06/04/15 EAL	SW846 6010C ¹	SW846 3050B ³
Cadmium	< 0.34	0.34	mg/kg	1	06/04/15	06/04/15 EAL	SW846 6010C ¹	SW846 3050B ³
Chromium	43.7	0.85	mg/kg	1	06/04/15	06/04/15 EAL	SW846 6010C ¹	SW846 3050B ³
Lead	602	0.85	mg/kg	1	06/04/15	06/04/15 EAL	SW846 6010C ¹	SW846 3050B ³
Mercury	0.42	0.031	mg/kg	1	06/06/15	06/08/15 EAL	SW846 7471B ²	SW846 7471B ⁴
Selenium	< 0.85	0.85	mg/kg	1	06/04/15	06/04/15 EAL	SW846 6010C ¹	SW846 3050B ³
Silver	< 0.43	0.43	mg/kg	1	06/04/15	06/04/15 EAL	SW846 6010C ¹	SW846 3050B ³

- (1) Instrument QC Batch: MA18182
- (2) Instrument QC Batch: MA18186
- (3) Prep QC Batch: MP24682
- (4) Prep QC Batch: MP24699

RL = Reporting Limit

Report of Analysis

Client Sample ID: B7-S1-03	Date Sampled: 06/02/15
Lab Sample ID: MC39046-8A	Date Received: 06/03/15
Matrix: SO - Soil	Percent Solids: 89.8
Project: PNSY Facility, Kittery, ME	

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 0.010	D004	5.0	0.010	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³
Barium	0.51	D005	100	0.50	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³
Cadmium	< 0.0040	D006	1.0	0.0040	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³
Chromium	< 0.010	D007	5.0	0.010	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³
Lead	0.75	D008	5.0	0.010	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³
Mercury	< 0.00020	D009	0.20	0.00020	mg/l	1	06/06/15	06/08/15 EAL	SW846 7470A ²	SW846 7470A ⁴
Selenium	< 0.025	D010	1.0	0.025	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³
Silver	< 0.0050	D011	5.0	0.0050	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³

- (1) Instrument QC Batch: MA18184
- (2) Instrument QC Batch: MA18187
- (3) Prep QC Batch: MP24692
- (4) Prep QC Batch: MP24698

RL = Reporting Limit
MCL = Maximum Contamination Level (40 CFR 261 6/96)

Report of Analysis

Client Sample ID: B8-S1-02	Date Sampled: 06/02/15
Lab Sample ID: MC39046-9	Date Received: 06/03/15
Matrix: SO - Soil	Percent Solids: 75.0
Method: SW846 8260C	
Project: PNSY Facility, Kittery, ME	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	K88462.D	1	06/04/15	JM	n/a	n/a	MSK2752
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	7.50 g	10.0 ml	100 ul
Run #2			

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	53	ug/kg	
108-88-3	Toluene	ND	530	ug/kg	
100-41-4	Ethylbenzene	ND	210	ug/kg	
1330-20-7	Xylene (total)	ND	210	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		65-141%
2037-26-5	Toluene-D8	99%		65-129%
460-00-4	4-Bromofluorobenzene	101%		63-137%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B8-S1-02		Date Sampled: 06/02/15
Lab Sample ID: MC39046-9		Date Received: 06/03/15
Matrix: SO - Soil		Percent Solids: 75.0
Method: SW846 8270D SW846 3546		
Project: PNSY Facility, Kittery, ME		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W22389.D	1	06/08/15	KD	06/03/15	OP43283	MSW952
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.9 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	130	ug/kg	
208-96-8	Acenaphthylene	ND	130	ug/kg	
120-12-7	Anthracene	ND	130	ug/kg	
56-55-3	Benzo(a)anthracene	ND	130	ug/kg	
50-32-8	Benzo(a)pyrene	ND	130	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	130	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	130	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	130	ug/kg	
218-01-9	Chrysene	166	130	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	130	ug/kg	
206-44-0	Fluoranthene	272	130	ug/kg	
86-73-7	Fluorene	ND	130	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	130	ug/kg	
91-57-6	2-Methylnaphthalene	ND	130	ug/kg	
91-20-3	Naphthalene	ND	130	ug/kg	
85-01-8	Phenanthrene	233	130	ug/kg	
129-00-0	Pyrene	238	130	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	67%		17-118%
321-60-8	2-Fluorobiphenyl	79%		27-121%
1718-51-0	Terphenyl-d14	100%		39-142%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B8-S1-02	Date Sampled: 06/02/15
Lab Sample ID: MC39046-9	Date Received: 06/03/15
Matrix: SO - Soil	Percent Solids: 75.0
Method: SW846 8015	
Project: PNSY Facility, Kittery, ME	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BD70317.D	1	06/04/15	AF	n/a	n/a	GBD3388
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	7.50 g	10.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (VOA)	ND	11	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
	2,3,4-Trifluorotoluene	112%		62-131%	

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B8-S1-02		
Lab Sample ID: MC39046-9		Date Sampled: 06/02/15
Matrix: SO - Soil		Date Received: 06/03/15
Method: SW846 8151 SW846 3550B		Percent Solids: 75.0
Project: PNSY Facility, Kittery, ME		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ94310.D	1	06/08/15	NK	06/03/15	OP43262	GYZ7781
Run #2							

	Initial Weight	Final Volume
Run #1	30.3 g	5.0 ml
Run #2		

Herbicide List

CAS No.	Compound	Result	RL	Units	Q
94-75-7	2,4-D	ND	26	ug/kg	
93-72-1	2,4,5-TP (Silvex)	ND	26	ug/kg	
93-76-5	2,4,5-T	ND	26	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	112%		12-200%
19719-28-9	2,4-DCAA	87%		12-200%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B8-S1-02	
Lab Sample ID: MC39046-9	Date Sampled: 06/02/15
Matrix: SO - Soil	Date Received: 06/03/15
Method: SW846 8081B SW846 3546	Percent Solids: 75.0
Project: PNSY Facility, Kittery, ME	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE46208.D	1	06/09/15	NK	06/03/15	OP43286	GBE2336
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.6 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	Units	Q
309-00-2	Aldrin	ND	6.5	ug/kg	
319-84-6	alpha-BHC	ND	6.5	ug/kg	
319-85-7	beta-BHC	ND	6.5	ug/kg	
319-86-8	delta-BHC	ND	6.5	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	6.5	ug/kg	
5103-71-9	alpha-Chlordane	ND	6.5	ug/kg	
5103-74-2	gamma-Chlordane	ND	6.5	ug/kg	
60-57-1	Dieldrin	ND	6.5	ug/kg	
72-54-8	4,4'-DDD	ND	6.5	ug/kg	
72-55-9	4,4'-DDE	ND	6.5	ug/kg	
50-29-3	4,4'-DDT	ND	6.5	ug/kg	
72-20-8	Endrin	ND	6.5	ug/kg	
1031-07-8	Endosulfan sulfate	ND	6.5	ug/kg	
7421-93-4	Endrin aldehyde	ND	6.5	ug/kg	
959-98-8	Endosulfan-I	ND	6.5	ug/kg	
33213-65-9	Endosulfan-II	ND	6.5	ug/kg	
76-44-8	Heptachlor	ND	6.5	ug/kg	
1024-57-3	Heptachlor epoxide	ND	6.5	ug/kg	
72-43-5	Methoxychlor	ND	6.5	ug/kg	
53494-70-5	Endrin ketone	ND	6.5	ug/kg	
8001-35-2	Toxaphene	ND	65	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	73%		10-143%
877-09-8	Tetrachloro-m-xylene	66%		10-143%
2051-24-3	Decachlorobiphenyl	85%		10-172%
2051-24-3	Decachlorobiphenyl	92%		10-172%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B8-S1-02		
Lab Sample ID: MC39046-9		Date Sampled: 06/02/15
Matrix: SO - Soil		Date Received: 06/03/15
Method: SW846 8082A SW846 3546		Percent Solids: 75.0
Project: PNSY Facility, Kittery, ME		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK48725.D	1	06/08/15	NK	06/03/15	OP43285	GBK1522
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.2 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	33	ug/kg	
11104-28-2	Aroclor 1221	ND	33	ug/kg	
11141-16-5	Aroclor 1232	ND	33	ug/kg	
53469-21-9	Aroclor 1242	ND	33	ug/kg	
12672-29-6	Aroclor 1248	ND	33	ug/kg	
11097-69-1	Aroclor 1254	ND	33	ug/kg	
11096-82-5	Aroclor 1260	ND	33	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	94%		35-136%
877-09-8	Tetrachloro-m-xylene	86%		35-136%
2051-24-3	Decachlorobiphenyl	105%		24-171%
2051-24-3	Decachlorobiphenyl	92%		24-171%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B8-S1-02	Date Sampled: 06/02/15
Lab Sample ID: MC39046-9	Date Received: 06/03/15
Matrix: SO - Soil	Percent Solids: 75.0
Method: SW846-8015 SW846 3546	
Project: PNSY Facility, Kittery, ME	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CR508.D	1	06/06/15	TA	06/03/15	OP43280	GCR1039
Run #2							

	Initial Weight	Final Volume
Run #1	15.5 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH-DRO (Semi-VOA)	83.8	22	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
84-15-1	o-Terphenyl	100%		40-140%	

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B8-S1-02 Lab Sample ID: MC39046-9 Matrix: SO - Soil Project: PNSY Facility, Kittery, ME	Date Sampled: 06/02/15 Date Received: 06/03/15 Percent Solids: 75.0
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Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analized By	Method	Prep Method
Arsenic	13.5	0.99	mg/kg	1	06/04/15	06/04/15 EAL	SW846 6010C ¹	SW846 3050B ³
Barium	102	4.9	mg/kg	1	06/04/15	06/04/15 EAL	SW846 6010C ¹	SW846 3050B ³
Cadmium	< 0.40	0.40	mg/kg	1	06/04/15	06/04/15 EAL	SW846 6010C ¹	SW846 3050B ³
Chromium	48.4	0.99	mg/kg	1	06/04/15	06/04/15 EAL	SW846 6010C ¹	SW846 3050B ³
Lead	31.8	0.99	mg/kg	1	06/04/15	06/04/15 EAL	SW846 6010C ¹	SW846 3050B ³
Mercury	0.41	0.039	mg/kg	1	06/06/15	06/08/15 EAL	SW846 7471B ²	SW846 7471B ⁴
Selenium	< 0.99	0.99	mg/kg	1	06/04/15	06/04/15 EAL	SW846 6010C ¹	SW846 3050B ³
Silver	< 0.49	0.49	mg/kg	1	06/04/15	06/04/15 EAL	SW846 6010C ¹	SW846 3050B ³

- (1) Instrument QC Batch: MA18182
- (2) Instrument QC Batch: MA18186
- (3) Prep QC Batch: MP24682
- (4) Prep QC Batch: MP24699

RL = Reporting Limit

Report of Analysis

Client Sample ID: B8-S1-02	Date Sampled: 06/02/15
Lab Sample ID: MC39046-9A	Date Received: 06/03/15
Matrix: SO - Soil	Percent Solids: 75.0
Project: PNSY Facility, Kittery, ME	

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	0.036	D004	5.0	0.010	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³
Barium	0.66	D005	100	0.50	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³
Cadmium	< 0.0040	D006	1.0	0.0040	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³
Chromium	< 0.010	D007	5.0	0.010	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³
Lead	0.21	D008	5.0	0.010	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³
Mercury	< 0.00020	D009	0.20	0.00020	mg/l	1	06/06/15	06/08/15 EAL	SW846 7470A ²	SW846 7470A ⁴
Selenium	< 0.025	D010	1.0	0.025	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³
Silver	< 0.0050	D011	5.0	0.0050	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³

- (1) Instrument QC Batch: MA18184
- (2) Instrument QC Batch: MA18187
- (3) Prep QC Batch: MP24692
- (4) Prep QC Batch: MP24698

RL = Reporting Limit
MCL = Maximum Contamination Level (40 CFR 261 6/96)

Report of Analysis

Client Sample ID: B8-S2-04	Date Sampled: 06/02/15
Lab Sample ID: MC39046-10	Date Received: 06/03/15
Matrix: SO - Soil	Percent Solids: 83.9
Method: SW846 8260C	
Project: PNSY Facility, Kittery, ME	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	K88463.D	1	06/04/15	JM	n/a	n/a	MSK2752
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	9.04 g	10.0 ml	100 ul
Run #2			

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	38	ug/kg	
108-88-3	Toluene	ND	380	ug/kg	
100-41-4	Ethylbenzene	ND	150	ug/kg	
1330-20-7	Xylene (total)	ND	150	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		65-141%
2037-26-5	Toluene-D8	103%		65-129%
460-00-4	4-Bromofluorobenzene	99%		63-137%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B8-S2-04		Date Sampled: 06/02/15
Lab Sample ID: MC39046-10		Date Received: 06/03/15
Matrix: SO - Soil		Percent Solids: 83.9
Method: SW846 8270D SW846 3546		
Project: PNSY Facility, Kittery, ME		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W22382.D	1	06/08/15	KD	06/03/15	OP43283	MSW952
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	20.8 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	110	ug/kg	
208-96-8	Acenaphthylene	ND	110	ug/kg	
120-12-7	Anthracene	ND	110	ug/kg	
56-55-3	Benzo(a)anthracene	ND	110	ug/kg	
50-32-8	Benzo(a)pyrene	ND	110	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	110	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	110	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	110	ug/kg	
218-01-9	Chrysene	ND	110	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	110	ug/kg	
206-44-0	Fluoranthene	ND	110	ug/kg	
86-73-7	Fluorene	ND	110	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	110	ug/kg	
91-57-6	2-Methylnaphthalene	ND	110	ug/kg	
91-20-3	Naphthalene	ND	110	ug/kg	
85-01-8	Phenanthrene	ND	110	ug/kg	
129-00-0	Pyrene	ND	110	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	68%		17-118%
321-60-8	2-Fluorobiphenyl	79%		27-121%
1718-51-0	Terphenyl-d14	99%		39-142%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B8-S2-04	Date Sampled: 06/02/15
Lab Sample ID: MC39046-10	Date Received: 06/03/15
Matrix: SO - Soil	Percent Solids: 83.9
Method: SW846 8015	
Project: PNSY Facility, Kittery, ME	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BD70318.D	1	06/04/15	AF	n/a	n/a	GBD3388
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	9.04 g	10.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (VOA)	ND	7.6	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
	2,3,4-Trifluorotoluene	110%		62-131%	

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B8-S2-04		Date Sampled: 06/02/15
Lab Sample ID: MC39046-10		Date Received: 06/03/15
Matrix: SO - Soil		Percent Solids: 83.9
Method: SW846 8151 SW846 3550B		
Project: PNSY Facility, Kittery, ME		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ94311.D	1	06/08/15	NK	06/03/15	OP43262	GYZ7781
Run #2							

	Initial Weight	Final Volume
Run #1	30.9 g	5.0 ml
Run #2		

Herbicide List

CAS No.	Compound	Result	RL	Units	Q
94-75-7	2,4-D	ND	23	ug/kg	
93-72-1	2,4,5-TP (Silvex)	ND	23	ug/kg	
93-76-5	2,4,5-T	ND	23	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	114%		12-200%
19719-28-9	2,4-DCAA	87%		12-200%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B8-S2-04		Date Sampled: 06/02/15
Lab Sample ID: MC39046-10		Date Received: 06/03/15
Matrix: SO - Soil		Percent Solids: 83.9
Method: SW846 8081B SW846 3546		
Project: PNSY Facility, Kittery, ME		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE46209.D	1	06/09/15	NK	06/03/15	OP43286	GBE2336
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.3 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	Units	Q
309-00-2	Aldrin	ND	5.9	ug/kg	
319-84-6	alpha-BHC	ND	5.9	ug/kg	
319-85-7	beta-BHC	ND	5.9	ug/kg	
319-86-8	delta-BHC	ND	5.9	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	5.9	ug/kg	
5103-71-9	alpha-Chlordane	ND	5.9	ug/kg	
5103-74-2	gamma-Chlordane	ND	5.9	ug/kg	
60-57-1	Dieldrin	ND	5.9	ug/kg	
72-54-8	4,4'-DDD	ND	5.9	ug/kg	
72-55-9	4,4'-DDE	ND	5.9	ug/kg	
50-29-3	4,4'-DDT	ND	5.9	ug/kg	
72-20-8	Endrin	ND	5.9	ug/kg	
1031-07-8	Endosulfan sulfate	ND	5.9	ug/kg	
7421-93-4	Endrin aldehyde	ND	5.9	ug/kg	
959-98-8	Endosulfan-I	ND	5.9	ug/kg	
33213-65-9	Endosulfan-II	ND	5.9	ug/kg	
76-44-8	Heptachlor	ND	5.9	ug/kg	
1024-57-3	Heptachlor epoxide	ND	5.9	ug/kg	
72-43-5	Methoxychlor	ND	5.9	ug/kg	
53494-70-5	Endrin ketone	ND	5.9	ug/kg	
8001-35-2	Toxaphene	ND	59	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	75%		10-143%
877-09-8	Tetrachloro-m-xylene	75%		10-143%
2051-24-3	Decachlorobiphenyl	101%		10-172%
2051-24-3	Decachlorobiphenyl	99%		10-172%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B8-S2-04	Date Sampled: 06/02/15
Lab Sample ID: MC39046-10	Date Received: 06/03/15
Matrix: SO - Soil	Percent Solids: 83.9
Method: SW846 8082A SW846 3546	
Project: PNSY Facility, Kittery, ME	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK48726.D	1	06/09/15	NK	06/03/15	OP43285	GBK1522
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	20.6 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	29	ug/kg	
11104-28-2	Aroclor 1221	ND	29	ug/kg	
11141-16-5	Aroclor 1232	ND	29	ug/kg	
53469-21-9	Aroclor 1242	ND	29	ug/kg	
12672-29-6	Aroclor 1248	ND	29	ug/kg	
11097-69-1	Aroclor 1254	ND	29	ug/kg	
11096-82-5	Aroclor 1260	ND	29	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	98%		35-136%
877-09-8	Tetrachloro-m-xylene	93%		35-136%
2051-24-3	Decachlorobiphenyl	104%		24-171%
2051-24-3	Decachlorobiphenyl	99%		24-171%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B8-S2-04	Date Sampled: 06/02/15
Lab Sample ID: MC39046-10	Date Received: 06/03/15
Matrix: SO - Soil	Percent Solids: 83.9
Method: SW846-8015 SW846 3546	
Project: PNSY Facility, Kittery, ME	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CR509.D	1	06/06/15	TA	06/03/15	OP43280	GCR1039
Run #2							

Run #	Initial Weight	Final Volume
Run #1	15.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH-DRO (Semi-VOA)	33.5	20	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
84-15-1	o-Terphenyl	98%		40-140%	

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B8-S2-04	Date Sampled: 06/02/15
Lab Sample ID: MC39046-10	Date Received: 06/03/15
Matrix: SO - Soil	Percent Solids: 83.9
Project: PNSY Facility, Kittery, ME	

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analysed By	Method	Prep Method
Arsenic	10.7	0.89	mg/kg	1	06/04/15	06/04/15 EAL	SW846 6010C ¹	SW846 3050B ³
Barium	117	4.4	mg/kg	1	06/04/15	06/04/15 EAL	SW846 6010C ¹	SW846 3050B ³
Cadmium	< 0.36	0.36	mg/kg	1	06/04/15	06/04/15 EAL	SW846 6010C ¹	SW846 3050B ³
Chromium	50.5	0.89	mg/kg	1	06/04/15	06/04/15 EAL	SW846 6010C ¹	SW846 3050B ³
Lead	17.1	0.89	mg/kg	1	06/04/15	06/04/15 EAL	SW846 6010C ¹	SW846 3050B ³
Mercury	0.040	0.037	mg/kg	1	06/06/15	06/08/15 EAL	SW846 7471B ²	SW846 7471B ⁴
Selenium	< 0.89	0.89	mg/kg	1	06/04/15	06/04/15 EAL	SW846 6010C ¹	SW846 3050B ³
Silver	< 0.44	0.44	mg/kg	1	06/04/15	06/04/15 EAL	SW846 6010C ¹	SW846 3050B ³

- (1) Instrument QC Batch: MA18182
- (2) Instrument QC Batch: MA18186
- (3) Prep QC Batch: MP24682
- (4) Prep QC Batch: MP24699

RL = Reporting Limit

Report of Analysis

Client Sample ID: B8-S2-04	Date Sampled: 06/02/15
Lab Sample ID: MC39046-10A	Date Received: 06/03/15
Matrix: SO - Soil	Percent Solids: 83.9
Project: PNSY Facility, Kittery, ME	

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 0.010	D004	5.0	0.010	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³
Barium	< 0.50	D005	100	0.50	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³
Cadmium	< 0.0040	D006	1.0	0.0040	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³
Chromium	< 0.010	D007	5.0	0.010	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³
Lead	0.012	D008	5.0	0.010	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³
Mercury	< 0.00020	D009	0.20	0.00020	mg/l	1	06/06/15	06/08/15 EAL	SW846 7470A ²	SW846 7470A ⁴
Selenium	< 0.025	D010	1.0	0.025	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³
Silver	< 0.0050	D011	5.0	0.0050	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³

- (1) Instrument QC Batch: MA18184
- (2) Instrument QC Batch: MA18187
- (3) Prep QC Batch: MP24692
- (4) Prep QC Batch: MP24698

RL = Reporting Limit
MCL = Maximum Contamination Level (40 CFR 261 6/96)

Report of Analysis

Client Sample ID:	B10-S1-05	Date Sampled:	06/01/15
Lab Sample ID:	MC39046-11	Date Received:	06/03/15
Matrix:	SO - Soil	Percent Solids:	73.8
Method:	SW846 8260C		
Project:	PNSY Facility, Kittery, ME		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	K88464.D	1	06/04/15	JM	n/a	n/a	MSK2752
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	8.68 g	10.0 ml	100 ul
Run #2			

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	48	ug/kg	
108-88-3	Toluene	ND	480	ug/kg	
100-41-4	Ethylbenzene	ND	190	ug/kg	
1330-20-7	Xylene (total)	ND	190	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		65-141%
2037-26-5	Toluene-D8	99%		65-129%
460-00-4	4-Bromofluorobenzene	104%		63-137%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B10-S1-05	Date Sampled: 06/01/15
Lab Sample ID: MC39046-11	Date Received: 06/03/15
Matrix: SO - Soil	Percent Solids: 73.8
Method: SW846 8270D SW846 3546	
Project: PNSY Facility, Kittery, ME	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W22390.D	1	06/08/15	KD	06/03/15	OP43283	MSW952
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	20.9 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	130	ug/kg	
208-96-8	Acenaphthylene	ND	130	ug/kg	
120-12-7	Anthracene	ND	130	ug/kg	
56-55-3	Benzo(a)anthracene	ND	130	ug/kg	
50-32-8	Benzo(a)pyrene	ND	130	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	130	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	130	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	130	ug/kg	
218-01-9	Chrysene	ND	130	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	130	ug/kg	
206-44-0	Fluoranthene	ND	130	ug/kg	
86-73-7	Fluorene	ND	130	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	130	ug/kg	
91-57-6	2-Methylnaphthalene	ND	130	ug/kg	
91-20-3	Naphthalene	ND	130	ug/kg	
85-01-8	Phenanthrene	ND	130	ug/kg	
129-00-0	Pyrene	ND	130	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	70%		17-118%
321-60-8	2-Fluorobiphenyl	75%		27-121%
1718-51-0	Terphenyl-d14	94%		39-142%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B10-S1-05	Date Sampled: 06/01/15
Lab Sample ID: MC39046-11	Date Received: 06/03/15
Matrix: SO - Soil	Percent Solids: 73.8
Method: SW846 8015	
Project: PNSY Facility, Kittery, ME	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BD70319.D	1	06/04/15	AF	n/a	n/a	GBD3388
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	8.68 g	10.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (VOA)	ND	9.6	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
	2,3,4-Trifluorotoluene	111%		62-131%	

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B10-S1-05		
Lab Sample ID: MC39046-11		Date Sampled: 06/01/15
Matrix: SO - Soil		Date Received: 06/03/15
Method: SW846 8151 SW846 3550B		Percent Solids: 73.8
Project: PNSY Facility, Kittery, ME		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ94313.D	1	06/08/15	NK	06/03/15	OP43262	GYZ7781
Run #2							

	Initial Weight	Final Volume
Run #1	30.3 g	5.0 ml
Run #2		

Herbicide List

CAS No.	Compound	Result	RL	Units	Q
94-75-7	2,4-D	ND	27	ug/kg	
93-72-1	2,4,5-TP (Silvex)	ND	27	ug/kg	
93-76-5	2,4,5-T	ND	27	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	61%		12-200%
19719-28-9	2,4-DCAA	57%		12-200%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B10-S1-05		Date Sampled: 06/01/15
Lab Sample ID: MC39046-11		Date Received: 06/03/15
Matrix: SO - Soil		Percent Solids: 73.8
Method: SW846 8081B SW846 3546		
Project: PNSY Facility, Kittery, ME		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE46207.D	1	06/09/15	NK	06/03/15	OP43286	GBE2336
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.3 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	Units	Q
309-00-2	Aldrin	ND	6.7	ug/kg	
319-84-6	alpha-BHC	ND	6.7	ug/kg	
319-85-7	beta-BHC	ND	6.7	ug/kg	
319-86-8	delta-BHC	ND	6.7	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	6.7	ug/kg	
5103-71-9	alpha-Chlordane	ND	6.7	ug/kg	
5103-74-2	gamma-Chlordane	ND	6.7	ug/kg	
60-57-1	Dieldrin	ND	6.7	ug/kg	
72-54-8	4,4'-DDD	ND	6.7	ug/kg	
72-55-9	4,4'-DDE	ND	6.7	ug/kg	
50-29-3	4,4'-DDT	ND	6.7	ug/kg	
72-20-8	Endrin	ND	6.7	ug/kg	
1031-07-8	Endosulfan sulfate	ND	6.7	ug/kg	
7421-93-4	Endrin aldehyde	ND	6.7	ug/kg	
959-98-8	Endosulfan-I	ND	6.7	ug/kg	
33213-65-9	Endosulfan-II	ND	6.7	ug/kg	
76-44-8	Heptachlor	ND	6.7	ug/kg	
1024-57-3	Heptachlor epoxide	ND	6.7	ug/kg	
72-43-5	Methoxychlor	ND	6.7	ug/kg	
53494-70-5	Endrin ketone	ND	6.7	ug/kg	
8001-35-2	Toxaphene	ND	67	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	76%		10-143%
877-09-8	Tetrachloro-m-xylene	70%		10-143%
2051-24-3	Decachlorobiphenyl	96%		10-172%
2051-24-3	Decachlorobiphenyl	96%		10-172%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B10-S1-05		
Lab Sample ID: MC39046-11		Date Sampled: 06/01/15
Matrix: SO - Soil		Date Received: 06/03/15
Method: SW846 8082A SW846 3546		Percent Solids: 73.8
Project: PNSY Facility, Kittery, ME		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK48727.D	1	06/09/15	NK	06/03/15	OP43285	GBK1522
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.2 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	34	ug/kg	
11104-28-2	Aroclor 1221	ND	34	ug/kg	
11141-16-5	Aroclor 1232	ND	34	ug/kg	
53469-21-9	Aroclor 1242	ND	34	ug/kg	
12672-29-6	Aroclor 1248	ND	34	ug/kg	
11097-69-1	Aroclor 1254	ND	34	ug/kg	
11096-82-5	Aroclor 1260	ND	34	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	98%		35-136%
877-09-8	Tetrachloro-m-xylene	92%		35-136%
2051-24-3	Decachlorobiphenyl	109%		24-171%
2051-24-3	Decachlorobiphenyl	106%		24-171%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B10-S1-05	Date Sampled: 06/01/15
Lab Sample ID: MC39046-11	Date Received: 06/03/15
Matrix: SO - Soil	Percent Solids: 73.8
Method: SW846-8015 SW846 3546	
Project: PNSY Facility, Kittery, ME	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CR504.D	1	06/06/15	TA	06/03/15	OP43280	GCR1039
Run #2							

	Initial Weight	Final Volume
Run #1	15.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH-DRO (Semi-VOA)	ND	22	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
84-15-1	o-Terphenyl	93%		40-140%	

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B10-S1-05	Date Sampled: 06/01/15
Lab Sample ID: MC39046-11	Date Received: 06/03/15
Matrix: SO - Soil	Percent Solids: 73.8
Project: PNSY Facility, Kittery, ME	

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analized By	Method	Prep Method
Arsenic	15.3	0.97	mg/kg	1	06/04/15	06/04/15	EAL SW846 6010C ¹	SW846 3050B ³
Barium	29.0	4.9	mg/kg	1	06/04/15	06/04/15	EAL SW846 6010C ¹	SW846 3050B ³
Cadmium	< 0.39	0.39	mg/kg	1	06/04/15	06/04/15	EAL SW846 6010C ¹	SW846 3050B ³
Chromium	13.1	0.97	mg/kg	1	06/04/15	06/04/15	EAL SW846 6010C ¹	SW846 3050B ³
Lead	5.4	0.97	mg/kg	1	06/04/15	06/04/15	EAL SW846 6010C ¹	SW846 3050B ³
Mercury	< 0.038	0.038	mg/kg	1	06/06/15	06/08/15	EAL SW846 7471B ²	SW846 7471B ⁴
Selenium	< 0.97	0.97	mg/kg	1	06/04/15	06/04/15	EAL SW846 6010C ¹	SW846 3050B ³
Silver	< 0.49	0.49	mg/kg	1	06/04/15	06/04/15	EAL SW846 6010C ¹	SW846 3050B ³

- (1) Instrument QC Batch: MA18182
- (2) Instrument QC Batch: MA18186
- (3) Prep QC Batch: MP24682
- (4) Prep QC Batch: MP24699

RL = Reporting Limit

Report of Analysis

Client Sample ID: B10-S1-05	Date Sampled: 06/01/15
Lab Sample ID: MC39046-11A	Date Received: 06/03/15
Matrix: SO - Soil	Percent Solids: 73.8
Project: PNSY Facility, Kittery, ME	

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 0.010	D004	5.0	0.010	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³
Barium	< 0.50	D005	100	0.50	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³
Cadmium	< 0.0040	D006	1.0	0.0040	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³
Chromium	< 0.010	D007	5.0	0.010	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³
Lead	< 0.010	D008	5.0	0.010	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³
Mercury	< 0.00020	D009	0.20	0.00020	mg/l	1	06/06/15	06/08/15 EAL	SW846 7470A ²	SW846 7470A ⁴
Selenium	< 0.025	D010	1.0	0.025	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³
Silver	< 0.0050	D011	5.0	0.0050	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³

- (1) Instrument QC Batch: MA18184
- (2) Instrument QC Batch: MA18187
- (3) Prep QC Batch: MP24692
- (4) Prep QC Batch: MP24698

RL = Reporting Limit
MCL = Maximum Contamination Level (40 CFR 261 6/96)

Report of Analysis

Client Sample ID: B10-S2-07		
Lab Sample ID: MC39046-12		Date Sampled: 06/01/15
Matrix: SO - Soil		Date Received: 06/03/15
Method: SW846 8260C		Percent Solids: 79.9
Project: PNSY Facility, Kittery, ME		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	K88465.D	1	06/04/15	JM	n/a	n/a	MSK2752
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	7.38 g	10.0 ml	100 ul
Run #2			

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	49	ug/kg	
108-88-3	Toluene	ND	490	ug/kg	
100-41-4	Ethylbenzene	ND	190	ug/kg	
1330-20-7	Xylene (total)	ND	190	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		65-141%
2037-26-5	Toluene-D8	101%		65-129%
460-00-4	4-Bromofluorobenzene	99%		63-137%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B10-S2-07	
Lab Sample ID: MC39046-12	Date Sampled: 06/01/15
Matrix: SO - Soil	Date Received: 06/03/15
Method: SW846 8270D SW846 3546	Percent Solids: 79.9
Project: PNSY Facility, Kittery, ME	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W22391.D	1	06/08/15	KD	06/03/15	OP43283	MSW952
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	20.3 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	120	ug/kg	
208-96-8	Acenaphthylene	ND	120	ug/kg	
120-12-7	Anthracene	ND	120	ug/kg	
56-55-3	Benzo(a)anthracene	ND	120	ug/kg	
50-32-8	Benzo(a)pyrene	ND	120	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	120	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	120	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	120	ug/kg	
218-01-9	Chrysene	ND	120	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	120	ug/kg	
206-44-0	Fluoranthene	ND	120	ug/kg	
86-73-7	Fluorene	ND	120	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	120	ug/kg	
91-57-6	2-Methylnaphthalene	ND	120	ug/kg	
91-20-3	Naphthalene	ND	120	ug/kg	
85-01-8	Phenanthrene	ND	120	ug/kg	
129-00-0	Pyrene	ND	120	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	65%		17-118%
321-60-8	2-Fluorobiphenyl	73%		27-121%
1718-51-0	Terphenyl-d14	95%		39-142%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B10-S2-07	Date Sampled: 06/01/15
Lab Sample ID: MC39046-12	Date Received: 06/03/15
Matrix: SO - Soil	Percent Solids: 79.9
Method: SW846 8015	
Project: PNSY Facility, Kittery, ME	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BD70320.D	1	06/05/15	AF	n/a	n/a	GBD3388
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	7.38 g	10.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (VOA)	ND	9.7	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
	2,3,4-Trifluorotoluene	108%		62-131%	

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B10-S2-07		Date Sampled: 06/01/15
Lab Sample ID: MC39046-12		Date Received: 06/03/15
Matrix: SO - Soil		Percent Solids: 79.9
Method: SW846 8151 SW846 3550B		
Project: PNSY Facility, Kittery, ME		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ94314.D	1	06/08/15	NK	06/03/15	OP43262	GYZ7781
Run #2							

	Initial Weight	Final Volume
Run #1	30.4 g	5.0 ml
Run #2		

Herbicide List

CAS No.	Compound	Result	RL	Units	Q
94-75-7	2,4-D	ND	25	ug/kg	
93-72-1	2,4,5-TP (Silvex)	ND	25	ug/kg	
93-76-5	2,4,5-T	ND	25	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	133%		12-200%
19719-28-9	2,4-DCAA	87%		12-200%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B10-S2-07	
Lab Sample ID: MC39046-12	Date Sampled: 06/01/15
Matrix: SO - Soil	Date Received: 06/03/15
Method: SW846 8081B SW846 3546	Percent Solids: 79.9
Project: PNSY Facility, Kittery, ME	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE46210.D	1	06/09/15	NK	06/03/15	OP43286	GBE2336
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.6 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	Units	Q
309-00-2	Aldrin	ND	6.1	ug/kg	
319-84-6	alpha-BHC	ND	6.1	ug/kg	
319-85-7	beta-BHC	ND	6.1	ug/kg	
319-86-8	delta-BHC	ND	6.1	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	6.1	ug/kg	
5103-71-9	alpha-Chlordane	ND	6.1	ug/kg	
5103-74-2	gamma-Chlordane	ND	6.1	ug/kg	
60-57-1	Dieldrin	ND	6.1	ug/kg	
72-54-8	4,4'-DDD	ND	6.1	ug/kg	
72-55-9	4,4'-DDE	ND	6.1	ug/kg	
50-29-3	4,4'-DDT	ND	6.1	ug/kg	
72-20-8	Endrin	ND	6.1	ug/kg	
1031-07-8	Endosulfan sulfate	ND	6.1	ug/kg	
7421-93-4	Endrin aldehyde	ND	6.1	ug/kg	
959-98-8	Endosulfan-I	ND	6.1	ug/kg	
33213-65-9	Endosulfan-II	ND	6.1	ug/kg	
76-44-8	Heptachlor	ND	6.1	ug/kg	
1024-57-3	Heptachlor epoxide	ND	6.1	ug/kg	
72-43-5	Methoxychlor	ND	6.1	ug/kg	
53494-70-5	Endrin ketone	ND	6.1	ug/kg	
8001-35-2	Toxaphene	ND	61	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	83%		10-143%
877-09-8	Tetrachloro-m-xylene	84%		10-143%
2051-24-3	Decachlorobiphenyl	112%		10-172%
2051-24-3	Decachlorobiphenyl	113%		10-172%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B10-S2-07		
Lab Sample ID: MC39046-12		Date Sampled: 06/01/15
Matrix: SO - Soil		Date Received: 06/03/15
Method: SW846 8082A SW846 3546		Percent Solids: 79.9
Project: PNSY Facility, Kittery, ME		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK48728.D	1	06/09/15	NK	06/03/15	OP43285	GBK1522
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.4 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	31	ug/kg	
11104-28-2	Aroclor 1221	ND	31	ug/kg	
11141-16-5	Aroclor 1232	ND	31	ug/kg	
53469-21-9	Aroclor 1242	ND	31	ug/kg	
12672-29-6	Aroclor 1248	ND	31	ug/kg	
11097-69-1	Aroclor 1254	ND	31	ug/kg	
11096-82-5	Aroclor 1260	ND	31	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	103%		35-136%
877-09-8	Tetrachloro-m-xylene	97%		35-136%
2051-24-3	Decachlorobiphenyl	105%		24-171%
2051-24-3	Decachlorobiphenyl	103%		24-171%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B10-S2-07	Date Sampled: 06/01/15
Lab Sample ID: MC39046-12	Date Received: 06/03/15
Matrix: SO - Soil	Percent Solids: 79.9
Method: SW846-8015 SW846 3546	
Project: PNSY Facility, Kittery, ME	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CR507.D	1	06/06/15	TA	06/03/15	OP43280	GCR1039
Run #2							

	Initial Weight	Final Volume
Run #1	15.4 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH-DRO (Semi-VOA)	ND	20	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
84-15-1	o-Terphenyl	99%		40-140%	

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B10-S2-07	Date Sampled: 06/01/15
Lab Sample ID: MC39046-12	Date Received: 06/03/15
Matrix: SO - Soil	Percent Solids: 79.9
Project: PNSY Facility, Kittery, ME	

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	14.2	0.96	mg/kg	1	06/04/15	06/04/15 EAL	SW846 6010C ¹	SW846 3050B ³
Barium	14.1	4.8	mg/kg	1	06/04/15	06/04/15 EAL	SW846 6010C ¹	SW846 3050B ³
Cadmium	< 0.38	0.38	mg/kg	1	06/04/15	06/04/15 EAL	SW846 6010C ¹	SW846 3050B ³
Chromium	8.1	0.96	mg/kg	1	06/04/15	06/04/15 EAL	SW846 6010C ¹	SW846 3050B ³
Lead	3.4	0.96	mg/kg	1	06/04/15	06/04/15 EAL	SW846 6010C ¹	SW846 3050B ³
Mercury	< 0.036	0.036	mg/kg	1	06/06/15	06/08/15 EAL	SW846 7471B ²	SW846 7471B ⁴
Selenium	< 0.96	0.96	mg/kg	1	06/04/15	06/04/15 EAL	SW846 6010C ¹	SW846 3050B ³
Silver	< 0.48	0.48	mg/kg	1	06/04/15	06/04/15 EAL	SW846 6010C ¹	SW846 3050B ³

- (1) Instrument QC Batch: MA18182
- (2) Instrument QC Batch: MA18186
- (3) Prep QC Batch: MP24682
- (4) Prep QC Batch: MP24699

RL = Reporting Limit

Report of Analysis

Client Sample ID: B10-S2-07	Date Sampled: 06/01/15
Lab Sample ID: MC39046-12A	Date Received: 06/03/15
Matrix: SO - Soil	Percent Solids: 79.9
Project: PNSY Facility, Kittery, ME	

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 0.010	D004	5.0	0.010	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³
Barium	< 0.50	D005	100	0.50	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³
Cadmium	< 0.0040	D006	1.0	0.0040	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³
Chromium	< 0.010	D007	5.0	0.010	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³
Lead	< 0.010	D008	5.0	0.010	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³
Mercury	< 0.00020	D009	0.20	0.00020	mg/l	1	06/06/15	06/08/15 EAL	SW846 7470A ²	SW846 7470A ⁴
Selenium	< 0.025	D010	1.0	0.025	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³
Silver	< 0.0050	D011	5.0	0.0050	mg/l	1	06/05/15	06/05/15 EAL	SW846 6010C ¹	SW846 3010A ³

- (1) Instrument QC Batch: MA18184
- (2) Instrument QC Batch: MA18187
- (3) Prep QC Batch: MP24692
- (4) Prep QC Batch: MP24698

RL = Reporting Limit
MCL = Maximum Contamination Level (40 CFR 261 6/96)

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: MC39046 Client: TERRACON Immediate Client Services Action Required: No

Date / Time Received: 6/3/2015 10:00:00 AM Delivery Method: _____

Project: PNSY No. Coolers: 1 Airbill #'s: _____

<u>Cooler Security</u>	<u>Y or N</u>		<u>Y or N</u>	
1. Custody Seals Present:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3. COC Present:	<input checked="" type="checkbox"/> <input type="checkbox"/>
2. Custody Seals Intact:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4. SmpI Dates/Time OK	<input checked="" type="checkbox"/> <input type="checkbox"/>

<u>Cooler Temperature</u>	<u>Y or N</u>	
1. Temp criteria achieved:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Cooler temp verification:	<u>Infrared Gun</u>	
3. Cooler media:	<u>Ice (Bag)</u>	

<u>Quality Control Preservation</u>	<u>Y</u>	<u>N</u>	<u>N/A</u>
1. Trip Blank present / cooler:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. Trip Blank listed on COC:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. Samples preserved properly:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
4. VOCs headspace free:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

<u>Sample Integrity - Documentation</u>	<u>Y or N</u>	
1. Sample labels present on bottles:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Container labeling complete:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Sample container label / COC agree:	<input checked="" type="checkbox"/>	<input type="checkbox"/>

<u>Sample Integrity - Condition</u>	<u>Y or N</u>	
1. Sample rec'd within HT:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. All containers accounted for:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Condition of sample:	<u>Intact</u>	

<u>Sample Integrity - Instructions</u>	<u>Y</u>	<u>N</u>	<u>N/A</u>
1. Analysis requested is clear:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. Bottles received for unspecified tests:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. Sufficient volume rec'd for analysis:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
4. Compositing instructions clear:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Filtering instructions clear:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comments

-2 and -7 received only two (2) MeOH vials, no raw volume for DRO or %SOL received

4.1
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Sample Receipt Summary - Problem Resolution

Accutest Job Number: MC39046

CSR: Frank D'Agostino

Response Date: 6/4/2015

Response: See the email in the file

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MC39046: Chain of Custody

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