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EFANENAVFACENGCOM 4335/3 (Rev. 6/80)

CONTRACT NO N62472-99-D-0032	CONTRACT TASK ORDER NO. 0102	ACTIVITY LOCATION Naval Station Newport - Newport, RI
----------------------------------------	----------------------------------------	-----------------------------------------------------------------

PROJECT TITLE
Derecktor Shipyard - Sand Blast Grit Removal

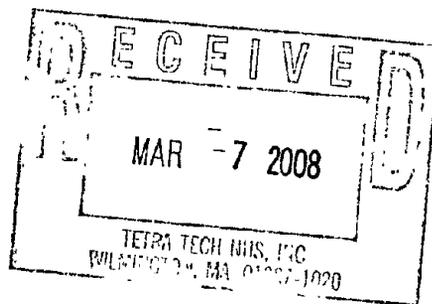
FROM Tetra Tech EC, Inc.: Program QC Manager George Sze	DATE March 6, 2008
-------------------------------------------------------------------	------------------------------

TO J. Colter (2 CD-Copies and 2 Hardcopies)	DATE March 6, 2008
-------------------------------------------------------	------------------------------

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FOR COMMANDING OFFICER, ENGINEERING FIELD
ACTIVITY NORTHEAST - NAVAL FACILITIES ENGINEERING
COMMAND

ITEM NO.	SUBMITTAL DESCRIPTION	PREPARED/SUBMITTED BY	APPROVED	DISAPPROVED	REMARKS
1	SD-08, Statements; Final Removal Action Completion Report for Sandblast Grit Removal at Derecktor Shipyard	Helene Ropars			



DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND, MID-ATLANTIC
9742 MARYLAND AVENUE
NORFOLK, VA 23511-3095

IN REPLY REFER TO

5090
15/OPNEEV/JLC
March 7, 2008

Ms. Kimberlee Keckler, Project Manager
Federal Facilities Superfund Section
USEPA Region I
1 Congress Street
Suite 1100 (HBT)
Boston MA 02114-2023

Mr. Paul Kulpa, Project Manager
Office of Waste Management
Rhode Island Department of Environmental Management
235 Promenade Street
Providence, RI 02908-5767

Dear Ms. Keckler & Mr. Kulpa

Subject: FINAL NON-TIME CRITICAL REMOVAL ACTION COMPLETION
REPORT (RACR) FOR DERECKTOR SHIPYARD SAND BLAST GRIT-
IMPACTED AREA; NAVAL STATION NEWPORT, RHODE ISLAND

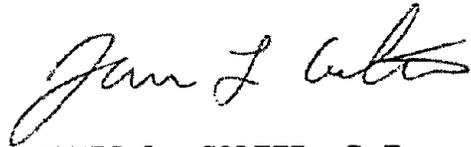
The Navy is forwarding two paper copies and two CDs of the Final Removal Action Completion Report (RACR) for the subject removal action to remove sand blast grit from IR Site 19 - Derecktor Shipyard located at NAVSTA Newport, Rhode Island.

The Final RACR has been revised to incorporate comments on a draft version of the report dated December 2007, that were submitted by the USEPA Region I and Rhode Island Department of Environmental Management (RIDEM) in letters to the Navy dated December 27, 2007 and January 17, 2008, respectively. The Navy's responses to those comments are also attached.

As noted by both the EPA and RIDEM, some of the confirmation samples had detections of lead and arsenic at concentrations that slightly exceeded RAOs. It is the Navy's intention to include these areas as part of the Onshore portion of IR Site 19. Work that is yet to be done will include a review of the inorganic data that is currently available and also from fieldwork scheduled for later in 2008 which will be screened against inorganic ranges that were developed by the Navy in the Basewide Background Study. If it determined that the concentration of inorganics in soils exceeds a background range, the Navy will pursue the development of a remedial strategy to address these exceedances.

If you have any additional questions regarding the enclosed Final document, you can contact me by phone at (757) 444-0825 or by email at james.colter@navy.mil.

Sincerely,



JAMES L. COLTER, P.E.
Remedial Project Manager
By direction of the
Commanding Officer

Enclosures

Copy to:

NAVSTA Newport, Cornelia Mueller (1 paper, 1 CD)

Newport RAB c/o C. Mueller, NAVSTA (4 CDs)

NAVSTA Newport, Bob Krivinskas (1 paper, 1 CD)

Gannett Fleming, Paula Loht (1 paper, 1 CD)

TtNUS, Steve Parker (1 CD)

Document Repository c/o C. Mueller, NAVSTA (4 paper, 4 CDs)

Administrative Record c/o J. Colter, MidLant (2 paper, 2 CDs)

TETRA TECH EC, INCORPORATED
U.S. NAVY ENGINEERING FIELD ACTIVITY NORTHEAST
REMEDIAL ACTION CONTRACT (RAC)
CONTRACT NO. N62472-99-D-0032
NAVAL AIR STATION – SOUTH WEYMOUTH, MASSACHUSETTS

ANNOTATED RESPONSES TO REVIEW COMMENTS

The Rhode Island Department of Environmental Management (RIDEM) Office of Waste Management have reviewed the Draft Non Time Critical Removal Action Completion Report for Derecktor Shipyard Sand Blast Grit – Impacted Area, Naval Station Newport, Rhode Island, dated December 5, 2007. RIDEM comments are provided in italic type followed by the Navy and/or TtEC's responses in bold type.

Reviewer: Paul Kulpa – RIDEM

Date: January 17, 2008

General Comment

Comment 1: The report notes that the concentration of arsenic and lead in soils at the site exceeds the Rhode Island residential direct exposure standards. Although not stated it is assumed that the Navy will propose a remedial action to address these exceedances (i.e., additional removal, ELUR, etc.), as part of the Feasibility Study for the entire Derecktor Shipyard site. Please confirm.

Response: Comment noted. Please refer to the Navy's Cover Letter for this document indicating that ELURs are planned for the entire Derecktor Shipyard Site, including these areas where there are exceedances for lead and arsenic.

Specific Comment

Comment 2: Section 3.0 Sample Results, Page 3-1: "These results correspond to background levels in the vicinity and do not appear to be related to the targeted sand blast grit material." Background data sets and an analysis and evaluation of the sand blast grit material has not been included in the report. Since no analytical data has been included in the report it is not appropriate to compare this to background levels. Please remove the above statement.

Response: The statement has been removed from the Completion Report.

TETRA TECH EC, INCORPORATED
U.S. NAVY ENGINEERING FIELD ACTIVITY NORTHEAST
REMEDIAL ACTION CONTRACT (RAC)
CONTRACT NO. N62472-99-D-0032
NAVAL AIR STATION – SOUTH WEYMOUTH, MASSACHUSETTS

ANNOTATED RESPONSES TO REVIEW COMMENTS

The U.S. Environmental Protection Agency (EPA) have reviewed the Draft Non Time Critical Removal Action Completion Report for Derecktor Shipyard Sand Blast Grit – Impacted Area, Naval Station Newport, Rhode Island, dated December 5, 2007. EPA comments are provided in italic type followed by the Navy and/or TtEC's responses in bold type.

Reviewer: Kymberlee Keckler – EPA

Date: January 17, 2008

Specific Comments

Comment 1: Page §3.0: The response to comment 3.2 dated January 2007, stated that if confirmatory samples that were in excess of the RAO were detected, additional excavation would occur with subsequent confirmatory soil sampling. Several confirmatory samples collected during this effort were above the RAO and excavation did not occur. Please explain in detail why soil containing greater than the RAO was allowed to remain in place.

Response: The arsenic and lead exceedances were in the vicinity of the newly constructed retaining wall. An inspection of the area revealed that further excavation would undermine the retaining wall. Therefore, the Navy determined that the additional cost for further excavation plus reconstruction was not economical given the minor nature of the exceedances.

Comment 2: The Date Analyzed in the table for PCB Data (8/02-06/07) is not consistent with the data validation report presented in Appendix C, or the text of Section 2.3. The table indicates that these confirmatory samples were analyzed in 2004. According to the text and the data validation reports, these samples were analyzed in 2007. Please correct.

Response: The table has been revised to reflect the correct date of analysis (August 13, 2007).

NAVAL FACILITIES ENGINEERING COMMAND, ATLANTIC
REMEDIAL ACTION CONTRACT (RAC)
CONTRACT NO. N62472-99-D-0032
CONTRACT TASK ORDER NO. 102

FINAL REMOVAL ACTION COMPLETION REPORT
FOR
SANDBLAST GRIT REMOVAL
AT
DERECKTOR SHIPYARD
NAVAL STATION NEWPORT PORTSMOUTH
MIDDLETOWN, RHODE ISLAND

Issued:

March 6, 2008

Prepared for

Department of the Navy
Naval Facility Engineering Command
Mid-Atlantic
9742 Maryland Avenue
Norfolk, VA 23511-3095

Prepared by

Tetra Tech EC, Inc.
133 Federal Street
Boston, Massachusetts 02110



Revision
1

Date
3/6/08

Prepared By
K. Myers

Approved By
B. Corbett

Pages Affected
All

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Appendix A	MILCON Contractor Sampling Results
Appendix B	Confirmatory Sample Screening Against RIDEM Criteria
Appendix C	Analytical Data Including Data Validation and GPS Coordinates

ABBREVIATIONS AND ACRONYMS

bgs	below ground surface
FFA	Federal Facilities Agreement
GPS	Global Positioning System
mg/kg	milligrams per kilogram
MILCON	Military Construction
NAVFAC	Naval Facilities Engineering Command
NAVSTA	Naval Station
PCBs	polychlorinated biphenyls
RCRA	Resource Conservation and Recovery Act
RIDEM	Rhode Island Department of Environmental Management
RIGIS	Rhode Island Geographic Information System
TtEC	Tetra Tech EC, Inc.
USEPA	United States Environmental Protection Agency

1.0 INTRODUCTION

Tetra Tech EC, Inc. (TtEC) has prepared this Removal Action Completion Report for Contract Task Order No. 102, under the United States Navy Naval Facilities Engineering Command (NAVFAC) Remedial Action Contract Number N62472-99-D-0032. This Removal Action Completion Report describes the investigation of soil with visual sandblast grit and soil with lead concentrations that exceed the Rhode Island Department of Environmental Management (RIDEM) Soil Direct Exposure Criteria of 150 parts per million at the sandblast grit-impacted area located at the Derecktor Shipyard, which is part of the Naval Station (NAVSTA) Newport in Middletown, Rhode Island (refer to Figure 1-1).

1.1 General Site Description Information

NAVSTA Newport is located approximately 60 miles southwest of Boston, Massachusetts, and 25 miles south of Providence, Rhode Island. It occupies approximately 1,063 acres, with portions of the facility located in the city of Newport and town of Middletown, Rhode Island. The facility layout is long and narrow, following the western shoreline of Aquidneck Island for nearly 6 miles facing the east passage of Coddington Cove (refer to Figure 1-1).

The NAVSTA Newport facility has been in use by the Navy since the Civil War. During both World Wars I and II, military activities at the facility increased significantly and the base provided housing for military personnel. In subsequent years, uses of the on-site facilities were slowly phased out until NAVSTA Newport became headquarters of the Commander-Cruiser Destroyer Force Atlantic in 1962. In April 1973, the Shore Establishment Realignment Program resulted in the reorganization of naval forces, and activity again declined.

The entire NAVSTA Newport facility was listed on the United States Environmental Protection Agency (USEPA) National Priorities List of abandoned or uncontrolled hazardous waste sites in November 1989. A Federal Facilities Agreement (FFA) for NAVSTA Newport was signed by the Navy, the state of Rhode Island, and the USEPA on March 23, 1992. The FFA outlines response action requirements under the Department of Defense Installation Restoration Program at NAVSTA Newport. The FFA was developed, in part, to ensure that environmental impacts associated with past and present activities at NAVSTA Newport are thoroughly investigated and remediated, as necessary.

The site is located approximately 15 to 20 feet north/northwest of the northwest corner of Building 5 (see Figure 1-2). Generally speaking, the area where the site exists gently slopes to the west towards Coddington Cove. The site is in the industrial area of the base. The Rhode Island Geographic Information System (RIGIS) land use map indicates that the site is predominantly classified as "Other Transportation," which consists of terminals, docks, etc. The RIGIS soils map indicates that the site is located in an area with variable soils. The RIGIS wetlands maps indicate that no wetlands are located in the general vicinity of the site. The RIGIS groundwater classification and well head protection map show that the site is not located inside a Community or Non-Community Well Head Protection Area, and the groundwater at the site is considered GB greater than 25 acres.

1.2 Previous Actions

In 2004, Military Construction (MILCON) contractors encountered sandblast grit in the subsurface soil within the footprint of a watchtower they were constructing at the site during a project entitled *The New North Gate and Security Improvements*. In December 2004, TtEC removed the subsurface sandblast grit impacted soil from the footprint of the watchtower (20 feet by 20 feet by 4.5 feet). Refer to Figure 1-2 for this footprint depiction. TtEC removed the sandblast grit from the excavation base and north, south, and western sidewalls of the excavation. Visual sandblast grit was left in place along the eastern sidewall to be addressed at a later date since its presence did not affect watchtower construction efforts. Polyethylene

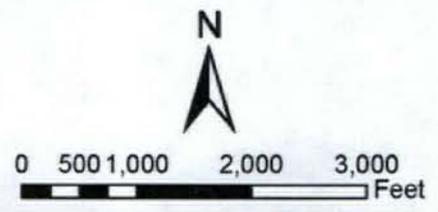
sheeting was left in place to demarcate the grit removal area from the eastern sidewall. Complete details of the December 2005 TtEC removal can be found in a report entitled *Final Closeout Report for Sandblast Grit Removal at Derecktor Shipyard, Naval Station Newport, Portsmouth, RI* (TtEC, June 17, 2005).

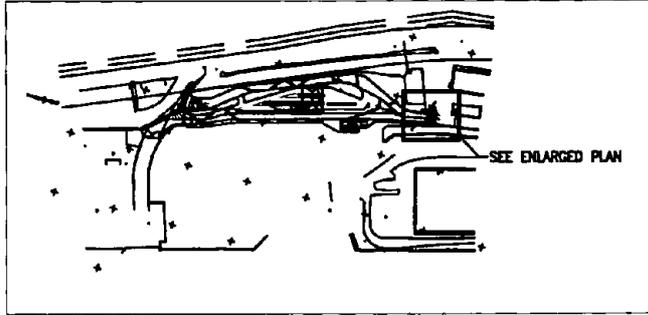
In early 2005, the MILCON contractor returned to the site, erected the watchtower, and covered a portion of the site with asphalt. Upon erecting the watchtower, the MILCON contractor inadvertently disturbed the eastern sidewall, which still contained sandblast grit. The MILCON contractor performed a removal action at the site, disposed of the excavated material, and collected confirmatory samples to ensure that the footprint of the tower was free from sandblast grit. Documentation of the confirmation sampling performed subsequent to the MILCON contractor's removal effort is included in Appendix A. The MILCON contractor then constructed an asphalt pad over most of the site and constructed a retaining wall east of the watchtower.

Upon completion of all MILCON construction activities, the Navy directed TtEC to return to the site to remove any remaining sandblast grit impacted soil from the eastern sidewall. The attached report documents the work associated with this directive.

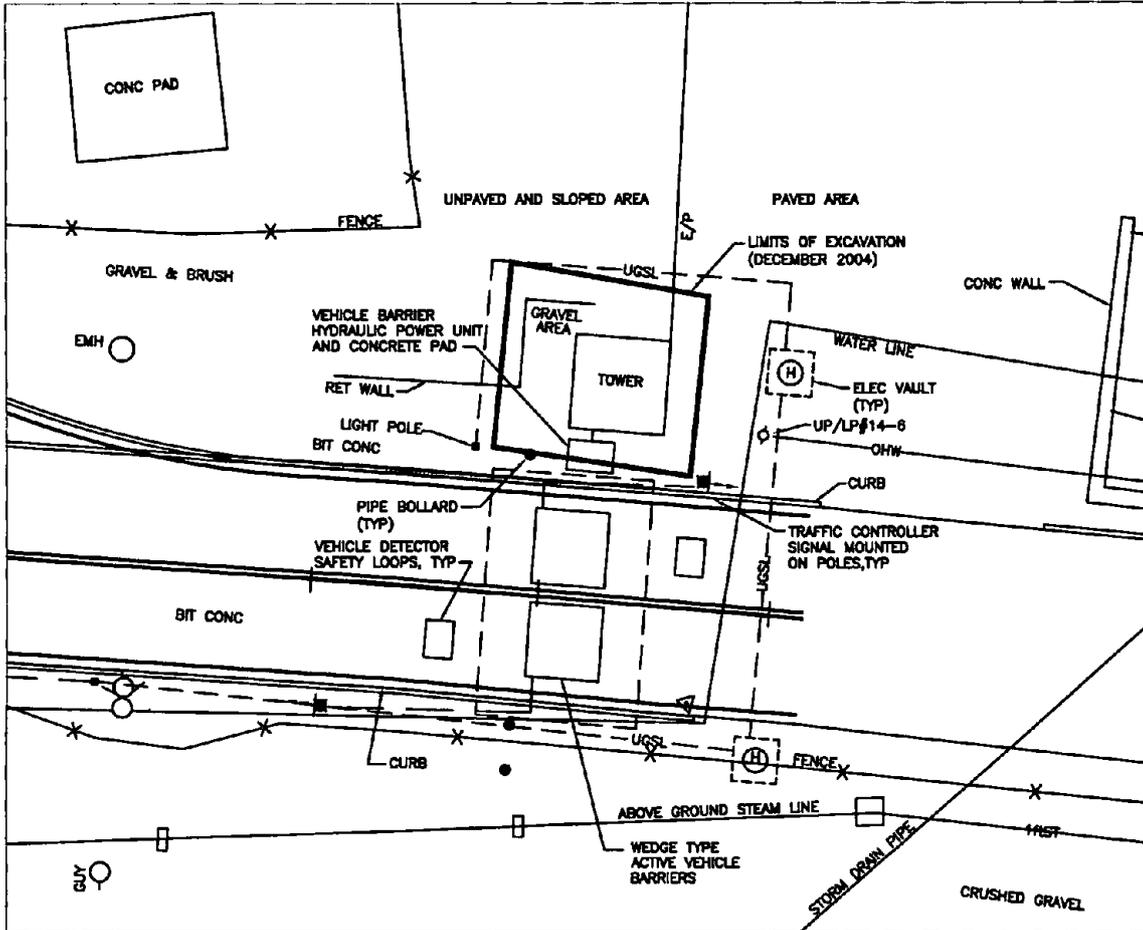


Figure 1-1
Derecktor Shipyard Site

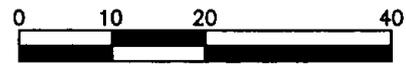




KEY PLAN



ENLARGED PLAN



APPROXIMATE GRAPHIC SCALE IN FEET

NOTES:

THIS FIGURE WAS EXCERPTED FROM AN AUTOCAD FILE PROVIDED BY THE WHITING-TURNER CONTRACTING COMPANY.

SOURCE: THE WHITING-TURNER CONTRACTING COMPANY. MARCH 2004

NAVFAC
DEREKTOR SHIPYARD
NAVAL STATION NEWPORT

SITE LAYOUT
(WITH DECEMBER 2004 EXCAVATION)

 TETRA TECH EC, INC.

SCALE: AS SHOWN	PREPARED: R.PAV	CAD FILE NO. FIG 2282-01.DWG
DATE:	CHECKED:	FIGURE No. 1-2
	APPROVED:	

2.0 SITE ACTIVITIES

2.1 Mobilization and Site Preparation

2.1.1 Mobilization

On Monday July 30, 2007, TtEC mobilized to the site with an extendahoe and operator, one laborer, a Project Superintendent and a Site Health and Safety Officer to implement work in accordance with the *Final Non-Time Critical Removal Action Work Plan for Derecktor Shipyard Sandblast Grit – Impacted Area, Newport Naval Station, Middletown, RI* (TtEC, June 20, 2007). Initial exploration of the site revealed the construction work on the watchtower had been completed. A roll-off container (used by the workshop adjacent to the site) had been placed on the edge of the asphalt in the proposed soil staging area. The container was moved in coordination with the workshop without incident. The TtEC roll-off containers were scheduled to be delivered once the testpitting had been completed.

2.1.2 Site Preparation

The site had been cleared of vegetation before TtEC arrived. Adjacent to the work area was a large expanse of asphalt which was identified to be used as a staging area. No fences were erected to isolate the site as it was located in a remote location with minimal activities of traffic.

2.1.3 Erosion and Sediment Control

The slope behind the retaining wall was dressed with 2-inch crushed stone to prevent erosion. An additional small section of dry stone wall helped retain the crushed stone at the southern end of the retaining wall. Adjacent to the end of the wall, an outfall pipe was identified indicating that there was a drainage system installed on the high side of the retaining wall. It appeared that the site drained to a low spot on the asphalt (shown by stains from previous puddles) and if any runoff reached the road, it would again be collected in a low point adjacent to the watchtower.

2.2 Exploratory Testpitting

Using the Global Positioning System (GPS) coordinates taken during the previous excavation, the extents were marked on the current surface. The edge of the previous excavation ran nearly parallel with the eastern section of the retaining wall and was located approximately 6 inches to the east of the wall.

Due to the proximity of the retaining wall and its drainage system, the initial excavation was sited not to impact the wall or the fill material. It was anticipated that the sandblast grit would not extend past this location. The first test pit was located approximately 15 feet from the retaining wall and dug to a depth of 4.5 feet below ground surface (bgs). The excavated material contained a small amount of miscellaneous construction debris and appeared to be reasonably well compacted light brown sandy soil. A lower layer denoted by a darker brown appearance and no debris was encountered at the lower end of the test pit; no visual sign of sandblast material was encountered.

As no sandblast grit material was discovered, the location for the second test pit was to be as close to the existing excavation as possible without impacting the retaining wall or associated drainage system. The first test pit was refilled to allow the second to be undertaken without the collapse of the sidewall due to the light and sandy nature of the soil.

Upon investigation of the photographs from the previous removal action, the sandblast material seemed to coincide with a stormwater drainage pipe located near the northern edge of the asphalted area. It was decided that an excavation located as close to the retaining wall as possible and covering the underside of the filled area until it reached the natural or previously constructed slope of the former adjacent electrical

transformer substation. As the retaining wall included a drainage system on the high side the trench was started at approximately five feet away from the retaining wall.

The first 6 to 8 inches of excavation were crushed rock visible on the surface and used for erosion control. Located under this was fill material, and on the retaining wall side of the trench some geotextile was exposed and appeared to be filled with the crushed rock. Beneath the crushed rock, the fill material was similar to the first test pit. The trench was excavated to the level of an existing stormwater drain pipe exposed during the previous removal operation.

Once the pipe could clearly be identified, the excavation was stopped as there was no indication of sandblast grit material. Navy personnel were contacted and informed of the visual results of the excavation who in turn requested RIDEM to visit the site.

2.3 Confirmatory Sampling

RIDEM visited the site and discussed the investigation process. Additional information was verbally received from one of the MILCON subcontractors who indicated that all outstanding sandblast grit was removed during the watchtower construction. The Navy Environmental Department also confirmed this.

It was agreed that additional tests pits would be dug in the flat area adjacent to the asphalt surfacing and the slope from the former electrical substation and tested using the procedure for confirmatory sampling outlined in the approved Work Plan (polychlorinated biphenyls [PCBs] and Resource Conservation and Recovery Act [RCRA] 8 metals). The first additional test pit was located as close to the southern end of the retaining wall as possible. Within the trench running parallel with the retaining wall, three samples were taken on the western sidewall using the excavator bucket as the trench was too deep to safely allow access. The additional test pits were constructed to the east of the previous test pits in the agreed locations. Refer to Figure 2-1 for the locations of the test pits and samples.

2.4 Off-Site Disposal

No sandblast grit was observed during the testpitting operation; therefore, no material was exported for disposal.

2.5 Site Restoration

The site was restored to its original grades with the material excavated from the test pits as backfill. Stone removed during the testpitting operation was placed on the slope behind the retaining wall. Additional stone was placed on February 20, 2008 during an additional TtEC mobilization to NAVSTA Newport. The stone was placed in the disturbed areas to complete site restoration.

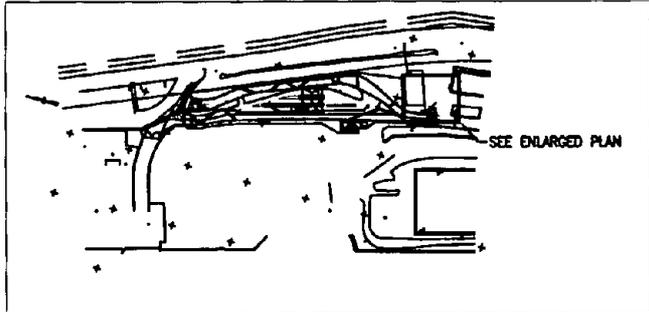
2.6 Waste Generation

The only waste stream was personal protective equipment that was disposed of using waste management collection.

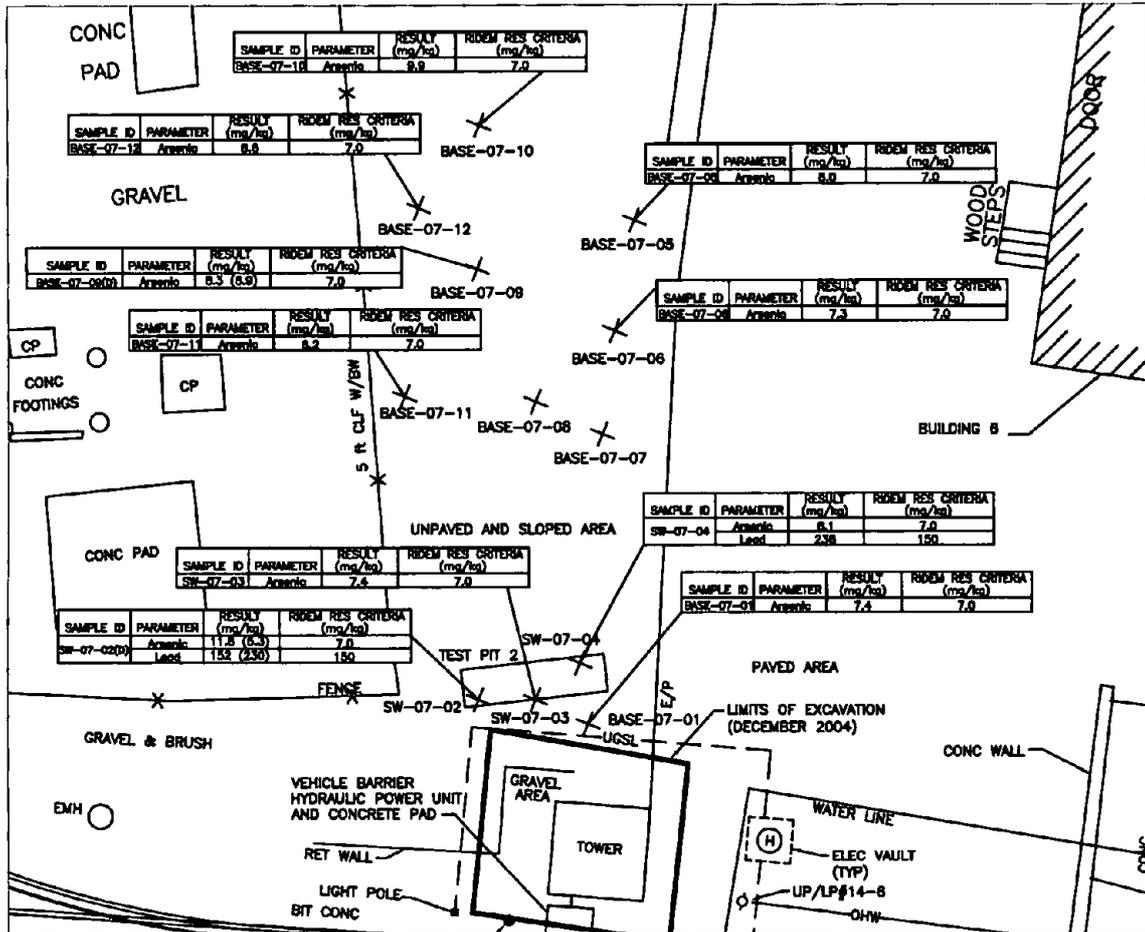
2.7 Demobilization

On Tuesday August 7, 2007, the restoration activities were completed and the extendahoe was removed from the site.

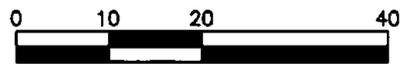
On Wednesday August 8, 2007, the samples were shipped to the laboratory and TtEC staff left the site.



KEY PLAN



ENLARGED PLAN



APPROXIMATE GRAPHIC SCALE IN FEET

NOTES:

1. DUPLICATE RESULTS ARE PROVIDED IN PARENTHESIS FOR SW-07-02 AND BASE-07-09

NAVAC
DEREKTOR SHIPYARD
NAVAL STATION NEWPORT
 SAMPLE LOCATIONS
 WITH METALS EXCEEDANCE OF RIDEM
 RESIDENTIAL CRITERIA

TETRA TECH EC, INC.

SCALE: AS SHOWN	PREPARED: REC	CAD FILE NO. FIG 2282-05.DWG
DATE: 10/24/07	CHECKED: APPROVED:	
		FIGURE No. 2-1

SOURCE: THE WHITING-TURNER CONTRACTING COMPANY, MARCH 2004

3.0 SAMPLE RESULTS

A total of 12 samples were taken, one from the base of each test pit and three from the sidewall of the trench running parallel to the retaining wall. The samples were analyzed for Total PCBs and RCRA 8 metals.

Refer to Figure 2-1 for the sample locations and exceedances of RIDEM Residential Criteria. Confirmatory sample screening against applicable RIDEM criteria is included in Appendix B. Refer to Appendix C for complete analytical data and validation memorandum.

The majority of the PCB results were non-detect with other samples being well below the RIDEM Residential Criteria of 10 milligrams per kilogram (mg/kg). The total PCBs were calculated by the laboratory.

Arsenic was found above the RIDEM Residential Criteria of 7 mg/kg at all of the sampling locations. The average of the arsenic levels in the confirmation samples was 7.9 mg/kg and there was no single exceedance greater than 15 mg/kg (see Appendix B).

Sample locations SW-07-02 and SW-07-04 within the trench of Test Pit 2 had lead concentrations that exceeded the RIDEM Residential Criteria of 150 mg/kg, but did not exceed the Industrial/Commercial Criteria of 500 mg/kg.

APPENDIX A

MILCON Contractor Sampling Results



**NORTHEAST ENGINEERS
& CONSULTANTS, INC.**

42 VALLEY ROAD MIDDLETOWN RHODE ISLAND 02842 401 849.0810 PHONE 401 846 4169 FAX WWW.NORTHEASTENGINEERS.COM

September 21, 2005

Mr. Tom Quirk
The Whiting-Turner Contracting Company
1297 Bushnell Street
Middletown, RI 02842

Re: Environmental Testing
North Gate Firing Position
Naval Station
Newport, Rhode Island

Dear Mr. Quirk,

Northeast Engineers & Consultants, Inc. (NE&C) has completed the second round of soil testing as specified in the Environmental Sample Plan prepared by NE&C and dated July 18, 2005. Excavation of contaminated soil and confirmatory sampling was completed on September 2, 2005 as specified in an email from you sent on August 30, 2005. A summary of the sampling activities and the results is discussed below. A drawing showing the confirmatory sample location and a copy of the Certificate of Analysis is attached.

Roughly 22 cubic feet of soil were excavated from the vicinity of sample S5 and drummed on September 2, 2005. One confirmatory sample was collected from beneath the excavation and one sample was collected from each of three drums. The samples were stored on ice and transported to ESS Laboratory for analysis. The Certificate of Analysis is attached. The results are summarized in the following tables.

Table 1: Summary of Confirmatory Analytical Results

Substance	R. DEC	I/C DEC	Sample
Metals, ppm			
Barium	5,500	10,000	27.4
Cadmium	39	1,000	0.66
Chromium	390	10,000	13.9
Lead	150	500	39.4
Mercury	23	610	ND
Selenium	390	10,000	ND
Silver	200	10,000	1.47
Zinc	6,000	10,000	98.4
PCBs, ppb	10,000	10,000	72.6

Notes: R. DEC – Residential Direct Exposure Criteria, I/C
DEC – Industrial/Commercial Direct Exposure
Criteria, ND – Not Detected

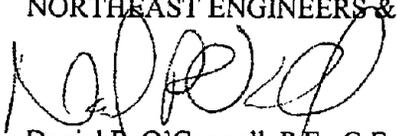
Table 2: Summary of Drum Analytical Results

Substance	MA Acceptance Criteria	Drum 2	Drum 3	Drum 4
Metals, ppm				
Arsenic	40	8.4	9.0	9.8
Cadmium	30	ND	ND	ND
Chromium	1,000	18.9	22.7	23.3
Lead	1,000	47.9	77.6	83.4
Mercury	10	0.039	0.085	0.050
TPH, ppm	2,500	24.8	63.8	58.7
PCBs, ppm	2	0.0969	0.168	0.309
SVOCs, ppm	100	4.87	4.009	4.436
VOCs, ppm	4	0.0313	0.0404	ND
Conductivity, μ mhos/cm	4,000	26	28	49

The analytical results indicate that the confirmatory soil sample collected from the excavated area is in compliance with the RIDEM Remediation Regulations Residential Direct Exposure Criteria. The samples collected from the three drums of excavated material meet the reuse acceptance criteria set forth in the MADEP Policy # COMM-97-001, "Reuse and Disposal of Contaminated Soil at Massachusetts Landfills".

Please feel free to call me at 401-849-0810 extension 1110 with any questions.

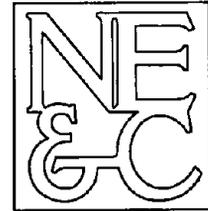
Sincerely,
NORTHEAST ENGINEERS & CONSULTANTS, INC.



Daniel P. O'Connell, P.E., G.E.
Chief Geotechnical Engineer

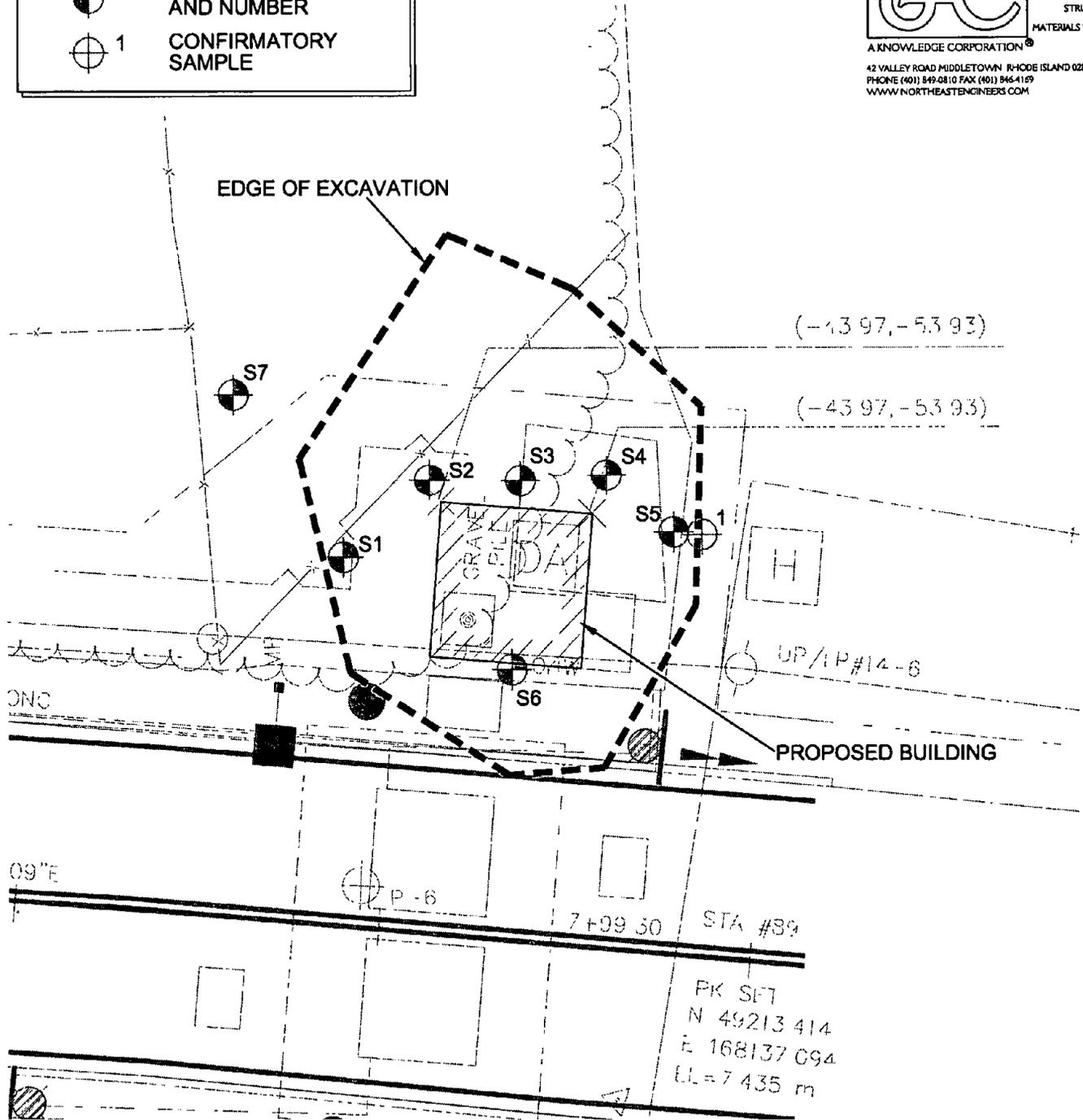
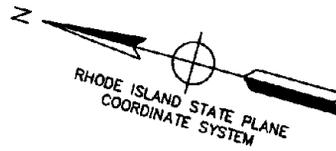
Enc.





LEGEND:

-  EDGE OF EXCAVATION
-  SAMPLE LOCATION AND NUMBER
-  CONFIRMATORY SAMPLE



Scale	Date: 21SEP05	Designed By	Drawn By: DPP	Checked By:
Project Title: NORTH GATE FIRING POSITION NAVAL STATION, NEWPORT R.I.		Drawing Title: ENVIRONMENTAL SAMPLING PLAN		
Issued for: THE WHITING - TURNER CONTRACTING CO.		Drawing Number: ESP-1	Project Number: 04082.0	

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: Northeast Engineers & Consultants
Client Project ID: N. Gate
Client Sample ID: 1
Date Sampled: 09/02/05 14:45
Percent Solids: 91

ESS Laboratory Work Order: 0509048
ESS Laboratory Sample ID: 0509048-01
Sample Matrix: Soil

3050B/6000/7000 Total Metals

<u>Analyte</u>	<u>Results</u>	<u>Units</u>	<u>MRL</u>	<u>Method</u>	<u>DF</u>	<u>Analyst</u>	<u>Analyzed</u>	<u>I/V</u>	<u>F/V</u>
Barium	27.4	mg/kg dry	1.2	6010B	1	SVD	09/06/05	1.8	100
Cadmium	0.66	mg/kg dry	0.61	6010B	1	SVD	09/06/05	1.8	100
Chromium	13.9	mg/kg dry	1.2	6010B	1	SVD	09/06/05	1.8	100
Lead	39.4	mg/kg dry	6.1	6010B	1	SVD	09/06/05	1.8	100
Mercury	ND	mg/kg dry	0.032	7471A	1	SVD	09/07/05	0.69	40
Selenium	ND	mg/kg dry	6.1	6010B	1	SVD	09/06/05	1.8	100
Silver	1.47	mg/kg dry	0.61	6010B	1	SVD	09/06/05	1.8	100
Zinc	98.4	mg/kg dry	3.0	6010B	1	SVD	09/06/05	1.8	100

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: Northeast Engineers & Consultants

Client Project ID: N. Gate

Client Sample ID: 1

Date Sampled: 09/02/05 14:45

Percent Solids: 91

Initial Volume: 20.5

Final Volume: 10

Extraction Method: 3541

ESS Laboratory Work Order: 0509048

ESS Laboratory Sample ID: 0509048-01

Sample Matrix: Soil

Analyst: SEP

Prepared: 09/06/05

8082 Polychlorinated Biphenyls (PCB)

<u>Analyte</u>	<u>Results</u>	<u>Units</u>	<u>MRL</u>	<u>DF</u>	<u>Analyzed</u>
Aroclor 1016	ND	ug/Kg dry	53.6	1	09/07/05
Aroclor 1221	ND	ug/Kg dry	53.6	1	09/07/05
Aroclor 1232	ND	ug/Kg dry	53.6	1	09/07/05
Aroclor 1242	ND	ug/Kg dry	53.6	1	09/07/05
Aroclor 1248	ND	ug/Kg dry	53.6	1	09/07/05
Aroclor 1254	ND	ug/Kg dry	53.6	1	09/07/05
Aroclor 1260	72.6	ug/Kg dry	53.6	1	09/07/05
Aroclor 1262	ND	ug/Kg dry	53.6	1	09/07/05
Aroclor 1268	ND	ug/Kg dry	53.6	1	09/07/05

	<u>%Recovery</u>	<u>Qualifier</u>	<u>Limits</u>
Surrogate: Decachlorobiphenyl	81 %		30-150
Surrogate: Decachlorobiphenyl [2C]	81 %		30-150
Surrogate: Tetrachloro-m-xylene	87 %		30-150
Surrogate: Tetrachloro-m-xylene [2C]	84 %		30-150

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: Northeast Engineers & Consultants

Client Project ID: N. Gate

ESS Laboratory Work Order: 0509048

Notes and Definitions

ND	Analyte NOT DETECTED above the detection limit
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
mg/kg	Results reported as wet weight
TCLP	Toxicity Characteristic Leachate Procedure
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
TIC	A forward library search of the NBS Mass Spectral Library was performed on this sample using the McLafferty Probability Base Matching (PBM) Algorithm. An estimated concentration of non-TCL compounds tentatively identified is quantified by the internal standard method. The nearest internal standard free of interferences was used to quantify. A response factor of one was assumed. This search was inclusive of the ten largest peaks greater than ten percent of the nearest internal standard.
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery

ESS Laboratory

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

CHAIN OF CUSTODY

Page of

Turn Time If later than 5 days, prior approval by laboratory is required # <u> </u>	Standard <u> </u> Other <u>24-hr</u>	Reporting Limits RES	ESS LAB PROJ. C.I. ID 0509048
State where samples were collected from MA <input type="checkbox"/> CT <input type="checkbox"/> NH <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> ME <input type="checkbox"/> Other <u> </u>		Electronic Deliverable <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Format PDF
Is this project for any of the following: MA-MCP* <input checked="" type="checkbox"/> Navy <input type="checkbox"/> USACE <input type="checkbox"/> Other <u> </u>			

Co Name NEC		Project #		Project Name (25 Char or less) N. Gate		Number of Containers	Type of Containers	Circle and/or Write Required Analysis															
Contact Person Clason Gold		Address 42 Valley Rd		8260	624			5242	8015 VPH	8015 GHD	8100 EPH No Targets	8081 PCB Pesticides	608 PCB Pesticides	8270 PAH (mt)	RCRA5 RCRA8 PPL3 TAL23	TCLPR MCP MCPw/Hg NRC7	PCB'S	Barium Cadmium	Chromium Lead	Mercury Selenium	Silver Zinc		
City Providence		State RI																				Zip 02840	PO#
Telephone # 508-238-8860		Fax # SAME																					
ESS LAB Sample #	Date	Collection Time	CMP	GRAB	MATRIX	Sample Identification (25 Char or less)																	
1	9-2-05	14:45		X	S	1																	

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

Cooler Present Yes No Internal Use Only
 Seals Intact Yes No NA [] Pickup
 Cooler Temp: **11A** [] Technicians

Comments: *** JasonG@northartengineers.com**

Relinquished by (Signature) <i>[Signature]</i>	Date/Time 9/16	Received by (Signature) <i>[Signature]</i>	Date/Time 9-16-05/1313	Relinquished by (Signature)	Date/Time	Received by (Signature)	Date/Time
Relinquished by (Signature)	Date/Time	Received by (Signature)	Date/Time	Relinquished by (Signature)	Date/Time	Received by (Signature)	Date/Time

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: Northeast Engineers & Consultants

Client Project ID: N. Gate

Client Sample ID: Drum 2

Date Sampled: 09/02/05 00:00

Percent Solids: 88

ESS Laboratory Work Order: 0509066

ESS Laboratory Sample ID: 0509066-01

Sample Matrix: Soil

3050B/6000/7000 Total Metals

<u>Analyte</u>	<u>Results</u>	<u>Units</u>	<u>MRL</u>	<u>Method</u>	<u>DF</u>	<u>Analyst</u>	<u>Analyzed</u>	<u>I/V</u>	<u>F/V</u>
Arsenic	8.4	mg/kg dry	1.6	7060A	5	JP	09/20/05	1.75	100
Cadmium	ND	mg/kg dry	0.65	6010B	1	SVD	09/07/05	1.75	100
Chromium	18.9	mg/kg dry	1.3	6010B	1	SVD	09/07/05	1.75	100
Lead	47.9	mg/kg dry	6.5	6010B	1	SVD	09/07/05	1.75	100
Mercury	0.039	mg/kg dry	0.037	7471A	1	EEM	09/08/05	0.62	40

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: Northeast Engineers & Consultants

Client Project ID: N. Gate

Client Sample ID: Drum 2

Date Sampled: 09/02/05 00:00

Percent Solids: 88

Initial Volume: 21

Final Volume: 15

Extraction Method: 5035

ESS Laboratory Work Order: 0509066

ESS Laboratory Sample ID: 0509066-01

Sample Matrix: Soil

Analyst: RES

5035/8260B Volatile Organic Compounds / Methanol

<u>Analyte</u>	<u>Results</u>	<u>Units</u>	<u>MRL</u>	<u>2xMDL</u>	<u>DF</u>	<u>Analyzed</u>
1,1,1,2-Tetrachloroethane	ND	ug/Kg dry	47.4	22.8000	1	09/16/05
1,1,1-Trichloroethane	ND	ug/Kg dry	47.4	9.4000	1	09/16/05
1,1,2,2-Tetrachloroethane	ND	ug/Kg dry	47.4	17.0000	1	09/16/05
1,1,2-Trichloroethane	ND	ug/Kg dry	47.4	24.6000	1	09/16/05
1,1-Dichloroethane	ND	ug/Kg dry	47.4	13.2000	1	09/16/05
1,1-Dichloroethene	ND	ug/Kg dry	47.4	13.2000	1	09/16/05
1,1-Dichloropropene	ND	ug/Kg dry	47.4	34.2000	1	09/16/05
1,2,3-Trichlorobenzene	ND	ug/Kg dry	47.4	26.6000	1	09/16/05
1,2,3-Trichloropropane	ND	ug/Kg dry	47.4	15.2000	1	09/16/05
1,2,4-Trichlorobenzene	ND	ug/Kg dry	47.4	15.2000	1	09/16/05
1,2,4-Trimethylbenzene	ND	ug/Kg dry	47.4	11.4000	1	09/16/05
1,2-Dibromo-3-Chloropropane	ND	ug/Kg dry	237	100.4000	1	09/16/05
1,2-Dibromoethane	ND	ug/Kg dry	47.4	15.2000	1	09/16/05
1,2-Dichlorobenzene	ND	ug/Kg dry	47.4	15.2000	1	09/16/05
1,2-Dichloroethane	ND	ug/Kg dry	47.4	20.8000	1	09/16/05
1,2-Dichloropropane	ND	ug/Kg dry	47.4	13.2000	1	09/16/05
1,3,5-Trimethylbenzene	ND	ug/Kg dry	47.4	9.4000	1	09/16/05
1,3-Dichlorobenzene	ND	ug/Kg dry	47.4	11.4000	1	09/16/05
1,3-Dichloropropane	ND	ug/Kg dry	47.4	34.2000	1	09/16/05
1,4-Dichlorobenzene	ND	ug/Kg dry	47.4	9.4000	1	09/16/05
1,4-Dioxane - Screen	ND	ug/Kg dry	4740	3800.0000	1	09/16/05
1-Chlorohexane	ND	ug/Kg dry	47.4	17.0000	1	09/16/05
2,2-Dichloropropane	ND	ug/Kg dry	94.8	66.4000	1	09/16/05
2-Butanone	ND	ug/Kg dry	1190	214.0000	1	09/16/05
2-Chlorotoluene	ND	ug/Kg dry	47.4	19.0000	1	09/16/05
2-Hexanone	ND	ug/Kg dry	47.4	149.8000	1	09/16/05
4-Chlorotoluene	ND	ug/Kg dry	47.4	11.4000	1	09/16/05
4-Isopropyltoluene	ND	ug/Kg dry	47.4	9.4000	1	09/16/05
4-Methyl-2-Pentanone	ND	ug/Kg dry	47.4	70.2000	1	09/16/05
Acetone	ND	ug/Kg dry	1190	1072.0000	1	09/16/05
Benzene	ND	ug/Kg dry	47.4	7.6000	1	09/16/05
Bromobenzene	ND	ug/Kg dry	47.4	19.0000	1	09/16/05
Bromochloromethane	ND	ug/Kg dry	47.4	24.6000	1	09/16/05
Bromodichloromethane	ND	ug/Kg dry	47.4	19.0000	1	09/16/05
Bromoform	ND	ug/Kg dry	47.4	22.8000	1	09/16/05

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: Northeast Engineers & Consultants

Client Project ID: N. Gate

Client Sample ID: Drum 2

Date Sampled: 09/02/05 00:00

Percent Solids: 88

Initial Volume: 21

Final Volume: 15

Extraction Method: 5035

ESS Laboratory Work Order: 0509066

ESS Laboratory Sample ID: 0509066-01

Sample Matrix: Soil

Analyst: RES

5035/8260B Volatile Organic Compounds / Methanol

Bromomethane	ND	ug/Kg dry	94.8	72.0000	1	09/16/05
Carbon Disulfide	ND	ug/Kg dry	47.4	32.2000	1	09/16/05
Carbon Tetrachloride	ND	ug/Kg dry	47.4	15.2000	1	09/16/05
Chlorobenzene	ND	ug/Kg dry	47.4	7.6000	1	09/16/05
Chloroethane	ND	ug/Kg dry	94.8	49.2000	1	09/16/05
Chloroform	ND	ug/Kg dry	47.4	30.4000	1	09/16/05
Chloromethane	ND	ug/Kg dry	47.4	38.0000	1	09/16/05
cis-1,2-Dichloroethene	ND	ug/Kg dry	47.4	11.4000	1	09/16/05
cis-1,3-Dichloropropene	ND	ug/Kg dry	47.4	11.4000	1	09/16/05
Dibromochloromethane	ND	ug/Kg dry	47.4	7.6000	1	09/16/05
Dibromomethane	ND	ug/Kg dry	47.4	19.0000	1	09/16/05
Dichlorodifluoromethane	ND	ug/Kg dry	47.4	34.2000	1	09/16/05
Diethyl Ether	ND	ug/Kg dry	47.4	38.0000	1	09/16/05
Di-isopropyl ether	ND	ug/Kg dry	47.4	36.0000	1	09/16/05
Ethyl tertiary-butyl ether	ND	ug/Kg dry	47.4	11.4000	1	09/16/05
Ethylbenzene	ND	ug/Kg dry	47.4	7.6000	1	09/16/05
Hexachlorobutadiene	ND	ug/Kg dry	47.4	68.2000	1	09/16/05
Isopropylbenzene	ND	ug/Kg dry	47.4	5.6000	1	09/16/05
Methyl tert-Butyl Ether	ND	ug/Kg dry	47.4	13.2000	1	09/16/05
Methylene Chloride	J 31.3	ug/Kg dry	237	30.4000	1	09/16/05
Naphthalene	ND	ug/Kg dry	47.4	13.2000	1	09/16/05
n-Butylbenzene	ND	ug/Kg dry	47.4	11.4000	1	09/16/05
n-Propylbenzene	ND	ug/Kg dry	47.4	13.2000	1	09/16/05
sec-Butylbenzene	ND	ug/Kg dry	47.4	9.4000	1	09/16/05
Styrene	ND	ug/Kg dry	47.4	13.2000	1	09/16/05
tert-Butylbenzene	ND	ug/Kg dry	47.4	11.4000	1	09/16/05
Tertiary-amyl methyl ether	ND	ug/Kg dry	47.4	15.2000	1	09/16/05
Tetrachloroethene	ND	ug/Kg dry	47.4	15.2000	1	09/16/05
Tetrahydrofuran	ND	ug/Kg dry	237	238.0000	1	09/16/05
Toluene	ND	ug/Kg dry	47.4	9.4000	1	09/16/05
trans-1,2-Dichloroethene	ND	ug/Kg dry	47.4	34.2000	1	09/16/05
trans-1,3-Dichloropropene	ND	ug/Kg dry	47.4	11.4000	1	09/16/05
Trichloroethene	ND	ug/Kg dry	47.4	15.2000	1	09/16/05
Trichlorofluoromethane	ND	ug/Kg dry	47.4	30.4000	1	09/16/05
Vinyl Acetate	ND	ug/Kg dry	237	34.2000	1	09/16/05
Vinyl Chloride	ND	ug/Kg dry	47.4	36.0000	1	09/16/05

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: Northeast Engineers & Consultants

Client Project ID: N. Gate

Client Sample ID: Drum 2

Date Sampled: 09/02/05 00:00

Percent Solids: 88

Initial Volume: 21

Final Volume: 15

Extraction Method: 5035

ESS Laboratory Work Order: 0509066

ESS Laboratory Sample ID: 0509066-01

Sample Matrix: Soil

Analyst: RES

5035/8260B Volatile Organic Compounds / Methanol

Xylene O	ND	ug/Kg dry	47.4	13.2000	1	09/16/05
Xylene P,M	ND	ug/Kg dry	94.8	19.0000	1	09/16/05
Xylenes (Total)	ND	ug/Kg	142			09/16/05

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichloroethane-d4	111 %		70-130
Surrogate: 4-Bromofluorobenzene	104 %		70-130
Surrogate: Dibromofluoromethane	117 %		70-130
Surrogate: Toluene-d8	108 %		70-130

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: Northeast Engineers & Consultants
Client Project ID: N. Gate
Client Sample ID: Drum 2
Date Sampled: 09/02/05 00:00
Percent Solids: 88
Initial Volume: 20.8
Final Volume: 10
Extraction Method: 3541

ESS Laboratory Work Order: 0509066
ESS Laboratory Sample ID: 0509066-01
Sample Matrix: Soil
Analyst: SEP
Prepared: 09/07/05

8082 Polychlorinated Biphenyls (PCB)

<u>Analyte</u>	<u>Results</u>	<u>Units</u>	<u>MRL</u>	<u>2xMDL</u>	<u>DF</u>	<u>Analyzed</u>
Aroclor 1016	ND	ug/Kg dry	54.6	34.8000	1	09/08/05
Aroclor 1221	ND	ug/Kg dry	54.6	34.8000	1	09/08/05
Aroclor 1232	ND	ug/Kg dry	54.6	34.8000	1	09/08/05
Aroclor 1242	ND	ug/Kg dry	54.6	34.8000	1	09/08/05
Aroclor 1248	ND	ug/Kg dry	54.6	34.8000	1	09/08/05
Aroclor 1254	ND	ug/Kg dry	54.6	34.8000	1	09/08/05
Aroclor 1260	96.9	ug/Kg dry	54.6	34.8000	1	09/08/05
Aroclor 1262	ND	ug/Kg dry	54.6	34.8000	1	09/08/05
Aroclor 1268	ND	ug/Kg dry	54.6	34.8000	1	09/08/05

	<u>%Recovery</u>	<u>Qualifier</u>	<u>Limits</u>
Surrogate: Decachlorobiphenyl	82 %		30-150
Surrogate: Decachlorobiphenyl [2C]	84 %		30-150
Surrogate: Tetrachloro-m-xylene	83 %		30-150
Surrogate: Tetrachloro-m-xylene [2C]	81 %		30-150

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: Northeast Engineers & Consultants
Client Project ID: N. Gate
Client Sample ID: Drum 2
Date Sampled: 09/02/05 00:00
Percent Solids: 88
Initial Volume: 30.1
Final Volume: 1
Extraction Method: 3550B

ESS Laboratory Work Order: 0509066
ESS Laboratory Sample ID: 0509066-01
Sample Matrix: Soil
Analyst: JLS
Prepared: 09/14/05

8100M Total Petroleum Hydrocarbons

<u>Analyte</u>	<u>Results</u>	<u>Units</u>	<u>MRL</u>	<u>2xMDL</u>	<u>DF</u>	<u>Analyzed</u>
Total Petroleum Hydrocarbons	J 24.8	mg/kg dry	28.3	4.5400	1	09/15/05

	<u>%Recovery</u>	<u>Qualifier</u>	<u>Limits</u>
Surrogate: O-Terphenyl	49 %		40-140

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: Northeast Engineers & Consultants

Client Project ID: N. Gate

Client Sample ID: Drum 2

Date Sampled: 09/02/05 00:00

Percent Solids: 88

Initial Volume: 19.5

Final Volume: 1

Extraction Method: 3541

ESS Laboratory Work Order: 0509066

ESS Laboratory Sample ID: 0509066-01

Sample Matrix: Soil

Analyst: VSC

Prepared: 09/14/05

8270C Semi-Volatile Organic Compounds

Analyte	Results	Units	MRL	2xMDL	DF	Analyzed
1,1-Biphenyl	ND	ug/Kg dry	583	480.0000	1	09/14/05
1,2,4-Trichlorobenzene	ND	ug/Kg dry	583	380.0000	1	09/14/05
1,2-Dichlorobenzene	ND	ug/Kg dry	583	398.0000	1	09/14/05
1,3-Dichlorobenzene	ND	ug/Kg dry	583	358.0000	1	09/14/05
1,4-Dichlorobenzene	ND	ug/Kg dry	583	396.0000	1	09/14/05
2,3,4,6-Tetrachlorophenol	ND	ug/Kg dry	2910	338.0000	1	09/14/05
2,4,5-Trichlorophenol	ND	ug/Kg dry	583	404.0000	1	09/14/05
2,4,6-Trichlorophenol	ND	ug/Kg dry	583	350.0000	1	09/14/05
2,4-Dichlorophenol	ND	ug/Kg dry	583	414.0000	1	09/14/05
2,4-Dimethylphenol	ND	ug/Kg dry	583	428.0000	1	09/14/05
2,4-Dinitrophenol	ND	ug/Kg dry	2910	774.0000	1	09/14/05
2,4-Dinitrotoluene	ND	ug/Kg dry	583	334.0000	1	09/14/05
2,6-Dinitrotoluene	ND	ug/Kg dry	583	334.0000	1	09/14/05
2-Chloronaphthalene	ND	ug/Kg dry	583	424.0000	1	09/14/05
2-Chlorophenol	ND	ug/Kg dry	583	342.0000	1	09/14/05
2-Methylnaphthalene	ND	ug/Kg dry	583	424.0000	1	09/14/05
2-Methylphenol	ND	ug/Kg dry	583	392.0000	1	09/14/05
2-Nitroaniline	ND	ug/Kg dry	583	404.0000	1	09/14/05
2-Nitrophenol	ND	ug/Kg dry	583	408.0000	1	09/14/05
3,3'-Dichlorobenzidine	ND	ug/Kg dry	583	266.0000	1	09/14/05
3+4-Methylphenol	ND	ug/Kg dry	1170	390.0000	1	09/14/05
3-Nitroaniline	ND	ug/Kg dry	583	352.0000	1	09/14/05
4,6-Dinitro-2-Methylphenol	ND	ug/Kg dry	2910	474.0000	1	09/14/05
4-Bromophenyl-phenylether	ND	ug/Kg dry	583	428.0000	1	09/14/05
4-Chloro-3-Methylphenol	ND	ug/Kg dry	583	372.0000	1	09/14/05
4-Chloroaniline	ND	ug/Kg dry	583	342.0000	1	09/14/05
4-Chloro-phenyl-phenyl ether	ND	ug/Kg dry	583	422.0000	1	09/14/05
4-Nitroaniline	ND	ug/Kg dry	583	312.0000	1	09/14/05
4-Nitrophenol	ND	ug/Kg dry	2910	314.0000	1	09/14/05
Acenaphthene	ND	ug/Kg dry	583	410.0000	1	09/14/05
Acenaphthylene	ND	ug/Kg dry	583	320.0000	1	09/14/05
Acetophenone	ND	ug/Kg dry	583	378.0000	1	09/14/05
Aniline	ND	ug/Kg dry	583	284.0000	1	09/14/05
Anthracene	ND	ug/Kg dry	583	450.0000	1	09/14/05
Azobenzene	ND	ug/Kg dry	583	424.0000	1	09/14/05

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: Northeast Engineers & Consultants

Client Project ID: N. Gate

Client Sample ID: Drum 2

Date Sampled: 09/02/05 00:00

Percent Solids: 88

Initial Volume: 19.5

Final Volume: 1

Extraction Method: 3541

ESS Laboratory Work Order: 0509066

ESS Laboratory Sample ID: 0509066-01

Sample Matrix: Soil

Analyst: VSC

Prepared: 09/14/05

8270C Semi-Volatile Organic Compounds

Benzo(a)anthracene	J	431	ug/Kg dry	583	348.0000	1	09/14/05
Benzo(a)pyrene		616	ug/Kg dry	583	314.0000	1	09/14/05
Benzo(b)fluoranthene	J	445	ug/Kg dry	583	398.0000	1	09/14/05
Benzo(g,h,i)perylene		ND	ug/Kg dry	583	366.0000	1	09/14/05
Benzo(k)fluoranthene	J	367	ug/Kg dry	583	342.0000	1	09/14/05
Benzoic Acid		ND	ug/Kg dry	2910	582.0000	1	09/14/05
Benzyl Alcohol		ND	ug/Kg dry	583	700.0000	1	09/14/05
bis(2-Chloroethoxy)methane		ND	ug/Kg dry	583	378.0000	1	09/14/05
bis(2-Chloroethyl)ether		ND	ug/Kg dry	583	390.0000	1	09/14/05
bis(2-chloroisopropyl)Ether		ND	ug/Kg dry	583	424.0000	1	09/14/05
bis(2-Ethylhexyl)phthalate		ND	ug/Kg dry	583	442.0000	1	09/14/05
Butylbenzylphthalate		ND	ug/Kg dry	583	406.0000	1	09/14/05
Carbazole		ND	ug/Kg dry	583	366.0000	1	09/14/05
Chrysene	J	462	ug/Kg dry	583	364.0000	1	09/14/05
Dibenzo(a,h)Anthracene		ND	ug/Kg dry	583	314.0000	1	09/14/05
Dibenzofuran		ND	ug/Kg dry	583	398.0000	1	09/14/05
Diethylphthalate		ND	ug/Kg dry	583	396.0000	1	09/14/05
Dimethylphthalate		ND	ug/Kg dry	583	392.0000	1	09/14/05
Di-n-butylphthalate		ND	ug/Kg dry	583	386.0000	1	09/14/05
Di-n-octylphthalate		ND	ug/Kg dry	583	384.0000	1	09/14/05
Fluoranthene		843	ug/Kg dry	583	406.0000	1	09/14/05
Fluorene		ND	ug/Kg dry	583	394.0000	1	09/14/05
Hexachlorobenzene		ND	ug/Kg dry	583	414.0000	1	09/14/05
Hexachlorobutadiene		ND	ug/Kg dry	583	406.0000	1	09/14/05
Hexachlorocyclopentadiene		ND	ug/Kg dry	2910	220.0000	1	09/14/05
Hexachloroethane		ND	ug/Kg dry	1170	424.0000	1	09/14/05
Indeno(1,2,3-cd)Pyrene	J	348	ug/Kg dry	583	348.0000	1	09/14/05
Isophorone		ND	ug/Kg dry	583	390.0000	1	09/14/05
Naphthalene		ND	ug/Kg dry	583	344.0000	1	09/14/05
Nitrobenzene		ND	ug/Kg dry	583	362.0000	1	09/14/05
N-Nitrosodimethylamine		ND	ug/Kg dry	583	310.0000	1	09/14/05
N-Nitroso-Di-n-Propylamine		ND	ug/Kg dry	583	428.0000	1	09/14/05
N-nitrosodiphenylamine		ND	ug/Kg dry	583	328.0000	1	09/14/05
Pentachlorophenol		ND	ug/Kg dry	2910	348.0000	1	09/14/05
Phenanthrene		598	ug/Kg dry	583	370.0000	1	09/14/05
Phenol		ND	ug/Kg dry	583	378.0000	1	09/14/05

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: Northeast Engineers & Consultants

Client Project ID: N. Gate

Client Sample ID: Drum 2

Date Sampled: 09/02/05 00:00

Percent Solids: 88

Initial Volume: 19.5

Final Volume: 1

Extraction Method: 3541

ESS Laboratory Work Order: 0509066

ESS Laboratory Sample ID: 0509066-01

Sample Matrix: Soil

Analyst: VSC

Prepared: 09/14/05

8270C Semi-Volatile Organic Compounds

Pyrene	757	ug/Kg dry	583	390.0000	1	09/14/05
Pyridine	ND	ug/Kg dry	2910	366.0000	1	09/14/05

%Recovery Qualifier Limits

<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	<i>79 %</i>		<i>30-130</i>
<i>Surrogate: 2,4,6-Tribromophenol</i>	<i>73 %</i>		<i>30-130</i>
<i>Surrogate: 2-Chlorophenol-d4</i>	<i>82 %</i>		<i>30-130</i>
<i>Surrogate: 2-Fluorobiphenyl</i>	<i>92 %</i>		<i>30-130</i>
<i>Surrogate: 2-Fluorophenol</i>	<i>78 %</i>		<i>30-130</i>
<i>Surrogate: Nitrobenzene-d5</i>	<i>79 %</i>		<i>30-130</i>
<i>Surrogate: Phenol-d6</i>	<i>84 %</i>		<i>30-130</i>
<i>Surrogate: p-Terphenyl-d14</i>	<i>112 %</i>		<i>30-130</i>

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: Northeast Engineers & Consultants
Client Project ID: N. Gate
Client Sample ID: Drum 2
Date Sampled: 09/02/05 00:00
Percent Solids: 88

ESS Laboratory Work Order: 0509066
ESS Laboratory Sample ID: 0509066-01
Sample Matrix: Soil

Classical Chemistry

<u>Analyte</u>	<u>Results</u>	<u>Units</u>	<u>MRL</u>	<u>Method</u>	<u>DF</u>	<u>Analyst</u>	<u>Analyzed</u>
Conductivity	D 26	umhos/cm	5	9050A	1	NMT	09/09/05

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: Northeast Engineers & Consultants
Client Project ID: N. Gate
Client Sample ID: Drum 3
Date Sampled: 09/02/05 00:00
Percent Solids: 89

ESS Laboratory Work Order: 0509066
ESS Laboratory Sample ID: 0509066-02
Sample Matrix: Soil

3050B/6000/7000 Total Metals

<u>Analyte</u>	<u>Results</u>	<u>Units</u>	<u>MRL</u>	<u>Method</u>	<u>DF</u>	<u>Analyst</u>	<u>Analyzed</u>	<u>I/V</u>	<u>F/V</u>
Arsenic	9.0	mg/kg dry	1.6	7060A	5	JP	09/20/05	1.75	100
Cadmium	ND	mg/kg dry	0.64	6010B	1	SVD	09/07/05	1.75	100
Chromium	22.7	mg/kg dry	1.3	6010B	1	SVD	09/07/05	1.75	100
Lead	77.6	mg/kg dry	6.4	6010B	1	SVD	09/07/05	1.75	100
Mercury	0.085	mg/kg dry	0.037	7471A	1	EEM	09/08/05	0.6	40

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: Northeast Engineers & Consultants
Client Project ID: N. Gate
Client Sample ID: Drum 3
Date Sampled: 09/02/05 00:00
Percent Solids: 89
Initial Volume: 15.3
Final Volume: 15
Extraction Method: 5035

ESS Laboratory Work Order: 0509066
ESS Laboratory Sample ID: 0509066-02
Sample Matrix: Soil
Analyst: RES

5035/8260B Volatile Organic Compounds / Methanol

Analyte	Results	Units	MRL	2xMDL	DF	Analyzed
1,1,1,2-Tetrachloroethane	ND	ug/Kg dry	61.3	29.4000	1	09/16/05
1,1,1-Trichloroethane	ND	ug/Kg dry	61.3	12.2000	1	09/16/05
1,1,2-Tetrachloroethane	ND	ug/Kg dry	61.3	22.0000	1	09/16/05
1,1,2-Trichloroethane	ND	ug/Kg dry	61.3	31.8000	1	09/16/05
1,1-Dichloroethane	ND	ug/Kg dry	61.3	17.2000	1	09/16/05
1,1-Dichloroethene	ND	ug/Kg dry	61.3	17.2000	1	09/16/05
1,1-Dichloropropene	ND	ug/Kg dry	61.3	44.2000	1	09/16/05
1,2,3-Trichlorobenzene	ND	ug/Kg dry	61.3	34.4000	1	09/16/05
1,2,3-Trichloropropane	ND	ug/Kg dry	61.3	19.6000	1	09/16/05
1,2,4-Trichlorobenzene	ND	ug/Kg dry	61.3	19.6000	1	09/16/05
1,2,4-Trimethylbenzene	ND	ug/Kg dry	61.3	14.8000	1	09/16/05
1,2-Dibromo-3-Chloropropane	ND	ug/Kg dry	306	129.8000	1	09/16/05
1,2-Dibromoethane	ND	ug/Kg dry	61.3	19.6000	1	09/16/05
1,2-Dichlorobenzene	ND	ug/Kg dry	61.3	19.6000	1	09/16/05
1,2-Dichloroethane	ND	ug/Kg dry	61.3	27.0000	1	09/16/05
1,2-Dichloropropane	ND	ug/Kg dry	61.3	17.2000	1	09/16/05
1,3,5-Trimethylbenzene	ND	ug/Kg dry	61.3	12.2000	1	09/16/05
1,3-Dichlorobenzene	ND	ug/Kg dry	61.3	14.8000	1	09/16/05
1,3-Dichloropropane	ND	ug/Kg dry	61.3	44.2000	1	09/16/05
1,4-Dichlorobenzene	ND	ug/Kg dry	61.3	12.2000	1	09/16/05
1,4-Dioxane - Screen	ND	ug/Kg dry	6130	4900.0000	1	09/16/05
1-Chlorohexane	ND	ug/Kg dry	61.3	22.0000	1	09/16/05
2,2-Dichloropropane	ND	ug/Kg dry	123	85.8000	1	09/16/05
2-Butanone	ND	ug/Kg dry	1530	276.0000	1	09/16/05
2-Chlorotoluene	ND	ug/Kg dry	61.3	24.6000	1	09/16/05
2-Hexanone	ND	ug/Kg dry	61.3	193.6000	1	09/16/05
4-Chlorotoluene	ND	ug/Kg dry	61.3	14.8000	1	09/16/05
4-Isopropyltoluene	ND	ug/Kg dry	61.3	12.2000	1	09/16/05
4-Methyl-2-Pentanone	ND	ug/Kg dry	61.3	90.6000	1	09/16/05
Acetone	ND	ug/Kg dry	1530	1384.0000	1	09/16/05
Benzene	ND	ug/Kg dry	61.3	9.8000	1	09/16/05
Bromobenzene	ND	ug/Kg dry	61.3	24.6000	1	09/16/05
Bromochloromethane	ND	ug/Kg dry	61.3	31.8000	1	09/16/05
Bromodichloromethane	ND	ug/Kg dry	61.3	24.6000	1	09/16/05
Bromoform	ND	ug/Kg dry	61.3	29.4000	1	09/16/05

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: Northeast Engineers & Consultants

Client Project ID: N. Gate

Client Sample ID: Drum 3

Date Sampled: 09/02/05 00:00

Percent Solids: 89

Initial Volume: 15.3

Final Volume: 15

Extraction Method: 5035

ESS Laboratory Work Order: 0509066

ESS Laboratory Sample ID: 0509066-02

Sample Matrix: Soil

Analyst: RES

5035/8260B Volatile Organic Compounds / Methanol

Bromomethane	ND	ug/Kg dry	123	93.2000	1	09/16/05
Carbon Disulfide	ND	ug/Kg dry	61.3	41.6000	1	09/16/05
Carbon Tetrachloride	ND	ug/Kg dry	61.3	19.6000	1	09/16/05
Chlorobenzene	ND	ug/Kg dry	61.3	9.8000	1	09/16/05
Chloroethane	ND	ug/Kg dry	123	63.8000	1	09/16/05
Chloroform	ND	ug/Kg dry	61.3	39.2000	1	09/16/05
Chloromethane	ND	ug/Kg dry	61.3	49.0000	1	09/16/05
cis-1,2-Dichloroethene	ND	ug/Kg dry	61.3	14.8000	1	09/16/05
cis-1,3-Dichloropropene	ND	ug/Kg dry	61.3	14.8000	1	09/16/05
Dibromochloromethane	ND	ug/Kg dry	61.3	9.8000	1	09/16/05
Dibromomethane	ND	ug/Kg dry	61.3	24.6000	1	09/16/05
Dichlorodifluoromethane	ND	ug/Kg dry	61.3	44.2000	1	09/16/05
Diethyl Ether	ND	ug/Kg dry	61.3	49.0000	1	09/16/05
Di-isopropyl ether	ND	ug/Kg dry	61.3	46.6000	1	09/16/05
Ethyl tertiary-butyl ether	ND	ug/Kg dry	61.3	14.8000	1	09/16/05
Ethylbenzene	ND	ug/Kg dry	61.3	9.8000	1	09/16/05
Hexachlorobutadiene	ND	ug/Kg dry	61.3	88.2000	1	09/16/05
Isopropylbenzene	ND	ug/Kg dry	61.3	7.4000	1	09/16/05
Methyl tert-Butyl Ether	ND	ug/Kg dry	61.3	17.2000	1	09/16/05
Methylene Chloride	J 40.4	ug/Kg dry	306	39.2000	1	09/16/05
Naphthalene	ND	ug/Kg dry	61.3	17.2000	1	09/16/05
n-Butylbenzene	ND	ug/Kg dry	61.3	14.8000	1	09/16/05
n-Propylbenzene	ND	ug/Kg dry	61.3	17.2000	1	09/16/05
sec-Butylbenzene	ND	ug/Kg dry	61.3	12.2000	1	09/16/05
Styrene	ND	ug/Kg dry	61.3	17.2000	1	09/16/05
tert-Butylbenzene	ND	ug/Kg dry	61.3	14.8000	1	09/16/05
Tertiary-amyl methyl ether	ND	ug/Kg dry	61.3	19.6000	1	09/16/05
Tetrachloroethene	ND	ug/Kg dry	61.3	19.6000	1	09/16/05
Tetrahydrofuran	ND	ug/Kg dry	306	306.0000	1	09/16/05
Toluene	ND	ug/Kg dry	61.3	12.2000	1	09/16/05
trans-1,2-Dichloroethene	ND	ug/Kg dry	61.3	44.2000	1	09/16/05
trans-1,3-Dichloropropene	ND	ug/Kg dry	61.3	14.8000	1	09/16/05
Trichloroethene	ND	ug/Kg dry	61.3	19.6000	1	09/16/05
Trichlorofluoromethane	ND	ug/Kg dry	61.3	39.2000	1	09/16/05
Vinyl Acetate	ND	ug/Kg dry	306	44.2000	1	09/16/05
Vinyl Chloride	ND	ug/Kg dry	61.3	46.6000	1	09/16/05

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: Northeast Engineers & Consultants

Client Project ID: N. Gate

Client Sample ID: Drum 3

Date Sampled: 09/02/05 00:00

Percent Solids: 89

Initial Volume: 15.3

Final Volume: 15

Extraction Method: 5035

ESS Laboratory Work Order: 0509066

ESS Laboratory Sample ID: 0509066-02

Sample Matrix: Soil

Analyst: RES

5035/8260B Volatile Organic Compounds / Methanol

Xylene O	ND	ug/Kg dry	61.3	17.2000	1	09/16/05
Xylene P,M	ND	ug/Kg dry	123	24.6000	1	09/16/05
Xylenes (Total)	ND	ug/Kg	184			09/16/05

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichloroethane-d4	104 %		70-130
Surrogate: 4-Bromofluorobenzene	100 %		70-130
Surrogate: Dibromofluoromethane	112 %		70-130
Surrogate: Toluene-d8	104 %		70-130

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: Northeast Engineers & Consultants
Client Project ID: N. Gate
Client Sample ID: Drum 3
Date Sampled: 09/02/05 00:00
Percent Solids: 89
Initial Volume: 19.5
Final Volume: 10
Extraction Method: 3541

ESS Laboratory Work Order: 0509066
ESS Laboratory Sample ID: 0509066-02
Sample Matrix: Soil
Analyst: SEP
Prepared: 09/07/05

8082 Polychlorinated Biphenyls (PCB)

<u>Analyte</u>	<u>Results</u>	<u>Units</u>	<u>MRL</u>	<u>2xMDL</u>	<u>DF</u>	<u>Analyzed</u>
Aroclor 1016	ND	ug/Kg dry	57.6	36.6000	1	09/08/05
Aroclor 1221	ND	ug/Kg dry	57.6	36.6000	1	09/08/05
Aroclor 1232	ND	ug/Kg dry	57.6	36.6000	1	09/08/05
Aroclor 1242	ND	ug/Kg dry	57.6	36.6000	1	09/08/05
Aroclor 1248	ND	ug/Kg dry	57.6	36.6000	1	09/08/05
Aroclor 1254	ND	ug/Kg dry	57.6	36.6000	1	09/08/05
Aroclor 1260	168	ug/Kg dry	57.6	36.6000	1	09/08/05
Aroclor 1262	ND	ug/Kg dry	57.6	36.6000	1	09/08/05
Aroclor 1268	ND	ug/Kg dry	57.6	36.6000	1	09/08/05

	<u>%Recovery</u>	<u>Qualifier</u>	<u>Limits</u>
Surrogate: Decachlorobiphenyl	68 %		30-150
Surrogate: Decachlorobiphenyl [2C]	66 %		30-150
Surrogate: Tetrachloro-m-xylene	69 %		30-150
Surrogate: Tetrachloro-m-xylene [2C]	67 %		30-150

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: Northeast Engineers & Consultants

Client Project ID: N. Gate

Client Sample ID: Drum 3

Date Sampled: 09/02/05 00:00

Percent Solids: 89

Initial Volume: 30.2

Final Volume: 1

Extraction Method: 3550B

ESS Laboratory Work Order: 0509066

ESS Laboratory Sample ID: 0509066-02

Sample Matrix: Soil

Analyst: JLS

Prepared: 09/14/05

8100M Total Petroleum Hydrocarbons

<u>Analyte</u>	<u>Results</u>	<u>Units</u>	<u>MRL</u>	<u>2xMDL</u>	<u>DF</u>	<u>Analyzed</u>
Total Petroleum Hydrocarbons	63.8	mg/kg dry	27.9	4 4600	1	09/15/05

	<u>%Recovery</u>	<u>Qualifier</u>	<u>Limits</u>
Surrogate: O-Terphenyl	82 %		40-140

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: Northeast Engineers & Consultants

Client Project ID: N. Gate

Client Sample ID: Drum 3

Date Sampled: 09/02/05 00:00

Percent Solids: 89

Initial Volume: 20.1

Final Volume: 1

Extraction Method: 3541

ESS Laboratory Work Order: 0509066

ESS Laboratory Sample ID: 0509066-02

Sample Matrix: Soil

Analyst: VSC

Prepared: 09/14/05

8270C Semi-Volatile Organic Compounds

Analyte	Results	Units	MRL	2xMDL	DF	Analyzed
1,1-Biphenyl	ND	ug/Kg dry	559	460.0000	1	09/14/05
1,2,4-Trichlorobenzene	ND	ug/Kg dry	559	364.0000	1	09/14/05
1,2-Dichlorobenzene	ND	ug/Kg dry	559	382.0000	1	09/14/05
1,3-Dichlorobenzene	ND	ug/Kg dry	559	344.0000	1	09/14/05
1,4-Dichlorobenzene	ND	ug/Kg dry	559	380.0000	1	09/14/05
2,3,4,6-Tetrachlorophenol	ND	ug/Kg dry	2800	324.0000	1	09/14/05
2,4,5-Trichlorophenol	ND	ug/Kg dry	559	386.0000	1	09/14/05
2,4,6-Trichlorophenol	ND	ug/Kg dry	559	336.0000	1	09/14/05
2,4-Dichlorophenol	ND	ug/Kg dry	559	398.0000	1	09/14/05
2,4-Dimethylphenol	ND	ug/Kg dry	559	412.0000	1	09/14/05
2,4-Dinitrophenol	ND	ug/Kg dry	2800	742.0000	1	09/14/05
2,4-Dinitrotoluene	ND	ug/Kg dry	559	320.0000	1	09/14/05
2,6-Dinitrotoluene	ND	ug/Kg dry	559	320.0000	1	09/14/05
2-Chloronaphthalene	ND	ug/Kg dry	559	406.0000	1	09/14/05
2-Chlorophenol	ND	ug/Kg dry	559	328.0000	1	09/14/05
2-Methylnaphthalene	ND	ug/Kg dry	559	406.0000	1	09/14/05
2-Methylphenol	ND	ug/Kg dry	559	376.0000	1	09/14/05
2-Nitroaniline	ND	ug/Kg dry	559	386.0000	1	09/14/05
2-Nitrophenol	ND	ug/Kg dry	559	392.0000	1	09/14/05
3,3'-Dichlorobenzidine	ND	ug/Kg dry	559	254.0000	1	09/14/05
3+4-Methylphenol	ND	ug/Kg dry	1120	374.0000	1	09/14/05
3-Nitroaniline	ND	ug/Kg dry	559	338.0000	1	09/14/05
4,6-Dinitro-2-Methylphenol	ND	ug/Kg dry	2800	454.0000	1	09/14/05
4-Bromophenyl-phenylether	ND	ug/Kg dry	559	412.0000	1	09/14/05
4-Chloro-3-Methylphenol	ND	ug/Kg dry	559	358.0000	1	09/14/05
4-Chloroaniline	ND	ug/Kg dry	559	328.0000	1	09/14/05
4-Chloro-phenyl-phenyl ether	ND	ug/Kg dry	559	404.0000	1	09/14/05
4-Nitroaniline	ND	ug/Kg dry	559	300.0000	1	09/14/05
4-Nitrophenol	ND	ug/Kg dry	2800	302.0000	1	09/14/05
Acenaphthene	ND	ug/Kg dry	559	394.0000	1	09/14/05
Acenaphthylene	ND	ug/Kg dry	559	306.0000	1	09/14/05
Acetophenone	ND	ug/Kg dry	559	362.0000	1	09/14/05
Aniline	ND	ug/Kg dry	559	272.0000	1	09/14/05
Anthracene	ND	ug/Kg dry	559	432.0000	1	09/14/05
Azobenzene	ND	ug/Kg dry	559	406.0000	1	09/14/05

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: Northeast Engineers & Consultants

Client Project ID: N. Gate

Client Sample ID: Drum 3

Date Sampled: 09/02/05 00:00

Percent Solids: 89

Initial Volume: 20.1

Final Volume: 1

Extraction Method: 3541

ESS Laboratory Work Order: 0509066

ESS Laboratory Sample ID: 0509066-02

Sample Matrix: Soil

Analyst: VSC

Prepared: 09/14/05

8270C Semi-Volatile Organic Compounds

Benzo(a)anthracene	ND	ug/Kg dry	559	334.0000	1	09/14/05
Benzo(a)pyrene	J 314	ug/Kg dry	559	302.0000	1	09/14/05
Benzo(b)fluoranthene	J 543	ug/Kg dry	559	382.0000	1	09/14/05
Benzo(g,h,i)perylene	ND	ug/Kg dry	559	352.0000	1	09/14/05
Benzo(k)fluoranthene	ND	ug/Kg dry	559	328.0000	1	09/14/05
Benzoic Acid	ND	ug/Kg dry	2800	560.0000	1	09/14/05
Benzyl Alcohol	ND	ug/Kg dry	559	670.0000	1	09/14/05
bis(2-Chloroethoxy)methane	ND	ug/Kg dry	559	362.0000	1	09/14/05
bis(2-Chloroethyl)ether	ND	ug/Kg dry	559	374.0000	1	09/14/05
bis(2-chloroisopropyl)Ether	ND	ug/Kg dry	559	406.0000	1	09/14/05
bis(2-Ethylhexyl)phthalate	961	ug/Kg dry	559	424.0000	1	09/14/05
Butylbenzylphthalate	ND	ug/Kg dry	559	390.0000	1	09/14/05
Carbazole	ND	ug/Kg dry	559	352.0000	1	09/14/05
Chrysene	J 353	ug/Kg dry	559	348.0000	1	09/14/05
Dibenzo(a,h)Anthracene	ND	ug/Kg dry	559	302.0000	1	09/14/05
Dibenzofuran	ND	ug/Kg dry	559	382.0000	1	09/14/05
Diethylphthalate	ND	ug/Kg dry	559	380.0000	1	09/14/05
Dimethylphthalate	ND	ug/Kg dry	559	376.0000	1	09/14/05
Di-n-butylphthalate	ND	ug/Kg dry	559	372.0000	1	09/14/05
Di-n-octylphthalate	ND	ug/Kg dry	559	368.0000	1	09/14/05
Fluoranthene	787	ug/Kg dry	559	390.0000	1	09/14/05
Fluorene	ND	ug/Kg dry	559	378.0000	1	09/14/05
Hexachlorobenzene	ND	ug/Kg dry	559	398.0000	1	09/14/05
Hexachlorobutadiene	ND	ug/Kg dry	559	390.0000	1	09/14/05
Hexachlorocyclopentadiene	ND	ug/Kg dry	2800	210.0000	1	09/14/05
Hexachloroethane	ND	ug/Kg dry	1120	406.0000	1	09/14/05
Indeno(1,2,3-cd)Pyrene	ND	ug/Kg dry	559	334.0000	1	09/14/05
Isophorone	ND	ug/Kg dry	559	374.0000	1	09/14/05
Naphthalene	ND	ug/Kg dry	559	330.0000	1	09/14/05
Nitrobenzene	ND	ug/Kg dry	559	346.0000	1	09/14/05
N-Nitrosodimethylamine	ND	ug/Kg dry	559	298.0000	1	09/14/05
N-Nitroso-Di-n-Propylamine	ND	ug/Kg dry	559	412.0000	1	09/14/05
N-nitrosodiphenylamine	ND	ug/Kg dry	559	316.0000	1	09/14/05
Pentachlorophenol	ND	ug/Kg dry	2800	334.0000	1	09/14/05
Phenanthrene	J 481	ug/Kg dry	559	356.0000	1	09/14/05
Phenol	ND	ug/Kg dry	559	362.0000	1	09/14/05

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: Northeast Engineers & Consultants

Client Project ID: N. Gate

Client Sample ID: Drum 3

Date Sampled: 09/02/05 00:00

Percent Solids: 89

Initial Volume: 20.1

Final Volume: 1

Extraction Method: 3541

ESS Laboratory Work Order: 0509066

ESS Laboratory Sample ID: 0509066-02

Sample Matrix: Soil

Analyst: VSC

Prepared: 09/14/05

8270C Semi-Volatile Organic Compounds

Pyrene	570	ug/Kg dry	559	374.0000	1	09/14/05
Pyridine	ND	ug/Kg dry	2800	352.0000	1	09/14/05

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichlorobenzene-d4	80 %		30-130
Surrogate: 2,4,6-Tribromophenol	84 %		30-130
Surrogate: 2-Chlorophenol-d4	78 %		30-130
Surrogate: 2-Fluorobiphenyl	89 %		30-130
Surrogate: 2-Fluorophenol	74 %		30-130
Surrogate: Nitrobenzene-d5	46 %		30-130
Surrogate: Phenol-d6	72 %		30-130
Surrogate: p-Terphenyl-d14	92 %		30-130

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: Northeast Engineers & Consultants
Client Project ID: N. Gate
Client Sample ID: Drum 3
Date Sampled: 09/02/05 00:00
Percent Solids: 89

ESS Laboratory Work Order: 0509066
ESS Laboratory Sample ID: 0509066-02
Sample Matrix: Soil

Classical Chemistry

<u>Analyte</u>		<u>Results</u>	<u>Units</u>	<u>MRL</u>	<u>Method</u>	<u>DF</u>	<u>Analyst</u>	<u>Analyzed</u>
Conductivity	D	28	umhos/cm	5	9050A	1	NMT	09/09/05

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: Northeast Engineers & Consultants
Client Project ID: N. Gate
Client Sample ID: Drum 4
Date Sampled: 09/02/05 00:00
Percent Solids: 89

ESS Laboratory Work Order: 0509066
ESS Laboratory Sample ID: 0509066-03
Sample Matrix: Soil

3050B/6000/7000 Total Metals

<u>Analyte</u>	<u>Results</u>	<u>Units</u>	<u>MRL</u>	<u>Method</u>	<u>DF</u>	<u>Analyst</u>	<u>Analyzed</u>	<u>I/V</u>	<u>F/V</u>
Arsenic	9.8	mg/kg dry	1.6	7060A	5	JP	09/20/05	1.8	100
Cadmium	ND	mg/kg dry	0.62	6010B	1	SVD	09/07/05	1.8	100
Chromium	23.3	mg/kg dry	1.2	6010B	1	SVD	09/07/05	1.8	100
Lead	83.4	mg/kg dry	6.2	6010B	1	SVD	09/07/05	1.8	100
Mercury	0.050	mg/kg dry	0.036	7471A	1	EEM	09/08/05	0.62	40

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: Northeast Engineers & Consultants

Client Project ID: N. Gate

Client Sample ID: Drum 4

Date Sampled: 09/02/05 00:00

Percent Solids: 89

Initial Volume: 19.5

Final Volume: 15

Extraction Method: 5035

ESS Laboratory Work Order: 0509066

ESS Laboratory Sample ID: 0509066-03

Sample Matrix: Soil

Analyst: RES

5035/8260B Volatile Organic Compounds / Methanol

<u>Analyte</u>	<u>Results</u>	<u>Units</u>	<u>MRL</u>	<u>2xMDL</u>	<u>DF</u>	<u>Analyzed</u>
1,1,1,2-Tetrachloroethane	ND	ug/Kg dry	49.4	23.8000	1	09/16/05
1,1,1-Trichloroethane	ND	ug/Kg dry	49.4	9.8000	1	09/16/05
1,1,2,2-Tetrachloroethane	ND	ug/Kg dry	49.4	17.8000	1	09/16/05
1,1,2-Trichloroethane	ND	ug/Kg dry	49.4	25.6000	1	09/16/05
1,1-Dichloroethane	ND	ug/Kg dry	49.4	13.8000	1	09/16/05
1,1-Dichloroethene	ND	ug/Kg dry	49.4	13.8000	1	09/16/05
1,1-Dichloropropene	ND	ug/Kg dry	49.4	35.6000	1	09/16/05
1,2,3-Trichlorobenzene	ND	ug/Kg dry	49.4	27.6000	1	09/16/05
1,2,3-Trichloropropane	ND	ug/Kg dry	49.4	15.8000	1	09/16/05
1,2,4-Trichlorobenzene	ND	ug/Kg dry	49.4	15.8000	1	09/16/05
1,2,4-Trimethylbenzene	ND	ug/Kg dry	49.4	11.8000	1	09/16/05
1,2-Dibromo-3-Chloropropane	ND	ug/Kg dry	247	104.8000	1	09/16/05
1,2-Dibromoethane	ND	ug/Kg dry	49.4	15.8000	1	09/16/05
1,2-Dichlorobenzene	ND	ug/Kg dry	49.4	15.8000	1	09/16/05
1,2-Dichloroethane	ND	ug/Kg dry	49.4	21.8000	1	09/16/05
1,2-Dichloropropane	ND	ug/Kg dry	49.4	13.8000	1	09/16/05
1,3,5-Trimethylbenzene	ND	ug/Kg dry	49.4	9.8000	1	09/16/05
1,3-Dichlorobenzene	ND	ug/Kg dry	49.4	11.8000	1	09/16/05
1,3-Dichloropropane	ND	ug/Kg dry	49.4	35.6000	1	09/16/05
1,4-Dichlorobenzene	ND	ug/Kg dry	49.4	9.8000	1	09/16/05
1,4-Dioxane - Screen	ND	ug/Kg dry	4940	3960.0000	1	09/16/05
1-Chlorohexane	ND	ug/Kg dry	49.4	17.8000	1	09/16/05
2,2-Dichloropropane	ND	ug/Kg dry	98.8	69.2000	1	09/16/05
2-Butanone	ND	ug/Kg dry	1230	224.0000	1	09/16/05
2-Chlorotoluene	ND	ug/Kg dry	49.4	19.8000	1	09/16/05
2-Hexanone	ND	ug/Kg dry	494	156.0000	1	09/16/05
4-Chlorotoluene	ND	ug/Kg dry	49.4	11.8000	1	09/16/05
4-Isopropyltoluene	ND	ug/Kg dry	49.4	9.8000	1	09/16/05
4-Methyl-2-Pentanone	ND	ug/Kg dry	494	73.2000	1	09/16/05
Acetone	ND	ug/Kg dry	1230	1116.0000	1	09/16/05
Benzene	ND	ug/Kg dry	49.4	8.0000	1	09/16/05
Bromobenzene	ND	ug/Kg dry	49.4	19.8000	1	09/16/05
Bromochloromethane	ND	ug/Kg dry	49.4	25.6000	1	09/16/05
Bromodichloromethane	ND	ug/Kg dry	49.4	19.8000	1	09/16/05
Bromoform	ND	ug/Kg dry	49.4	23.8000	1	09/16/05

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: Northeast Engineers & Consultants

Client Project ID: N. Gate

Client Sample ID: Drum 4

Date Sampled: 09/02/05 00:00

Percent Solids: 89

Initial Volume: 19.5

Final Volume: 15

Extraction Method: 5035

ESS Laboratory Work Order: 0509066

ESS Laboratory Sample ID: 0509066-03

Sample Matrix: Soil

Analyst: RES

5035/8260B Volatile Organic Compounds / Methanol

Bromomethane	ND	ug/Kg dry	98.8	75.0000	1	09/16/05
Carbon Disulfide	ND	ug/Kg dry	49.4	33.6000	1	09/16/05
Carbon Tetrachloride	ND	ug/Kg dry	49.4	15.8000	1	09/16/05
Chlorobenzene	ND	ug/Kg dry	49.4	8.0000	1	09/16/05
Chloroethane	ND	ug/Kg dry	98.8	51.4000	1	09/16/05
Chloroform	ND	ug/Kg dry	49.4	31.6000	1	09/16/05
Chloromethane	ND	ug/Kg dry	49.4	39.6000	1	09/16/05
cis-1,2-Dichloroethene	ND	ug/Kg dry	49.4	11.8000	1	09/16/05
cis-1,3-Dichloropropene	ND	ug/Kg dry	49.4	11.8000	1	09/16/05
Dibromochloromethane	ND	ug/Kg dry	49.4	8.0000	1	09/16/05
Dibromomethane	ND	ug/Kg dry	49.4	19.8000	1	09/16/05
Dichlorodifluoromethane	ND	ug/Kg dry	49.4	35.6000	1	09/16/05
Diethyl Ether	ND	ug/Kg dry	49.4	39.6000	1	09/16/05
Di-isopropyl ether	ND	ug/Kg dry	49.4	37.6000	1	09/16/05
Ethyl tertiary-butyl ether	ND	ug/Kg dry	49.4	11.8000	1	09/16/05
Ethylbenzene	ND	ug/Kg dry	49.4	8.0000	1	09/16/05
Hexachlorobutadiene	ND	ug/Kg dry	49.4	71.2000	1	09/16/05
Isopropylbenzene	ND	ug/Kg dry	49.4	6.0000	1	09/16/05
Methyl tert-Butyl Ether	ND	ug/Kg dry	49.4	13.8000	1	09/16/05
Methylene Chloride	ND	ug/Kg dry	247	31.6000	1	09/16/05
Naphthalene	ND	ug/Kg dry	49.4	13.8000	1	09/16/05
n-Butylbenzene	ND	ug/Kg dry	49.4	11.8000	1	09/16/05
n-Propylbenzene	ND	ug/Kg dry	49.4	13.8000	1	09/16/05
sec-Butylbenzene	ND	ug/Kg dry	49.4	9.8000	1	09/16/05
Styrene	ND	ug/Kg dry	49.4	13.8000	1	09/16/05
tert-Butylbenzene	ND	ug/Kg dry	49.4	11.8000	1	09/16/05
Tertiary-amyl methyl ether	ND	ug/Kg dry	49.4	15.8000	1	09/16/05
Tetrachloroethene	ND	ug/Kg dry	49.4	15.8000	1	09/16/05
Tetrahydrofuran	ND	ug/Kg dry	247	246.0000	1	09/16/05
Toluene	ND	ug/Kg dry	49.4	9.8000	1	09/16/05
trans-1,2-Dichloroethene	ND	ug/Kg dry	49.4	35.6000	1	09/16/05
trans-1,3-Dichloropropene	ND	ug/Kg dry	49.4	11.8000	1	09/16/05
Trichloroethene	ND	ug/Kg dry	49.4	15.8000	1	09/16/05
Trichlorofluoromethane	ND	ug/Kg dry	49.4	31.6000	1	09/16/05
Vinyl Acetate	ND	ug/Kg dry	247	35.6000	1	09/16/05
Vinyl Chloride	ND	ug/Kg dry	49.4	37.6000	1	09/16/05

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: Northeast Engineers & Consultants

Client Project ID: N. Gate

Client Sample ID: Drum 4

Date Sampled: 09/02/05 00:00

Percent Solids: 89

Initial Volume: 19.5

Final Volume: 15

Extraction Method: 5035

ESS Laboratory Work Order: 0509066

ESS Laboratory Sample ID: 0509066-03

Sample Matrix: Soil

Analyst: RES

5035/8260B Volatile Organic Compounds / Methanol

Xylene O	ND	ug/Kg dry	49.4	13.8000	1	09/16/05
Xylene P,M	ND	ug/Kg dry	98.8	19.8000	1	09/16/05
Xylenes (Total)	ND	ug/Kg	148			09/16/05

	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>
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Surrogate: 1,2-Dichloroethane-d4

99 %

70-130

Surrogate: 4-Bromofluorobenzene

94 %

70-130

Surrogate: Dibromofluoromethane

104 %

70-130

Surrogate: Toluene-d8

94 %

70-130

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: Northeast Engineers & Consultants
Client Project ID: N. Gate
Client Sample ID: Drum 4
Date Sampled: 09/02/05 00:00
Percent Solids: 89
Initial Volume: 20.3
Final Volume: 10
Extraction Method: 3541

ESS Laboratory Work Order: 0509066
ESS Laboratory Sample ID: 0509066-03
Sample Matrix: Soil
Analyst: SEP
Prepared: 09/07/05

8082 Polychlorinated Biphenyls (PCB)

<u>Analyte</u>	<u>Results</u>	<u>Units</u>	<u>MRL</u>	<u>2xMDL</u>	<u>DF</u>	<u>Analyzed</u>
Aroclor 1016	ND	ug/Kg dry	55.3	35.2000	1	09/08/05
Aroclor 1221	ND	ug/Kg dry	55.3	35.2000	1	09/08/05
Aroclor 1232	ND	ug/Kg dry	55.3	35.2000	1	09/08/05
Aroclor 1242	ND	ug/Kg dry	55.3	35.2000	1	09/08/05
Aroclor 1248	ND	ug/Kg dry	55.3	35.2000	1	09/08/05
Aroclor 1254	ND	ug/Kg dry	55.3	35.2000	1	09/08/05
Aroclor 1260	309	ug/Kg dry	55.3	35.2000	1	09/08/05
Aroclor 1262	ND	ug/Kg dry	55.3	35.2000	1	09/08/05
Aroclor 1268	ND	ug/Kg dry	55.3	35.2000	1	09/08/05

	<u>%Recovery</u>	<u>Qualifier</u>	<u>Limits</u>
Surrogate: Decachlorobiphenyl	77 %		30-150
Surrogate: Decachlorobiphenyl [2C]	77 %		30-150
Surrogate: Tetrachloro-m-xylene	75 %		30-150
Surrogate: Tetrachloro-m-xylene [2C]	76 %		30-150

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: Northeast Engineers & Consultants
Client Project ID: N. Gate
Client Sample ID: Drum 4
Date Sampled: 09/02/05 00:00
Percent Solids: 89
Initial Volume: 30.4
Final Volume: 1
Extraction Method: 3550B

ESS Laboratory Work Order: 0509066
ESS Laboratory Sample ID: 0509066-03
Sample Matrix: Soil
Analyst: JLS
Prepared: 09/14/05

8100M Total Petroleum Hydrocarbons

<u>Analyte</u>	<u>Results</u>	<u>Units</u>	<u>MRL</u>	<u>2xMDL</u>	<u>DF</u>	<u>Analyzed</u>
Total Petroleum Hydrocarbons	58.7	mg/kg dry	27.7	4.4400	1	09/15/05

	<u>%Recovery</u>	<u>Qualifier</u>	<u>Limits</u>
Surrogate: O-Terphenyl	82 %		40-140

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: Northeast Engineers & Consultants

Client Project ID: N. Gate

Client Sample ID: Drum 4

Date Sampled: 09/02/05 00:00

Percent Solids: 89

Initial Volume: 20.6

Final Volume: 1

Extraction Method: 3541

ESS Laboratory Work Order: 0509066

ESS Laboratory Sample ID: 0509066-03

Sample Matrix: Soil

Analyst: VSC

Prepared: 09/14/05

8270C Semi-Volatile Organic Compounds

<u>Analyte</u>	<u>Results</u>	<u>Units</u>	<u>MRL</u>	<u>2xMDL</u>	<u>DF</u>	<u>Analyzed</u>
1,1-Biphenyl	ND	ug/Kg dry	545	450.0000	1	09/14/05
1,2,4-Trichlorobenzene	ND	ug/Kg dry	545	356.0000	1	09/14/05
1,2-Dichlorobenzene	ND	ug/Kg dry	545	374.0000	1	09/14/05
1,3-Dichlorobenzene	ND	ug/Kg dry	545	336.0000	1	09/14/05
1,4-Dichlorobenzene	ND	ug/Kg dry	545	370.0000	1	09/14/05
2,3,4,6-Tetrachlorophenol	ND	ug/Kg dry	2730	316.0000	1	09/14/05
2,4,5-Trichlorophenol	ND	ug/Kg dry	545	378.0000	1	09/14/05
2,4,6-Trichlorophenol	ND	ug/Kg dry	545	328.0000	1	09/14/05
2,4-Dichlorophenol	ND	ug/Kg dry	545	388.0000	1	09/14/05
2,4-Dimethylphenol	ND	ug/Kg dry	545	402.0000	1	09/14/05
2,4-Dinitrophenol	ND	ug/Kg dry	2730	724.0000	1	09/14/05
2,4-Dinitrotoluene	ND	ug/Kg dry	545	312.0000	1	09/14/05
2,6-Dinitrotoluene	ND	ug/Kg dry	545	312.0000	1	09/14/05
2-Chloronaphthalene	ND	ug/Kg dry	545	398.0000	1	09/14/05
2-Chlorophenol	ND	ug/Kg dry	545	320.0000	1	09/14/05
2-Methylnaphthalene	ND	ug/Kg dry	545	398.0000	1	09/14/05
2-Methylphenol	ND	ug/Kg dry	545	366.0000	1	09/14/05
2-Nitroaniline	ND	ug/Kg dry	545	378.0000	1	09/14/05
2-Nitrophenol	ND	ug/Kg dry	545	382.0000	1	09/14/05
3,3'-Dichlorobenzidine	ND	ug/Kg dry	545	248.0000	1	09/14/05
3+4-Methylphenol	ND	ug/Kg dry	1090	364.0000	1	09/14/05
3-Nitroaniline	ND	ug/Kg dry	545	330.0000	1	09/14/05
4,6-Dinitro-2-Methylphenol	ND	ug/Kg dry	2730	442.0000	1	09/14/05
4-Bromophenyl-phenylether	ND	ug/Kg dry	545	402.0000	1	09/14/05
4-Chloro-3-Methylphenol	ND	ug/Kg dry	545	350.0000	1	09/14/05
4-Chloroaniline	ND	ug/Kg dry	545	320.0000	1	09/14/05
4-Chloro-phenyl-phenyl ether	ND	ug/Kg dry	545	394.0000	1	09/14/05
4-Nitroaniline	ND	ug/Kg dry	545	292.0000	1	09/14/05
4-Nitrophenol	ND	ug/Kg dry	2730	294.0000	1	09/14/05
Acenaphthene	ND	ug/Kg dry	545	384.0000	1	09/14/05
Acenaphthylene	ND	ug/Kg dry	545	298.0000	1	09/14/05
Acetophenone	ND	ug/Kg dry	545	354.0000	1	09/14/05
Aniline	ND	ug/Kg dry	545	266.0000	1	09/14/05
Anthracene	ND	ug/Kg dry	545	422.0000	1	09/14/05
Azobenzene	ND	ug/Kg dry	545	398.0000	1	09/14/05

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: Northeast Engineers & Consultants

Client Project ID: N. Gate

Client Sample ID: Drum 4

Date Sampled: 09/02/05 00:00

Percent Solids: 89

Initial Volume: 20.6

Final Volume: 1

Extraction Method: 3541

ESS Laboratory Work Order: 0509066

ESS Laboratory Sample ID: 0509066-03

Sample Matrix: Soil

Analyst: VSC

Prepared: 09/14/05

8270C Semi-Volatile Organic Compounds

Benzo(a)anthracene	J	342	ug/Kg dry	545	326.0000	1	09/14/05
Benzo(a)pyrene	J	544	ug/Kg dry	545	294.0000	1	09/14/05
Benzo(b)fluoranthene	J	381	ug/Kg dry	545	374.0000	1	09/14/05
Benzo(g,h,i)perylene		ND	ug/Kg dry	545	342.0000	1	09/14/05
Benzo(k)fluoranthene	J	347	ug/Kg dry	545	320.0000	1	09/14/05
Benzoic Acid		ND	ug/Kg dry	2730	546.0000	1	09/14/05
Benzyl Alcohol		ND	ug/Kg dry	545	654.0000	1	09/14/05
bis(2-Chloroethoxy)methane		ND	ug/Kg dry	545	354.0000	1	09/14/05
bis(2-Chloroethyl)ether		ND	ug/Kg dry	545	364.0000	1	09/14/05
bis(2-chloroisopropyl)Ether		ND	ug/Kg dry	545	398.0000	1	09/14/05
bis(2-Ethylhexyl)phthalate	J	489	ug/Kg dry	545	414.0000	1	09/14/05
Butylbenzylphthalate		ND	ug/Kg dry	545	380.0000	1	09/14/05
Carbazole		ND	ug/Kg dry	545	342.0000	1	09/14/05
Chrysene	J	361	ug/Kg dry	545	340.0000	1	09/14/05
Dibenzo(a,h)Anthracene		ND	ug/Kg dry	545	294.0000	1	09/14/05
Dibenzofuran		ND	ug/Kg dry	545	374.0000	1	09/14/05
Diethylphthalate		ND	ug/Kg dry	545	370.0000	1	09/14/05
Dimethylphthalate		ND	ug/Kg dry	545	366.0000	1	09/14/05
Di-n-butylphthalate		ND	ug/Kg dry	545	362.0000	1	09/14/05
Di-n-octylphthalate		ND	ug/Kg dry	545	360.0000	1	09/14/05
Fluoranthene		865	ug/Kg dry	545	380.0000	1	09/14/05
Fluorene		ND	ug/Kg dry	545	368.0000	1	09/14/05
Hexachlorobenzene		ND	ug/Kg dry	545	388.0000	1	09/14/05
Hexachlorobutadiene		ND	ug/Kg dry	545	380.0000	1	09/14/05
Hexachlorocyclopentadiene		ND	ug/Kg dry	2730	206.0000	1	09/14/05
Hexachloroethane		ND	ug/Kg dry	1090	398.0000	1	09/14/05
Indeno(1,2,3-cd)Pyrene		ND	ug/Kg dry	545	326.0000	1	09/14/05
Isophorone		ND	ug/Kg dry	545	364.0000	1	09/14/05
Naphthalene		ND	ug/Kg dry	545	322.0000	1	09/14/05
Nitrobenzene		ND	ug/Kg dry	545	338.0000	1	09/14/05
N-Nitrosodimethylamine		ND	ug/Kg dry	545	290.0000	1	09/14/05
N-Nitroso-Di-n-Propylamine		ND	ug/Kg dry	545	402.0000	1	09/14/05
N-nitrosodiphenylamine		ND	ug/Kg dry	545	308.0000	1	09/14/05
Pentachlorophenol		ND	ug/Kg dry	2730	326.0000	1	09/14/05
Phenanthrene	J	452	ug/Kg dry	545	346.0000	1	09/14/05
Phenol		ND	ug/Kg dry	545	354.0000	1	09/14/05

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: Northeast Engineers & Consultants

Client Project ID: N. Gate

Client Sample ID: Drum 4

Date Sampled: 09/02/05 00:00

Percent Solids: 89

Initial Volume: 20.6

Final Volume: 1

Extraction Method: 3541

ESS Laboratory Work Order: 0509066

ESS Laboratory Sample ID: 0509066-03

Sample Matrix: Soil

Analyst: VSC

Prepared: 09/14/05

8270C Semi-Volatile Organic Compounds

Pyrene	655	ug/Kg dry	545	364.0000	1	09/14/05
Pyridine	ND	ug/Kg dry	2730	342.0000	1	09/14/05

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichlorobenzene-d4	75 %		30-130
Surrogate: 2,4,6-Tribromophenol	70 %		30-130
Surrogate: 2-Chlorophenol-d4	78 %		30-130
Surrogate: 2-Fluorobiphenyl	94 %		30-130
Surrogate: 2-Fluorophenol	77 %		30-130
Surrogate: Nitrobenzene-d5	81 %		30-130
Surrogate: Phenol-d6	78 %		30-130
Surrogate: p-Terphenyl-d14	111 %		30-130

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: Northeast Engineers & Consultants
Client Project ID: N. Gate
Client Sample ID: Drum 4
Date Sampled: 09/02/05 00:00
Percent Solids: 89

ESS Laboratory Work Order: 0509066
ESS Laboratory Sample ID: 0509066-03
Sample Matrix: Soil

Classical Chemistry

<u>Analyte</u>		<u>Results</u>	<u>Units</u>	<u>MRL</u>	<u>Method</u>	<u>DF</u>	<u>Analyst</u>	<u>Analyzed</u>
Conductivity	D	49	umhos/cm	5	9050A	1	NMT	09/09/05

APPENDIX B

Confirmatory Sample Screening Against RIDEM Criteria

**Confirmatory Sample Screening Against RIDEM Residential Criteria and Analytical Data
Newport Shipyard
Confirmatory Sample PCB Data
08/02/-08/06/07**

SAMP ID	MATRIX	PARAMETER	QUAL ¹	RESULT (mg/kg) ²	RIDEM Residential Criteria (mg/kg)	Exceed RIDEM Residential Criteria? (Y/N)	Reporting Limit Issue? ³	Date Analyzed	Method	Lab ID#
SHIPYARD-BASE-07-01	Soil	Total PCBs	U	0	10	N	N	12/28/2004	EPA 8082	Y3947-01
SHIPYARD-SIDEWALL-WEST-07-02	Soil	Total PCBs		0.045	10	N	N	12/28/2004	EPA 8082	Y3947-02
SHIPYARD-SIDEWALL-WEST-07-02D	Soil	Total PCBs		0.06	10	N	N	12/28/2004	EPA 8082	Y3947-03
SHIPYARD-SIDEWALL-WEST-07-03	Soil	Total PCBs		0.024	10	N	N	12/28/2004	EPA 8082	Y3947-04
SHIPYARD-SIDEWALL-WEST-07-04	Soil	Total PCBs	E	2.2	10	N	N	12/28/2004	EPA 8082	Y3947-05
SHIPYARD-SIDEWALL-WEST-07-04DL	Soil	Total PCBs		3.4	10	N	N	12/28/2004	EPA 8082	Y3947-05DL
SHIPYARD-BASE-07-05	Soil	Total PCBs		0.02	10	N	N	12/28/2004	EPA 8082	Y3947-06
SHIPYARD-BASE-07-06	Soil	Total PCBs		0.027	10	N	N	12/28/2004	EPA 8082	Y3947-07
SHIPYARD-BASE-07-07	Soil	Total PCBs		0.057	10	N	N	12/28/2004	EPA 8082	Y3947-08
SHIPYARD-BASE-07-08	Soil	Total PCBs	U	0	10	N	N	12/28/2004	EPA 8082	Y3947-09
SHIPYARD-BASE-07-09	Soil	Total PCBs	U	0	10	N	N	12/28/2004	EPA 8082	Y3947-10
SHIPYARD-BASE-07-09D	Soil	Total PCBs	U	0	10	N	N	12/28/2004	EPA 8082	Y3947-11
SHIPYARD-BASE-07-10	Soil	Total PCBs	U	0	10	N	N	12/28/2004	EPA 8082	Y3947-12
SHIPYARD-BASE-07-11	Soil	Total PCBs	U	0	10	N	N	12/28/2004	EPA 8082	Y3947-13
SHIPYARD-BASE-07-12	Soil	Total PCBs	U	0	10	N	N	12/28/2004	EPA 8082	Y3947-14
1 E = Value Exceeds Calibration range, U = Not Detected										
2 Total PCBs values calculated by Lab										
3 Identifies if the laboratory reporting limit, itself, exceeds the clean-up criteria										

**Confirmatory Sample Screening Against RIDEM Residential Criteria and Analytical Data
Newport Shipyard Confirmatory Sample
RCRA 8 Metal Data
8/02-8/06/07**

SAMP ID	MATRIX	PARAMETER	QUAL ¹	RESULT (mg/kg)	RIDEM Residential Criteria (mg/kg)	RIDEM Industrial Criteria (mg/kg)	Exceed RIDEM Residential Criteria? (Y/N)	Exceed RIDEM Industrial Criteria? (Y/N)	Lab ID#	CAS NOS
SHIPYARD-BASE-07-01	Soil	Arsenic		7.41	7	7	Y	Y	Y3947-01	7440-38-2
		Barium		29.6	5500	10000	N	N		7440-39-3
		Cadmium	J	0.833	39	1000	N	N		7440-43-9
		Chromium		17.2	390	10000	N	N		7440-47-3
		Lead		25.8	150	500	N	N		7439-92-1
		Mercury	U	0	23	610	N	N		7439-97-6
		Selenium	U	0	390	10000	N	N		7782-49-2
		Silver	U	0	200	10000	N	N		7440-22-4
SHIPYARD-SIDEWALL-WEST-07-02	Soil	Arsenic		11.8	7	7	Y	Y	Y3947-02	7440-38-2
		Barium		127	5500	10000	N	N		7440-39-3
		Cadmium		2.52	39	1000	N	N		7440-43-9
		Chromium		45.1	390	10000	N	N		7440-47-3
		Lead		152	150	500	Y	N		7439-92-1
		Mercury		0.044	23	610	N	N		7439-97-6
		Selenium	U	0	390	10000	N	N		7782-49-2
		Silver	U	0	200	10000	N	N		7440-22-4
SHIPYARD-SIDEWALL-WEST-07-02D	Soil	Arsenic		5.34	7	7	N	N	Y347-03	7440-38-2
		Barium		183	5500	10000	N	N		7440-39-3
		Cadmium		1.86	39	1000	N	N		7440-43-9
		Chromium		57.1	390	10000	N	N		7440-47-3
		Lead		230	150	500	Y	N		7439-92-1
		Mercury		0.101	23	610	N	N		7439-97-6
		Selenium	U	0	390	10000	N	N		7782-49-2
		Silver	U	0	200	10000	N	N		7440-22-4
SHIPYARD-SIDEWALL-WEST-07-03	Soil	Arsenic		7.4	7	7	Y	Y	Y3947-04	7440-38-2
		Barium		31.4	5500	10000	N	N		7440-39-3
		Cadmium	J	0.717	39	1000	N	N		7440-43-9
		Chromium		13.6	390	10000	N	N		7440-47-3
		Lead		25.8	150	500	N	N		7439-92-1
		Mercury	J	0.004	23	610	N	N		7439-97-6
		Selenium	U	0	390	10000	N	N		7782-49-2
		Silver	U	0	200	10000	N	N		7440-22-4
SHIPYARD-SIDEWALL-WEST-07-04	Soil	Arsenic		8.14	7	7	Y	Y	Y3947-05	7440-38-2
		Barium		119	5500	10000	N	N		7440-39-3
		Cadmium		2.36	39	1000	N	N		7440-43-9
		Chromium		35.5	390	10000	N	N		7440-47-3
		Lead		236	150	500	Y	N		7439-92-1
		Mercury		0.042	23	610	N	N		7439-97-6
		Selenium	U	0	390	10000	N	N		7782-49-2
		Silver	U	0	200	10000	N	N		7440-22-4
SHIPYARD-BASE-07-05	Soil	Arsenic		7.96	7	7	Y	Y	Y3947-06	7440-38-2
		Barium		18.6	5500	10000	N	N		7440-39-3
		Cadmium	J	0.98	39	1000	N	N		7440-43-9
		Chromium		13.6	390	10000	N	N		7440-47-3
		Lead		10.6	150	500	N	N		7439-92-1
		Mercury	U	0	23	610	N	N		7439-97-6
		Selenium	U	0	390	10000	N	N		7782-49-2
		Silver	U	0	200	10000	N	N		7440-22-4
SHIPYARD-BASE-07-06	Soil	Arsenic		7.26	7	7	Y	Y	Y3947-07	7440-38-2
		Barium		17.4	5500	10000	N	N		7440-39-3
		Cadmium	J	0.778	39	1000	N	N		7440-43-9
		Chromium		12.7	390	10000	N	N		7440-47-3
		Lead		9.99	150	500	N	N		7439-92-1
		Mercury	U	0	23	610	N	N		7439-97-6
		Selenium	U	0	390	10000	N	N		7782-49-2
		Silver	U	0	200	10000	N	N		7440-22-4
SHIPYARD-BASE-07-07	Soil	Arsenic		5.37	7	7	N	N	Y3947-08	7440-38-2
		Barium		14	5500	10000	N	N		7440-39-3
		Cadmium	J	0.71	39	1000	N	N		7440-43-9
		Chromium		11.5	390	10000	N	N		7440-47-3
		Lead		13.4	150	500	N	N		7439-92-1
		Mercury	U	0	23	610	N	N		7439-97-6
		Selenium	U	0	390	10000	N	N		7782-49-2
		Silver	U	0	200	10000	N	N		7440-22-4

**Confirmatory Sample Screening Against RIDEM Residential Criteria and Analytical Data
Newport Shipyard Confirmatory Sample
RCRA 8 Metal Data
8/02-8/06/07**

SAMP_ID	MATRIX	PARAMETER	QUAL ¹	RESULT (mg/kg)	RIDEM Residential Criteria (mg/kg)	RIDEM Industrial Criteria (mg/kg)	Exceed RIDEM Residential Criteria? (Y/N)	Exceed RIDEM Industrial Criteria? (Y/N)	Lab ID#	CAS NOS
SHIPYARD-BASE-07-08	Soil	Arsenic		6.06	7	7	N	N	Y3947-09	7440-38-2
		Barium		13.7	5500	10000	N	N		7440-39-3
		Cadmium		1.17	39	1000	N	N		7440-43-9
		Chromium		18.8	390	10000	N	N		7440-47-3
		Lead		21.3	150	500	N	N		7439-92-1
		Mercury	U	0	23	610	N	N		7439-97-6
		Selenium	U	0	390	10000	N	N		7782-49-2
		Silver	U	0	200	10000	N	N		7440-22-4
SHIPYARD-BASE-07-09	Soil	Arsenic		8.3	7	7	Y	Y	Y3947-10	7440-38-2
		Barium		20.2	5500	10000	N	N		7440-39-3
		Cadmium	J	0.738	39	1000	N	N		7440-43-9
		Chromium		13.2	390	10000	N	N		7440-47-3
		Lead		10.4	150	500	N	N		7439-92-1
		Mercury	U	0	23	610	N	N		7439-97-6
		Selenium	U	0	390	10000	N	N		7782-49-2
		Silver	U	0	200	10000	N	N		7440-22-4
SHIPYARD-BASE-07-09D	Soil	Arsenic		8.92	7	7	Y	Y	Y3947-11	7440-38-2
		Barium		19	5500	10000	N	N		7440-39-3
		Cadmium	J	0.73	39	1000	N	N		7440-43-9
		Chromium		13.5	390	10000	N	N		7440-47-3
		Lead		11.3	150	500	N	N		7439-92-1
		Mercury	U	0	23	610	N	N		7439-97-6
		Selenium	U	0	390	10000	N	N		7782-49-2
		Silver	U	0	200	10000	N	N		7440-22-4
SHIPYARD-BASE-07-10	Soil	Arsenic		9.88	7	7	Y	Y	Y3947-12	7440-38-2
		Barium		19.6	5500	10000	N	N		7440-39-3
		Cadmium	J	1.06	39	1000	N	N		7440-43-9
		Chromium		15.1	390	10000	N	N		7440-47-3
		Lead		11.8	150	500	N	N		7439-92-1
		Mercury	U	0	23	610	N	N		7439-97-6
		Selenium	U	0	390	10000	N	N		7782-49-2
		Silver	U	0	200	10000	N	N		7440-22-4
SHIPYARD-BASE-07-11	Soil	Arsenic		8.24	7	7	Y	Y	Y3947-13	7440-38-2
		Barium		22.5	5500	10000	N	N		7440-39-3
		Cadmium	J	0.854	39	1000	N	N		7440-43-9
		Chromium		15.7	390	10000	N	N		7440-47-3
		Lead		9.39	150	500	N	N		7439-92-1
		Mercury	U	0	23	610	N	N		7439-97-6
		Selenium	U	0	390	10000	N	N		7782-49-2
		Silver	U	0	200	10000	N	N		7440-22-4
SHIPYARD-BASE-07-12	Soil	Arsenic		8.57	7	7	Y	Y	Y3947-14	7440-38-2
		Barium		22.6	5500	10000	N	N		7440-39-3
		Cadmium	J	0.887	39	1000	N	N		7440-43-9
		Chromium		15.7	390	10000	N	N		7440-47-3
		Lead		9.24	150	500	N	N		7439-92-1
		Mercury	U	0	23	610	N	N		7439-97-6
		Selenium	U	0	390	10000	N	N		7782-49-2
		Silver	U	0	200	10000	N	N		7440-22-4
1 E = Value Exceeds Calibration range, U = Not Detected, J = Estimated Value										
2 Identifies if the laboratory reporting limit, itself, exceeds the clean-up criteria										

APPENDIX C

**Analytical Data Including Data Validation
and GPS Coordinates**

**Naval Station Newport
Middletown, Rhode Island
September 2007**

ANALYTICAL DATA QA/QC REVIEW

Derecktor Shipyard Site
PCBs and RCRA 8 Metals in Soil
Chemtech SDG # Y3947

Sample Numbers: Base-07-01
 Base-07-05
 Base-07-06
 Base-07-07
 Base-07-08
 Base-07-09
 Base-07-09D
 Base-07-10
 Base-07-11
 Base-07-12
 Sidewall-West-07-02
 Sidewall-West-07-02D
 Sidewall-West-07-03
 Sidewall-West-07-04

INTRODUCTION

A QA/QC review was performed by TtEC on the analytical results for the 14 soil samples collected from the Derecktor Shipyard Site at Naval Station Newport on 08/02/2007 and 08/06/2007 and analyzed by Chemtec Laboratory of Mountainside, NJ. The soil samples were collected in support of site cleanup actions at the Derecktor Shipyard Site. The soil samples were analyzed for:

Polychlorinated Biphenyls (PCBs) via EPA SW-846 Method 8082
RCRA 8 Metals via EPA SW-846 Methods 6010/7471

OBJECTIVES

The analytical results and quality control data summarized on laboratory reporting forms were reviewed for the following QA/QC criteria:

- Holding Times
- Field and Laboratory Duplicate Precision
- Surrogate Standard Recoveries
- Trip, Field and Method Blanks
- Matrix Spike/Matrix Spike Duplicate
- Laboratory Control Sample Recoveries

This technical review compared the summarized results to the project's Data Quality Objectives (DQOs). The technical review performed on these QA/QC elements was limited in scope and focused on laboratory QA/QC summary sheets. A more comprehensive examination of raw QA/QC data for each individual sample (such as included in a full EPA data validation) was not included within the associated scope of work.

RESULTS

Based on the quality control data reviewed, the sample results appear to meet the project's DQOs with the exceptions noted below:

Holding Times : All sample extractions and analyses were performed within the analytical holding times.

Field and Laboratory Duplicate Precision : The laboratory duplicate sample results were within acceptable criteria. The analysis of Field Duplicate pair (Base-07-09 and Base-07-09D) provided good precision in the RCRA 8 analysis. The maximum RPD between an element in the sample was 8.2% for Lead. The PCB analysis was non-detect. The RPD for Lead in samples Sidewall-West-07-02 and Sidewall-West-07-02D was 41%. This exceeds the QC criterion of 35%. This difference may be due to the homogeneity of the soil matrix. No actions were taken.

Surrogate Standard Recoveries : All surrogate recoveries met the required criteria.

Trip, Field and Method Blanks : The laboratory method blank samples did not contain any analytes of interest above the reporting limit.

Matrix Spike/Matrix Spike Duplicate : All of the MS/MSD results were within the required criteria for both analyses.

Laboratory Control Sample Recoveries : All of the LCS/LCSD sample recoveries met the required criteria. No actions were required.

SUMMARY:

The analytical data from the 14 soil samples collected from the Derecktor Shipyard Site at Naval Station Newport were reviewed for adherence to QA/QC requirements and compared to project DQOs. There were no significant QA/QC exceedances noted in the data packages. The PCB result for sample Sidewall-West-07-04 was analyzed and reported at a 1:10 dilution due to high levels of PCB in the sample. The results for the soil samples are useable for project related decisions as presented in the data package.

Sample ID	BASE-07-01	SIDEWALL-WEST-07-02	SIDEWALL-WEST-07-02-D
Lab Sample Number	Y3947-01	Y3947-02	Y3947-03
Sampling Date	08/02/07	08/02/07	08/02/07
Matrix	SOIL	SOIL	SOIL
Dilution Factor	1.0	1.0	1.0
Units	mg/Kg	mg/Kg	mg/Kg

COMPOUND	CAS #			
Mercury	7439-97-6	0.004 U	0.044	0.101

Sample ID	BASE-07-01	SIDEWALL-WEST-07-02	SIDEWALL-WEST-07-02-D
Lab Sample Number	Y3947-01	Y3947-02	Y3947-03
Sampling Date	08/02/07	08/02/07	08/02/07
Matrix	SOIL	SOIL	SOIL
Dilution Factor	1.0	1.0	1.0
Units	mg/Kg	mg/Kg	mg/Kg

COMPOUND	CAS #			
Arsenic	7440-38-2	7.410	11.8	5.340
Barium	7440-39-3	29.6	127	183
Cadmium	7440-43-9	0.833 J	2.520	1.860
Chromium	7440-47-3	17.2	45.1	57.1
Lead	7439-92-1	25.8	152	230
Selenium	7782-49-2	0.194 U	0.205 U	0.206 U
Silver	7440-22-4	0.194 U	0.205 U	0.206 U

Sample ID	BASE-07-01	SIDEWALL-WEST-07-02	SIDEWALL-WEST-07-02-D
Lab Sample Number	Y3947-01	Y3947-02	Y3947-03
Sampling Date	08/02/07	08/02/07	08/02/07
Matrix	SOIL	SOIL	SOIL
Dilution Factor	1.0	1.0	1.0
Units	ug/Kg	ug/Kg	ug/Kg

COMPOUND	CAS #			
Total PCB	11096-82-5	4.5 U	45	60

Qualifiers

- U - The compound was not detected at the indicated concentration.
- J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than the concentration given is an approximate value.
- B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environment.
- P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.
- * - For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference.
- NR - Not analyzed

Sample ID	SIDEWALL-WEST-07-03	SIDEWALL-WEST-07-04
Lab Sample Number	Y3947-04	Y3947-05
Sampling Date	08/02/07	08/02/07
Matrix	SOIL	SOIL
Dilution Factor	1.0	1.0
Units	mg/Kg	mg/Kg

COMPOUND	CAS #		
Mercury	7439-97-6	0.004 J	0.042

Sample ID	SIDEWALL-WEST-07-03	SIDEWALL-WEST-07-04
Lab Sample Number	Y3947-04	Y3947-05
Sampling Date	08/02/07	08/02/07
Matrix	SOIL	SOIL
Dilution Factor	1.0	1.0
Units	mg/Kg	mg/Kg

COMPOUND	CAS #		
Arsenic	7440-38-2	7.400	8.140
Barium	7440-39-3	31.4	119
Cadmium	7440-43-9	0.717 J	2.360
Chromium	7440-47-3	13.6	35.5
Lead	7439-92-1	25.8	236
Selenium	7782-49-2	0.198 U	0.207 U
Silver	7440-22-4	0.198 U	0.207 U

Sample ID	SIDEWALL-WEST-07-03	SIDEWALL-WEST-07-04
Lab Sample Number	Y3947-04	Y3947-05
Sampling Date	08/02/07	08/02/07
Matrix	SOIL	SOIL
Dilution Factor	1.0	1.0
Units	ug/Kg	ug/Kg

COMPOUND	CAS #		
Total PCB	11096-82-5	30	2200 E

Qualifiers

U - The compound was not detected at the indicat

J - Data indicates the presence of a compound theater than zero.
The concentration given is an approximate valu

B - The analyte was found in the laboratory blank onmental sample.

P - For dual column analysis, the percent differenc

* - For dual column analysis, the lowest quantitate

NR - Not analyzed

Sample ID	BASE-07-05	BASE-07-06	BASE-07-07	BASE-07-08
Lab Sample Number	Y3947-06	Y3947-07	Y3947-08	Y3947-09
Sampling Date	08/02/07	08/02/07	08/02/07	08/02/07
Matrix	SOIL	SOIL	SOIL	SOIL
Dilution Factor	1.0	1.0	1.0	1.0
Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg

COMPOUND	CAS #				
Mercury	7439-97-6	0.004 U	0.004 U	0.003 U	0.004

Sample ID	BASE-07-05	BASE-07-06	BASE-07-07	BASE-07-08
Lab Sample Number	Y3947-06	Y3947-07	Y3947-08	Y3947-09
Sampling Date	08/02/07	08/02/07	08/02/07	08/02/07
Matrix	SOIL	SOIL	SOIL	SOIL
Dilution Factor	1.0	1.0	1.0	1.0
Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg

COMPOUND	CAS #				
Arsenic	7440-38-2	7.960	7.260	5.370	6.060
Barium	7440-39-3	18.6	17.4	14.0	13.7
Cadmium	7440-43-9	0.980 J	0.778 J	0.710 J	1.170
Chromium	7440-47-3	13.6	12.7	11.5	18.8
Lead	7439-92-1	10.6	9.990	13.4	21.3
Selenium	7782-49-2	0.196 U	0.192 U	0.191 U	0.198
Silver	7440-22-4	0.196 U	0.192 U	0.191 U	0.198

Sample ID	SIDEWALL-WEST-07-04DL	BASE-07-05	BASE-07-06	BASE-07-07
Lab Sample Number	Y3947-05DL	Y3947-06	Y3947-07	Y3947-08
Sampling Date	08/02/07	08/02/07	08/02/07	08/02/07
Matrix	SOIL	SOIL	SOIL	SOIL
Dilution Factor	10.0	1.0	1.0	1.0
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg

COMPOUND	CAS #				
Total PCB	11096-82-5	3400 D	20	27	57

Qualifiers
U - The compound was not detected at the indicat
J - Data indicates the presence of a compound th The concentration given is an approximate valu
B - The analyte was found in the laboratory blank
P - For dual column analysis, the percent differenc
* - For dual column analysis, the lowest quantitate
NR - Not analyzed

Sample ID	BASE-07-09	BASE-07-09-D	BASE-07-10	BASE-07-11
Lab Sample Number	Y3947-10	Y3947-11	Y3947-12	Y3947-13
Sampling Date	08/02/07	08/02/07	08/02/07	08/06/07
Matrix	SOIL	SOIL	SOIL	SOIL
Dilution Factor	1.0	1.0	1.0	1.0
Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg

COMPOUND	CAS #				
Mercury	7439-97-6	U	0.004 U	0.004 U	0.004 U

Sample ID	BASE-07-09	BASE-07-09-D	BASE-07-10	BASE-07-11
Lab Sample Number	Y3947-10	Y3947-11	Y3947-12	Y3947-13
Sampling Date	08/02/07	08/02/07	08/02/07	08/06/07
Matrix	SOIL	SOIL	SOIL	SOIL
Dilution Factor	1.0	1.0	1.0	1.0
Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg

COMPOUND	CAS #				
Arsenic	7440-38-2		8.300	8.920	9.880
Barium	7440-39-3		20.2	19.0	19.6
Cadmium	7440-43-9		0.736 J	0.730 J	1.060 J
Chromium	7440-47-3		13.2	13.5	15.1
Lead	7439-92-1		10.4	11.3	11.8
Selenium	7782-49-2	U	0.195 U	0.196 U	0.197 U
Silver	7440-22-4	U	0.195 U	0.196 U	0.197 U

Sample ID	BASE-07-08	BASE-07-09	BASE-07-09-D	BASE-07-10
Lab Sample Number	Y3947-09	Y3947-10	Y3947-11	Y3947-12
Sampling Date	08/02/07	08/02/07	08/02/07	08/02/07
Matrix	SOIL	SOIL	SOIL	SOIL
Dilution Factor	1.0	1.0	1.0	1.0
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg

COMPOUND	CAS #				
Total PCB	11096-82-5		4.6 U	4.6 U	4.5 U

Qualifiers

- U - The compound was not detected at the indicated concentration
- J - Data indicates the presence of a compound that is not listed in the table. The concentration given is an approximate value.
- B - The analyte was found in the laboratory blank.
- P - For dual column analysis, the percent difference between the two columns is greater than 10%.
- * - For dual column analysis, the lowest quantitate was used.
- NR - Not analyzed

Sample ID **BASE-07-12**
 Lab Sample Number **Y3947-14**
 Sampling Date **08/06/07**
 Matrix **SOIL**
 Dilution Factor **1.0**
 Units **mg/Kg**

COMPOUND	CAS #	
Mercury	7439-97-6	0.004 U

Sample ID **BASE-07-12**
 Lab Sample Number **Y3947-14**
 Sampling Date **08/06/07**
 Matrix **SOIL**
 Dilution Factor **1.0**
 Units **mg/Kg**

COMPOUND	CAS #	
Arsenic	7440-38-2	8.570
Barium	7440-39-3	22.6
Cadmium	7440-43-9	0.887 J
Chromium	7440-47-3	15.7
Lead	7439-92-1	9.240
Selenium	7782-49-2	0.201 U
Silver	7440-22-4	0.201 U

Sample ID	BASE-07-11	BASE-07-12
Lab Sample Number	Y3947-13	Y3947-14
Sampling Date	08/06/07	08/06/07
Matrix	SOIL	SOIL
Dilution Factor	1.0	1.0
Units	ug/Kg	ug/Kg

COMPOUND	CAS #		
Total PCB	11096-82-5	4.6 U	4.6 U

Qualifiers

U - The compound was not detected at the indicated concentration

J - Data indicates the presence of a compound that is not listed in the table. The concentration given is an approximate value.

B - The analyte was found in the laboratory blank.

P - For dual column analysis, the percent difference between the two columns is greater than 10%.

* - For dual column analysis, the lowest quantitated concentration is reported.

NR - Not analyzed

Sample GPS Coordinates

Sample Identification Number	GPS COORDINATES	
	Easting*	Northing*
shipyard-base-07-01	551673.167	161481.611
shipyard-sidewallwest-07-02	551672.533	161493.638
shipyard-sidewallwest-07-03	551674.435	161487.713
shipyard-sidewallwest-07-04	551679.223	161484.183
shipyard-base-07-05	551726.545	161491.113
shipyard-base-07-06	551714.579	161490.027
shipyard-base-07-07	551703.553	161488.339
shipyard-base-07-08	551704.974	161496.148
shipyard-base-07-09	551716.949	161505.951
shipyard-base-07-10	551731.935	161509.847
shipyard-base-07-11	551701.748	161509.855
shipyard-base-07-12	551721.606	161513.75

* Coordinates are shown in NAD 27 - RI State Plane 3800, Feet.