



**Remedial Action Closure Report  
Lincoln Lace & Braid Remediation Project  
55-61 Ponagansett Street  
Providence, Rhode Island**

*Prepared for*

Providence Parks Department  
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Providence, Rhode Island 02905

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## 1. INTRODUCTION

On behalf of the City of Providence, EA Engineering, Science, and Technology, Inc. (EA) has prepared this Remedial Action Closure Report (RACR) to summarize the remedial activities conducted at the Lincoln Lace & Braid Remediation Project in Providence, Rhode Island (the Site). This Site is located to the north of Barbara Street and the south of RI Route 6. This RACR and all remedial activities discussed herein have been conducted in accordance with the Rhode Island Department of Environmental Management (RIDEM) *Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases* (short title: *Remediation Regulations*), August 1996, as amended February 2004.

As detailed in the 2010 Revised Remedial Action Work Plan (Revised RAWP), remedial activities conducted at the Site consisted of the capping of the property to prevent direct exposure to soil and sediment contamination consisting of petroleum hydrocarbons, several volatile organic compounds, beryllium, arsenic, lead, and mercury. The remedial action, in conjunction with the implementation of an Environmental Land Usage Restriction (ELUR), has prepared the Site for future use.

The remedial effort at the site represents an important step in the further development of Providence's Woonasquatucket River Greenway and bike trail project. Completion of the Greenway project will help restore the Woonasquatucket River to its former grandeur and revitalize the neighborhoods of Olneyville, Hartford, and Manton. The project's main goals are to increase the recreational and green space available to local residents, promote river conservation and environmental action, stimulate economic development, and increase awareness of local history and river ecology.

### 1.1 SITE DESCRIPTION

The former Lincoln Lace & Braid complex is located at 55-61 Ponagansett Street in Providence, Rhode Island. The Site is located on approximately 6.0 acres of land adjacent to the Woonasquatucket River in the Hartford section of Providence, designated on the City of Providence Tax Assessor's Map as Plat 113, Lots 305 and 429. Figure 1 provides a Site Location Map.

The lot slopes from south to north, towards the Woonasquatucket River. Access from Ponagansett Avenue is provided via a steep asphalt driveway that begins at the east end of the Ponagansett Avenue, traverses the embankment, and then swings sharply to the east across the now-filled headrace to reach the former building locations.

A stepped, coursed, split masonry and concrete wall lines the east wall of the tailrace immediately south of the location of the former Wheel House. The remainder of the tailrace has earthen embankments that suggest its original appearance as a flood channel. No traces of other mill buildings remain.

The Woonasquatucket River's western bank defines the eastern edge of the mill site. The remains of the 1918 dam in its channel near the north end of the lot are still evident. Concrete and rubblestone masonry dam abutments are located on both riverbanks and retain cast imprints and wood fragments of the spillway's timber cribbing. Remains of both a late nineteenth-century and an early twentieth-century railroad bridge are located in the river channel approximately 240 ft downstream of the dam remains.

The former Ponagansett Avenue Landfill abuts the west end of the Site and is accessed by the same driveway as the subject site.

## **1.2 HISTORICAL CONTEXT**

The Lincoln Lace & Braid site was established in 1812 as Merino Mill. By 1870, there were mill villages on the Johnston and North Providence sides of the river at Olneyville, Dyerville, Manton Village, Lyman's Mill, Allendale, Centerdale, and Graniteville. Within Providence, mills included Union Cotton, Delaine, Lyman Manufacturing, and the Valley Bleachery. Nearly every foot of the river's drop was being used to turn a factory waterwheel. The local manufacturers formed a company to build reservoirs upstream to store water for use during the dry months, such as the reservoir formerly located on the abutting site, the Ponagansett Avenue Landfill to keep the mill wheels turning throughout the year. This was the first such water management system of its kind and was replicated on industrial rivers throughout the world (Beers 1870; Greenwood n.d.; RIHPHC 1976b, 1981, 1986).

In 1994, the main building of the mill complex was destroyed by fire. Subsequent remediation efforts removed the building debris as well as petroleum and petroleum-contaminated soil from the Site. Only portions of the ruins of the former Merino Mill and its associated waterpower infrastructure remained on Site.

## **1.3 PREVIOUS INVESTIGATIONS/ REMEDIAL ACTIONS**

The Site has been the subject of several investigations and cleanup actions. The following information sources were reviewed:

- *Short-Term Response Report, Lincoln Lace & Braid Complex* (Cyn Environmental, February 1999)
- *Remedial Evaluation Report, Lincoln Lace & Braid, Providence, Rhode Island* (Rhode Island Department of Environmental Management – Office of Waste Management, December 1999)
- *Pre-Design Investigation Report*, dated August 2000, prepared by RIDEM's Office of Waste Management

- *Remedial Action Work Plan – Former Lincoln, Lace and Braid Site, Providence, Rhode Island* (MACTEC, Inc., November 2002 [Revised September 2003])
- *Remedial Action Work Plan for Ponagansett Avenue Remediation, 67 Melissa Street, Providence, Rhode Island* (EA Engineering, Science, and Technology, Inc. (July 2005))
- *Technical Memorandum, Lincoln, Lace, and Braid Property, Providence, Rhode Island – Cultural Resources Reconnaissance* (Public Archeological Laboratory, 16 April 2007)
- Correspondence entitled *Remedial Alternatives Analysis*, received by RIDEM on 11 May 2009, prepared and submitted by EA Engineering, Science, and Technology, Inc. (EA);
- Correspondence entitled *Revised Remedial Alternatives Analysis*, received by RIDEM on 8 July 2009, prepared and submitted by EA
- *Historical Site Characterization Site Plan*, received by RIDEM on 23 July 2009, prepared and submitted by EA
- *Lincoln Lace and Braid Supplemental Sampling and Analysis Plan*, received by RIDEM on 30 July 2009, prepared and submitted by EA
- *Sampling and Analysis Plan and Site-Specific Quality Assurance Project Plan for Supplemental Sediment and Surface Water Sampling*, received by RIDEM on 21 August 2009, prepared and submitted by EA
- *Sluiceway Sampling and Analysis Plan*, received by RIDEM on 25 August 2009, prepared and submitted by EA
- *Supplemental Sampling Analytical Results*, received by RIDEM on 1 December 2009, prepared and submitted by EA
- *Revised Remedial Alternative No. 3*, received by RIDEM on 1 December 2009, prepared and submitted by EA
- Correspondence entitled *Lincoln Lace and Braid Response to Comments*, received by RIDEM on 1 February 2010, prepared and submitted electronically by EA.
- *Depositional Sediment Dioxin Investigation*, received by RIDEM on 19 May 2010, prepared and submitted electronically by EA.

Previous investigations included test pit soil and groundwater sampling (Cyn Environmental, October 1996) and further removal actions conducted in November 1998. The 1996 removal action and test pit soil and groundwater sampling included the excavation and disposal of soil

and petroleum from an underground storage tank (UST). Soil and groundwater samples were collected from a total of 21 test pits resulting in the subsequent (1998) removal of contaminated soil in areas identified during the 1996 investigation.

In May 1996, a RIDEM contractor collected six sediment samples within the sluiceway to determine if sediments were impacted. Analytical results indicate the sediments are impacted with lead and arsenic and concentrations exceeding the RIDEM Residential and/or Industrial Commercial Direct Exposure Criteria for soil (no sediment standards are currently promulgated by RIDEM).

In August 2000, Fuss & O'Neill completed a limited design investigation (LDI) that concluded that anoxic conditions occur in the groundwater at the Site. The LDI stated that this condition causes iron to discharge into groundwater. When groundwater is exposed to oxygen (*i.e.*, discharged into the tailrace), the iron precipitates out of solution and deposits on the bed of the former tailrace.

In October 2009, EA collected 8 sediment samples from the sluiceway to determine if previous remediation attempts were successful in the lower reaches of the sluiceway. Analytical results indicate sediments on the downstream reaches of the sluiceway are not impacted with arsenic and lead at concentrations exceeding the RIDEM Residential Direct Exposure Criteria.

In response to a public request for investigation of potential impacts of depositional sediments resultant from March 2010 flooding, EA collected three composite samples from three locations at the Site. The analytical results indicate that 2,3,7,8-TCDD is present in depositional sediment and/or native soils at the Site. Concentrations range from 43 nanograms per kilogram (ng/kg (parts per trillion)) to 120 ng/kg. The cleanup standard established for the Centerville Manor Site in North Providence is equal to 1,000 ng/kg in sediment. RIDEM has established a 4.3 ng/kg residential direct exposure standard for other projects currently ongoing in the Providence area. EPA currently recommends a 50 ng/kg Screening Level and a 1,000 ng/kg Action Level for residential sites.

#### **1.4 CONTAMINANTS OF CONCERN**

The primary contaminants of concern at the Site are the presence of elevated metal and polycyclic aromatic hydrocarbon (PAH) concentrations previously observed in soil and sediment samples throughout the Site above the RIDEM RDEC. Exceedances of the RDEC for arsenic, beryllium, lead, mercury, ethyl benzene, trichloroethene, tetrachloroethene, xylene, and total petroleum hydrocarbons (TPH) were found in some soil samples.

## 2. REMEDIAL ACTIVITIES

This section summarizes the remedial activities for each of the media of concern at the Site conducted from October 2010 through May 2011. Remedial technologies were utilized to address the following issues:

Media	Contaminant	Risk/Issue	Remedial Technology
Soil	Debris and Litter	None/Aesthetics	Removal/Offsite Disposal
	PAHs, TPH, Metals, VOCs	Direct Exposure	Engineered Soil Barrier/Environmental Land Usage Restriction
Sediment	Iron oxide/Metals	Direct Exposure/Aesthetics	Engineered Barrier/Wetland Plantings, ELUR
Surface Water (Tailrace)	Iron oxide	None/Aesthetics	Installation of Check Dams/Wetland Plantings
Groundwater	None	None	None

Additional detail regarding the remedial technologies is provided in the following sections. The regulatory approvals received from RIDEM are provided in Appendix A.

### 2.1 ENGINEERED CAP

There are seven types of engineered cap that were constructed at the Site due to the presence of the 100-year floodplain and proposed bike path on the property. However, one of these engineered caps is relative to the impacted sediments within the sluiceway. These are identified as Cover Systems 1 through 7 on Sheet 3 the attached Final Design Plan Set (Appendix B).

Cover System 1 refers to an engineered cap consisting of 1 ft of certified clean soil underlain with a geotextile. This cover system is located mainly within the 100-year floodplain. As this cover system is located within the 100-year floodplain, the area was cut 16 in. prior to installation of the geotextile and 1-ft soil cap to maintain flood storage across the Site. The additional 4 in. of excavation is to compensate for filling within the floodplain in other areas (cover systems 3 and 5).

Cover System 1 was installed in all areas within the 100-year floodplain that did not have mature, established trees. This cover system was also implemented in all areas of new plantings. The plantings were installed after construction of the engineered cap, over the geotextile filter fabric. The delineation of this cover system is shown on Figure 2.

Cover System 2 refers to an engineered cap also consisting of one ft of certified clean soil underlain with a geotextile. However, this cover system was constructed in western upland portions of the Site outside of the 100-year floodplain. In this area, there are no restrictions on the final elevation of the cap. Therefore, the material excavated from the areas within the 100-



year floodplain were installed in this area prior to construction of the engineered cap. Refer to Figure 2 for the delineation of this cover system.

Cover system 3 also refers to an engineered cap consisting of 1 ft of certified clean soil underlain with a geotextile. This cover system is located outside of the 100-year floodplain and therefore was not excavated prior to installation of the engineered cap. Filling was not conducted in this area prior to installation of the engineered cap.

Cover system 4 refers to an engineered cap consisting of 1 ft of certified clean soil underlain with a geotextile. However, this cap was installed in the areas of the future bike path. This area was filled with 1 ft of gravel in accordance with RIDOT specifications to proposed grade to provide RIDOT with a base for the proposed bike path and avoid significant disturbance to the engineered cap. This area has been treated with erosion control binding materials that will remain until construction of the bike path.

Cover system 5 refers to an engineered cap consisting of a geogrid, geotextile, and 6 in of 1.5 inch minus crushed stone. This cap was installed in all areas of the sluiceway demonstrated as contaminated during the EA investigation conducted in October 2009. The geogrid was installed to provide stability to the cap, as geotechnical data within the sluiceway was not available. The geotextile and crushed stone was installed to isolate contaminated sediments from downstream migration and prevent direct exposure.

Cover system 6 refers to an engineered cap consisting of 6 inches underlain with a construction fencing barrier layer. This cap was installed in river bank area within the existing vegetation. The vegetation shall remain to help stabilize this area, while preventing direct exposure.

Cover system 7 refers to an engineered cap consisting of 6 in of 1.5 in minus crushed stone underlain with a construction fencing barrier layer. This cap was installed around trees with a diameter of 12 in or greater unless showing visual signs of disease and/or infestation. The cap encompasses a 30' diameter around each tree or under its canopy, whichever is smaller. This will preserve the trees while preventing direct exposure to impacted soils.

### **2.1.1 Closure Cap Subgrade**

A closure cap subgrade was prepared from the suitable existing site grade to create adequate stormwater drainage for the Site and serve as a suitable base for the components of the closure cap system following clearing/grubbing and off-site disposal of existing debris. The existing concrete and asphalt surfaces were broken in place, crushed to specified size, and placed in the areas of Cover System 2 prior to installation of the engineered cap. A site survey of the closure cap subgrade is provided in Appendix C, As-Built Plan Set.

### **2.1.2 Geotextile Filter Layer**

A geotextile filter layer was placed above the closure cap subgrade and below a protective soil cover to prevent human exposure to impacted soil at the Site while allowing precipitation to infiltrate through the cover systems and into the groundwater table. The fabric filter was installed so that the seams overlap to prevent the underlying impacted soil from mixing with the clean soil cap.

### **2.1.3 Protective Cover Soil Layer/Vegetative Cover**

The protective cover soil layer of the closure cap system, also commonly termed the vegetative support soil layer, consists of a minimum of 4 in to 6 in. of certified clean fill material. The vegetative support soil layer is designed to provide for root growth while buffering the underlying layers from damage due to the effects of frost penetration, root penetration, and loading of the finished surface of the closure cap. The upper 4 in. of this soil layer is a topsoil/loam having characteristics to promote adequate vegetation, stability, and erosion resistance. A Site as-build is provided as Figure 4 and shows all final grades.

All fill material was sampled and certified clean prior to transport to and placement on the Site. Material was sampled at a frequency of at least one sample analyzed per 500 yards for arsenic by U.S. Environmental Protection Agency (EPA) Method 6010B/Graphite Furnace. One-quarter of the total compliance samples were analyzed for total petroleum hydrocarbons (TPH) by EPA Method 8100, priority pollutant 13 metals by EPA Method 6010B/7741, semi-volatile organic compounds (SVOCs) by EPA Method 8270, and VOCs by EPA Method 8260B/5035. Fill material was deemed to be suitable for use as cap material upon receipt of analytical results indicating all tested analytes were below the I/CDEC.

Four different types of material were imported onto the Site for remedial activities, including 5,040 cubic yards (yd<sup>3</sup>) of certified clean gravel and 2,193 yd<sup>3</sup> of certified clean loam. Weight slips for the imported materials are provided as Appendix D. Analytical Reports for all imported soil are included as Appendix E.

## **2.2 RIPARIAN BUFFER RESTORATION**

A buffer between the Woonasquatucket River and the future bike path was created to increase the ecologic value of the Site. This riparian restoration opportunity involved installation of a geotextile, 6 in of clean soil, and the planting of native shrubs to enhance microhabitat diversity and functionality of the floodplain.

This restoration area is located adjacent to the Woonasquatucket River and will enhance and encourage the wildlife habitat that currently frequents the surrounding area. This area is defined as the area between the Woonasquatucket River and the proposed bike path and is referred to as Upland Buffer Type 2.

### **2.3 SLUICEWAY/WETLAND RESTORATION**

The southern extent of the former mill sluiceway defines the southeastern boundary of the project Site. The remediation strategy for this portion of the Site included the installation of an engineered barrier, construction of several check dams within the sluiceway, and the establishment of a mixed scrub-shrub/wet meadow wetland.

The plantings refer specifically to three planting zones, delineated on Sheet 7 of Appendix B, Planting Plan. The most upland zone, Upland Buffer Type 1, consists of shrubs with thorns to discourage access to the sluiceway. The riparian planting zone is located between the upland planting zone and the sluiceway and includes plantings that thrive in transition zones and provide ecological value to the area. Finally, cattails were planted along the sluiceway to stabilize the bank and obstruct sight lines to the sluiceway.

A previous remediation attempt within the sluiceway included excavation of sediments within the downstream reaches of the sluiceway. Sampling and analysis of sediments conducted by EA in 2009 confirmed the effectiveness of the remediation by demonstrating that sediments were not contaminated in the downstream area. Therefore, an engineered barrier was not required in this area.

The engineered barrier in the sluiceway (cover system 5) refers to an engineered cap consisting of a geogrid, geotextile, and 6 in of crushed stone. This cap was installed within the impacted areas of the sluiceway. The geogrid was installed to provide stability to the cap. The geotextile and crushed stone was installed to isolate contaminated sediments from downstream migration and prevent direct exposure to impacted sediment.

Five check dams were installed within the sluiceway for two purposes. The first purpose is to act as a barrier, creating backwater areas for the iron flocculation to settle out and minimize downstream migration. The second purpose of the check dams is to aerate the water. The physical action of the water flowing over the check dams will entrain oxygen in the water column. The oxygen increase causes the ferrous iron ( $\text{Fe}^{+2}$ ) in dissolved phase to oxidize into ferric iron ( $\text{Fe}^{+3}$ ) and precipitate into the rust colored iron flocculent currently present in the sluiceway. The downstream check dam will then capture the iron, minimizing further downstream migration into the Woonasquatucket River.

### **2.4 RHODE ISLAND POLLUTANT DISCHARGE ELIMINATION SYSTEM**

A Remediation General Permit was obtained from the Rhode Island Pollutant Discharge Elimination System (RIPDES) Program (RIPDES Permit No. RIG85G008) to discharge treated effluent associated with dewatering the sluiceway during grading and check dam installation. A Notice of Termination dated 30 March 2011 was received from RIDEM indicating the permit has been formally closed. No exceedances or violations of the discharge permit were observed during the dewatering activities.

A Stormwater Pollution Prevention Plan (SWPPP) was prepared to protect the environmental surroundings at the Site during remediation and construction and to identify, minimize, and control the potential for release of pollutants into the adjacent Woonasquatucket River. The erosion and sedimentation controls outlined in the SWPPP were implemented prior to all construction activities at the Site. The erosion controls will be removed following a fall 2011 inspection of the Site ensuring adequate vegetation (i.e. grass) across the Site.

### **3. QUALITY CONTROL**

EA conducted a site visit prior to the start of construction activities to ensure that erosion controls were properly installed. Periodic inspections were conducted by EA to document that the materials used in constructing the cap conformed to the approved design specifications and to ensure that the required thickness of the engineered cap was achieved and that the geotextile was appropriately installed during construction activities,. Inspection logs completed during Site construction activities are provided in Appendix F. Photos documenting the inspections conducted by EA are provided in Appendix G.

#### **4. ENVIRONMENTAL LAND USE RESTRICTION**

An ELUR documenting the required maintenance and annual inspection of the remedy will be recorded in the land evidence records of the City of Providence, along with a Soil Management Plan (SMP) to be followed during future activities that may disrupt the cap, such as utility maintenance. The ELUR/SMP, included as Appendix H, will be recorded with the City of Providence Land Evidence Records following completion of the proposed bike path.

*Appendix A*

*RIDEM Regulatory Approvals*



RHODE ISLAND  
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

235 Promenade Street, Providence, RI 02908-5767

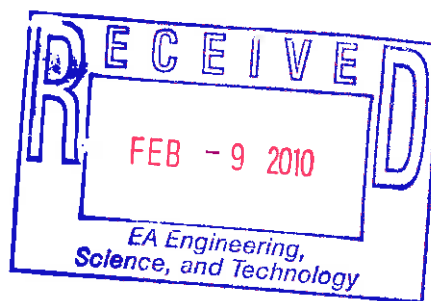
TDD 401-222-4462

**PROGRAM LETTER**

Mr. Robert F. McMahon, Superintendent  
Providence Parks Department  
Dalrymple Boathouse  
Roger Williams Park  
Providence, RI 02905

February 2, 2010

RE: Lincoln Lace and Braid Mill Site  
55-61 Ponagansett Street  
Plat 113 / Lots 305 and 429  
Providence, Rhode Island  
**RIDEM Case No. 2009-018**



Dear Mr. McMahon:

On February 24, 2004, the Rhode Island Department of Environmental Management (the Department) amended the Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases, (the Remediation Regulations). The purpose of these Regulations is to create an integrated program requiring reporting, investigation and remediation of contaminated sites in order to eliminate and/or control threats to human health and the environment in an efficient manner. The purpose of a *Program Letter* is to indicate that the Department deems the investigation of the reported release complete and to notify the Responsible Party that they must perform Public Notice in accordance with Sections 7.07 and 7.09 of the Remediation Regulations.

The Department has reviewed the following documents relative to the above referenced property:

1. Correspondence entitled Lab Project # C1203, Client Project # NA, received by the Department on November 21, 1996, prepared and submitted by Mitkem Corporation (Mitkem);
2. Correspondence entitled Gas Chromatography-Mass Spectrometry Analysis of Extractable Organics in Soils and Sediments – Lace Textile, received by the Department on December 4, 1996, prepared and submitted by the United States Environmental Protection Agency (USEPA);





**REMEDIAL APPROVAL LETTER  
RIDEM CASE No. 2009-018**

October 7, 2010

Mr. Robert F. McMahon, Superintendent  
Providence Parks Department  
Dalrymple Boathouse  
Roger Williams Park  
Providence, RI 02905

RE: Lincoln Lace & Braid – Mill Site  
55-61 Ponagansett Street  
Plat 113 / Lots 305 and 429  
Providence, Rhode Island

Dear Mr. McMahon:

On February 24, 2004, the Rhode Island Department of Environmental Management's (the Department) Office of Waste Management (OWM) amended the Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases (the Remediation Regulations). The purpose of these regulations is to create an integrated program requiring reporting, investigation and remediation of contaminated sites in order to eliminate and/or control threats to human health and the environment in a timely and cost-effective manner. A **Remedial Approval Letter** is a document used by the Department to approve remedial actions at contaminated sites that do not involve the use of complex engineered systems or techniques (i.e., groundwater pump and treat systems, soil vapor extraction systems, etc...).

In the matter of the above referenced Site, the Department has on file the following documents submitted:

- Correspondence entitled **Lab Project # C1203, Client Project # NA**, received by the Department on November 21, 1996, prepared and submitted by Mitkem Corporation (Mitkem);
- Correspondence entitled **Gas Chromatography – Mass Spectrometry Analysis of Extractable Organics in Soils and Sediments – Lace Textile**, received by the Department on December 4, 1996, prepared and submitted by the United States Environmental Protection Agency (USEPA);
- **Results of Subsurface Site Investigation**, received by the Department on December 23, 1996, prepared and submitted by Fuss & O'Neill, Inc. (F&O);
- Correspondence entitled **Client Project #: Lincoln Lace, Lab Project #: E0020**, received by the Department on January 27, 1998, prepared and submitted by Mitkem;

- Correspondence entitled **Work Plan**, received by the Department on October 27, 1998, prepared and submitted by Cyn Environmental Services (Cyn);
- **Short-Term Response Report (Response Report)**, dated February 10, 1999, prepared and submitted by Cyn;
- Laboratory Analytical Data Reports, dated May 27, 1999, prepared and submitted by ESS Laboratory;
- Laboratory Analytical Data Reports, dated June 2, 1999, prepared and submitted by ESS Laboratory;
- Laboratory Analytical Data Reports, dated July 17, 1999, prepared and submitted by ESS Laboratory;
- Correspondence entitled **Former Landfill / Dump Location and Extent**, received by the Department on October 2, 1999, prepared and submitted by F&O;
- **Remedial Evaluation Report**, dated December 1999, prepared by the Department's Office of Waste Management;
- Correspondence entitled **Testing Documentation**, dated December 1999, prepared and submitted by the Trust for Public Land;
- Laboratory Analytical Data Reports, received by the Department on February 24, 2000, submitted by F&O;
- **Pre-Design Investigation Report**, dated August 2000, prepared by the Department's Office of Waste Management;
- Correspondence entitled **Proposal for Limited Subsurface Investigation**, received by the Department on January 11, 2002, prepared and submitted by F&O;
- Correspondence entitled **Proposal for Remedial Assessment**, received by the Department on January 8, 2003, prepared and submitted by F&O;
- **Remedial Evaluation Report Addendum**, received by the Department on February 11, 2003, prepared and submitted by F&O;
- **Remedial Evaluation Report Addendum**, received by the Department on March 17, 2003, prepared and submitted by F&O;
- **Remedial Evaluation Report Addendum**, dated April 2003, prepared by the Department's Office of Waste Management;
- **Public Notice Letters**, notifying abutters of investigation work, received by the Department on

October 10, 2003, prepared and submitted by the Department of Planning and Development for the City of Providence;

- Correspondence entitled **Site Security – Former Lincoln Lace and Braid Property, Providence**, received by the Department on August 10, 2004, prepared and submitted by the Department of Public Parks for the City of Providence;
- Correspondence entitled **Remedial Alternatives Analysis**, received by the Department on May 11, 2009, prepared and submitted by EA Engineering, Science, and Technology, Inc. (EA);
- Correspondence entitled **Revised Remedial Alternatives Analysis**, received by the Department on July 8, 2009, prepared and submitted by EA;
- **\$1,000.00 Remedial Action Approval Application Fee**, received by the Department on July 14, 2009;
- **Historical Site Characterization Site Plan**, received by the Department on July 23, 2009, prepared and submitted by EA;
- **Lincoln Lace and Braid Supplemental Sampling and Analysis Plan**, received by the Department on July 30, 2009, prepared and submitted by EA;
- **Sampling and Analysis Plan and Site-Specific Quality Assurance Project Plan for Supplemental Sediment and Surface Water Sampling**, received by the Department on August 21, 2009, prepared and submitted by EA;
- **Sluiceway Sampling and Analysis Plan**, received by the Department on August 25, 2009, prepared and submitted by EA;
- **Supplemental Sampling Analytical Results**, received by the Department on December 1, 2009, prepared and submitted by EA;
- **Revised Remedial Alternative No. 3**, received by the Department on December 1, 2009, prepared and submitted by EA;
- Correspondence entitled **Lincoln Lace and Braid Response to Comments**, received by the Department on February 1, 2010, prepared and submitted electronically by EA;
- Correspondence entitled **Lincoln Lace and Braid Public Involvement**, received by the Department on February 11, 2010, prepared and submitted electronically by EA;
- Correspondence entitled **Lincoln Lace and Braid Floodplain Revision**, received by the Department on March 23, 2010, prepared and submitted electronically by EA;
- Correspondence entitled **Comments on Lincoln Lace & Braid clean up**, received by the Department on April 16, 2010, prepared and submitted electronically by Rhode Island Legal Services, Inc.;

- Correspondence entitled **Lincoln Lace and Braid Public Involvement Letter**, received by the Department on April 23, 2010, prepared and submitted electronically by EA;
- Correspondence entitled **Lincoln Lace and Braid Dioxin Sampling Summary**, received by the Department on May 20, 2010, prepared and submitted electronically by EA;
- Correspondence entitled **Lincoln Lace and Braid Public Comments**, received by the Department on May 24, 2010, prepared and submitted electronically by EA;
- Correspondence entitled **RE: Lincoln Lace and Braid Public Comments**, received by the Department on June 4, 2010, prepared and submitted electronically by EA;
- **RIPDES Remediation General Permit Application**, received by the Department on June 9, 2010, prepared and submitted by EA;
- **Stormwater Pollution Prevention Plan**, received by the Department on June 9, 2010, prepared and submitted by EA;
- **Remedial Action Work Plan**, received by the Department on June 9, 2010, prepared and submitted by EA;
- Correspondence entitled **RE: Lincoln Lace and Braid Public Comments**, received by the Department on June 11, 2010, prepared and submitted electronically by EA; and
- **Remedial Action Work Plan (RAWP) – Lincoln Lace & Braid Mill Site with responses to Department comments**, received by the Department on September 10, 2010, prepared and submitted by EA.

**The preferred remedial alternative involves restricting the future use of the property by capping the entire property with a Department approved cap to act as engineered controls for eliminating direct exposure to the public. This cap will consist of seven separate capping scenarios:**

- **Cover System 1 – One (1) foot of clean fill over a geotextile liner following the removal of sixteen (16) inches of soil for floodplain compensation.**
- **Cover System 2 – One (1) foot of clean fill over a geotextile liner following the placement of the soils removed from cover system 1 for floodplain compensation.**
- **Cover System 3 – One (1) foot of clean fill over a geotextile liner.**
- **Cover System 4 – One (1) foot of gravel over a geotextile liner in the area of the future bike path followed by placement of erosion control matting.**
- **Cover System 5 – Six (6) inches of one and a half (1.5) inch minus crushed stone overlain a geotextile liner and a geogrid in the contaminated area of the sluiceway.**
- **Cover System 6 – Six (6) inches of clean fill over construction fencing to ensure slope stability and to allow the existing trees to thrive.**
- **Cover System 7 – Six (6) inches of one and a half (1.5) inch minus crushed stone overlain construction fencing installed around trees to be preserved to allow the existing trees to thrive. This capping will extend out in a thirty (30) foot diameter from the tree or the area**

under the tree canopy, whichever is smaller.

**In addition, the proposed remedy also calls for the maintenance and monitoring of the engineered controls through the recording of an institutional control in the form of a Department approved Environmental Land Usage Restriction (ELUR) and Soil Management Plan (SMP). The ELUR will require maintenance of all engineered controls and will act to further limit direct exposure to contaminated areas. As part of the ELUR, it is the responsibility of the property owners to provide for annual inspections of the property by a qualified environmental professional, and to submit a report, subject to review by the Department, which shall certify that the property is in compliance with the terms of the ELUR.**

Based upon review and consideration of the above referenced documents, the Department approves the RAWP through this **Remedial Approval Letter (RAL)** provided that:

1. All work must be performed in accordance with all applicable regulations and the Department approved RAWP.
2. All excess excavated regulated soil, if any, shall be capped onsite in accordance with Cover System 2 or disposed of off-site at an appropriately licensed disposal facility in accordance with all local, State, and Federal laws. Copies of the material shipping records and / or manifests associated with the disposal of the material shall be included along with a Closure Report and also maintained by the site owner and included in the annual inspection report for the site.
3. Areas of the property where contaminated soils are to be excavated must be staged and temporarily stored in a designated area of the property with proper polyethylene covers, which shall be used under the stockpile and also covering the stockpile. Within reason, the storage location will be selected to limit the unauthorized access to the materials (i.e., away from public roadways/walkways). No regulated soil will be stockpiled on-site for greater than 60 days. In the event that stockpiled soils pose a risk or threat of leaching hazardous materials, a proper leak-proof container (i.e. drum or lined roll-off) or secondary containment will be required and utilized.
4. The Department no longer requires the submittal of analytical data prior to clean fill being brought to a Site. It is the sole responsibility of the Performing Party and their consultant to analyze the material, certify that the material meets the Department's Residential Direct Exposure Criteria (RDEC), as defined by the Remediation Regulations, for all constituents, and is suitable for use on the Site. The Department strongly suggests that enough representative samples of the clean fill are collected prior to moving the material to the Site to satisfy the Performing Party and their consultant that the material meets the RDEC. Please note that the Department reserves its rights to sample the clean fill, if suspect, to confirm compliance with the RDEC.
5. All regulated soil remaining on-site shall be encapsulated by an engineered control consistent with those described in the Department approved RAWP and this RAL.
6. Dust suppression techniques (i.e. watering, etc.) must be employed at all times during all soil disturbing/handling activities at the Site in order to minimize the generation of fugitive dust and any stockpiled materials, including clean fill, must be underlain and covered with polyethylene sheeting and be secured at the end of each day with all appropriate erosion and sediment controls to limit the

loss of the cover and protect against storm-water and / or wind erosion (i.e. hay bales, rocks, etc). These appropriate sedimentation and erosion controls must be in place and in proper working order at all times until all disturbed and capped areas are stabilized and re-vegetated as proposed. Extra measures (i.e. dust screens, etc...) shall be taken at the property boundaries for all residential abutting properties to minimize the amount of exposed soil and airborne dust that may be migrating offsite.

7. All work on the subject property must take place in accordance with the aforementioned site plans received on September 10, 2010, entitled "Lincoln Lace and Braid Remediation Project, Providence, Rhode Island, Prepared For The City Of Providence Parks Departments," sheets one through seven of seven, bearing a revision date of August 25, 2010.
8. Establishment of new vegetation on the subject property must be in strict accordance with sheet seven of seven of the above referenced site plans.
9. In accordance with the aforementioned site plans accompanying the RAWP, all trees with a diameter of twelve (12) inches or greater that exist on the subject property within the two-hundred (200) foot riverbank wetland of the Woonasquatucket River must be preserved during and after the capping procedure. This also includes all trees on the subject property in the riverbank wetland that are not depicted on the aforementioned site plans. Prior to the proposed remediation activities, diligent measures must be taken to protect all trees greater than or equal to twelve (12) inches diameter by installation of tree armor where appropriate.
10. Within sixty (60) days of completion of the work described in the Department approved RAWP, a Closure Report detailing the Remedial Action and the results of any applicable sampling shall be submitted to the OWM.
11. Within sixty (60) days of completion of the work described in the Department approved RAWP revisions, the final Department approved ELUR shall be recorded in the City of Providence Land Evidence Records (pending approval by the Department) for the property and a stamped, certified copy returned to the Department within fifteen (15) days of recording. Upon the receipt of a copy of the recorded (stamped) ELUR, the Department will issue an Interim Letter of Compliance. Upon completion of the final bike path construction, along with the construction of the post and beam fencing and the planting of "deterrent, thorny" species, the Department will issue a Letter of Compliance.
12. Following recording of the ELUR, the site shall be maintained and annually inspected to evaluate the compliance status of the site with the ELUR. Within thirty (30) days of each annual inspection, an evaluation report shall be prepared and submitted to the Department detailing the findings of the inspection and noting any compliance violations at the site.
13. Any changes in the activities detailed in the RAWP revisions shall be reported to the Department by telephone within one (1) working day and in writing within five (5) working days.
14. The OWM shall be notified 48 hours prior to initiating the remedial activities at the site associated with the Department approved RAWP revisions.

15. The OWM shall be immediately notified of any site or operation condition that results in non-compliance with this RAL.

Please note that at this time the Department does not approve the ELUR for recording in the Land Evidence Records with the City of Providence. The draft ELUR and SMP shall be reviewed and approved by the Department under separate cover, followed by recording at the completion of all remedial work.

This **Remedial Approval Letter** does not remove your obligation to obtain any necessary permits from other local, State, and/or Federal agencies, including but not limited to the Army Corp. of Engineers.

Please contact me by telephone at 401-222-2797, extension 7147, or by E-mail me at tim.fleury@dem.ri.gov if you have any questions.

Sincerely,



Timothy M. Fleury  
Senior Engineer  
Office of Waste Management

Authorized by,



Kelly J. Owens  
Assoc. Supervising Engineer  
Office of Waste Management

Cc: Jeffrey P. Crawford, Office of Waste Management  
Elizabeth Stone, Office of the Director  
Ronald Gagnon, Office of Customer and Technical Assistance  
Martin Wencek, Office of Water Resources – Wetlands  
Aaron Mello, Office of Water Resources – RIPDES  
Alan Peterson, U.S. Environmental Protection Agency  
Steven Fischbach, R.I. Legal Services, Inc.  
Gilberta Taylor, Hartford Park Residents Association  
Lisa Aurecchia, Woonasquatucket River Watershed Council  
Frank Postma, EA Engineering, Science, and Technology, Inc.  
Ronald Mack, EA Engineering, Science, and Technology, Inc.

3. Results of Subsurface Site Investigation, received by the Department on December 23, 1996, prepared and submitted by Fuss & O'Neill, Inc. (F&O);
4. Correspondence entitled Client Project #: Lincoln Lace, Lab Project #: E0020, received by the Department on January 27, 1998, prepared and submitted by Mitkem;
5. Correspondence entitled Work Plan, received by the Department on October 27, 1998, prepared and submitted by Cyn Environmental Services (Cyn);
6. Short-Term Response Report (Response Report), dated February 10, 1999, prepared and submitted by Cyn;
7. Laboratory Analytical Data Reports, dated May 27, 1999, prepared and submitted by ESS Laboratory;
8. Laboratory Analytical Data Reports, dated June 2, 1999, prepared and submitted by ESS Laboratory;
9. Laboratory Analytical Data Reports, dated July 17, 1999, prepared and submitted by ESS Laboratory;
10. Correspondence entitled Former Landfill / Dump Location and Extent, received by the Department on October 2, 1999, prepared and submitted by F&O;
11. Remedial Evaluation Report, dated December 1999, prepared by the Department's Office of Waste Management;
12. Correspondence entitled Testing Documentation, dated December 1999, prepared and submitted by the Trust for Public Land;
13. Laboratory Analytical Data Reports, received by the Department on February 24, 2000, submitted by F&O;
14. Pre-Design Investigation Report, dated August 2000, prepared by the Department's Office of Waste Management;
15. Correspondence entitled Proposal for Limited Subsurface Investigation, received by the Department on January 11, 2002, prepared and submitted by F&O;
16. Correspondence entitled Proposal for Remedial Assessment, received by the Department on January 8, 2003, prepared and submitted by F&O;
17. Remedial Evaluation Report Addendum, received by the Department on February 11, 2003, prepared and submitted by F&O;



18. **Remedial Evaluation Report Addendum**, received by the Department on March 17, 2003, prepared and submitted by F&O;
19. **Remedial Evaluation Report Addendum**, dated April 2003, prepared by the Department's Office of Waste Management;
20. **Public Notice Letters** notifying abutters of investigation work, received by the Department on October 10, 2003, prepared and submitted by the Department of Planning and Development for the City of Providence;
21. Correspondence entitled **Site Security – Former Lincoln Lace and Braid Property, Providence**, received by the Department on August 10, 2004, prepared and submitted by the Department of Public Parks for the City of Providence;
22. Correspondence entitled **Remedial Alternatives Analysis**, received by the Department on May 11, 2009, prepared and submitted by EA Engineering, Science, and Technology, Inc. (EA);
23. Correspondence entitled **Revised Remedial Alternatives Analysis**, received by the Department on July 8, 2009, prepared and submitted by EA;
24. **\$1,000.00 Remedial Action Approval Application Fee**, received by the Department on July 14, 2009;
25. **Historical Site Characterization Site Plan**, received by the Department on July 23, 2009, prepared and submitted by EA;
26. **Lincoln Lace and Braid Supplemental Sampling and Analysis Plan**, received by the Department on July 30, 2009, prepared and submitted by EA;
27. **Sampling and Analysis Plan and Site-Specific Quality Assurance Project Plan for Supplemental Sediment and Surface Water Sampling**, received by the Department on August 21, 2009, prepared and submitted by EA;
28. **Sluiceway Sampling and Analysis Plan**, received by the Department on August 25, 2009, prepared and submitted by EA;
29. **Supplemental Sampling Analytical Results**, received by the Department on December 1, 2009, prepared and submitted by EA;
30. **Revised Remedial Alternative No. 3**, received by the Department on December 1, 2009, prepared and submitted by EA; and

31. Correspondence entitled Lincoln Lace and Braid Response to Comments, received by the Department on February 1, 2010, prepared and submitted electronically by EA.

The Department regards the information provided in these reports as collectively meeting the requirements pursuant to Rule 7.08 Site Investigation Report (SIR) of the Remediation Regulations.

The Department requires that you give public notice to all abutting property owners, tenants, and utilities with easements on the completed SIR with the preferred alternatives being:

**The preferred remedial alternative calls for the minimum placement of one foot of clean fill in the wetland buffer areas along the sluiceway and river, in addition to the introduction of wetland vegetation. The remaining areas of the site will be capped with a minimum of one foot of clean fill over a geofabric material. Due to floodplain displacement, excavation may be necessary prior to capping, therefore, any excess contaminated soils that cannot be consolidated and encapsulated onsite will be properly disposed of off-site at a licensed disposal facility in accordance with all local, State, and Federal laws. This remedial alternative also calls for the maintenance and monitoring of the engineered controls through the recording of an institutional control in the form of a Department approved Environmental Land Usage Restriction (ELUR) and Soil Management Plan (SMP), followed by annual compliance certification of the ELUR.**

**Remediation of the upper sluiceway shall consist of encapsulating the contaminated sediments with a geotextile overlaid by a geogrid and a minimum of six inches of 1 ½" stone aggregate. Excavation of the lower sluiceway will also be performed to allow for the installation of four check dams.**

The Department acknowledges that the site investigation activities are complete. The Department is not yet able to formally approve the SIR, however, due to the necessity to first allow the public to comment on the preferred Remedial Alternative. Sections 7.07 and 7.09 of the Remediation Regulations outline the requirements for public notice to property abutters, tenants, and utilities with easements regarding the substantive findings of the completed investigation, and the opportunity for public review and comment on the technical feasibility of the preferred remedial alternative. Please submit a draft notification to the Department via e-mail for review and approval prior to distribution. The Department will require a copy of the approved Public Notice letter and a list of all recipients. The City of Providence is also reminded of it's obligation to comply with **Rhode Island General Law 23-19.14-5 Environmental Equity and Public Participation** due to the re-use of the property as a recreational facility. Despite the Office of Waste Management being notified of this release prior to the August 1, 2007, implementation of the **Policy for Considering Environmental Justice in the Review of Investigation and Remediation of Contaminated Properties (the Policy)**, the Department strongly recommends that the

City of Providence adhere to this Policy to inform the public of future remedial activities at the site.

The Department will formally approve the SIR in the form of a **Remedial Decision Letter** once Public Notice is completed and upon Department approval of all final responses to relevant public comments. At that point, the Department will require submission of the draft Remedial Action Work Plan (RAWP) that shall include the draft ELUR and Soil Management Plan for review and approval in accordance with Sections 8.0 and 9.0 of the Remediation Regulations.

The ELUR, once approved, shall be recorded for Plat 113 / Lots 305 and 429 in the Land Evidence Records for the City of Providence and a recorded copy forwarded back to the Department.

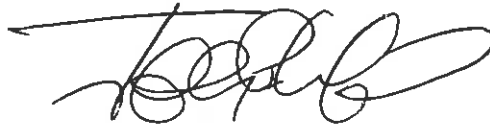
If you have any questions regarding this letter, please contact me by telephone at (401) 222-2797 ext. 7147 or by email at [tim.fleury@dem.ri.gov](mailto:tim.fleury@dem.ri.gov).

Sincerely,



Timothy M. Fleury  
Engineer  
Office of Waste Management

Authorized by,



Jeffrey P. Crawford  
Principal Environmental Scientist  
Office of Waste Management

cc: Kelly J. Owens, Office of Waste Management  
Ronald Gagnon, Office of Customer and Technical Assistance  
Martin Wencek, Office of Water Resources – Wetlands  
Aaron Mello, Office of Water Resources – RIPDES  
Alan Peterson, U.S. Environmental Protection Agency  
Lisa Aurecchia, Woonasquatucket River Watershed Council  
Steven Fischbach, Rhode Island Legal Services, Inc.  
**Ronald Mack**, EA Engineering, Science, and Technology, Inc.



RHODE ISLAND

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

235 Promenade Street, Providence, RI 02908-5767

TDD 401-222-4462

**REMEDIAL DECISION LETTER**  
**CASE NO. 2009-018**

July 7, 2010

Mr. Robert F. McMahon, Superintendent  
Providence Parks Department  
Dalrymple Boathouse  
Roger Williams Park  
Providence, RI 02905

RE: Lincoln Lace and Braid – Mill Site  
55-61 Ponagansett Street  
Plat 113 / Lots 305 and 429  
Providence, Rhode Island

Dear Mr. McMahon:

In 2004, the Rhode Island Department of Environmental Management (the Department) amended the Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases (the Remediation Regulations). The purpose of these regulations is to create an integrated program requiring reporting, investigation and remediation of contaminated sites in order to eliminate and/or control threats to human health and the environment in a timely and cost-effective manner. A **Remedial Decision Letter (RDL)** is a formal, written communication from the Department that approves a site investigation, identifies the preferred remedial alternative and authorizes the development of a Remedial Action Work Plan in order to achieve the objectives of the environmental clean-up.

The Department has the following documents on file in the matter of the above referenced "Site" (as defined in the Industrial Property Remediation and Reuse Act):

1. Correspondence entitled **Lab Project # C1203, Client Project # NA**, received by the Department on November 21, 1996, prepared and submitted by Mitkem Corporation (Mitkem);
2. Correspondence entitled **Gas Chromatography-Mass Spectrometry Analysis of Extractable Organics in Soils and Sediments – Lace Textile**, received by the Department on December 4, 1996, prepared and submitted by the United States Environmental Protection Agency (USEPA);
3. **Results of Subsurface Site Investigation**, received by the Department on December 23, 1996, prepared and submitted by Fuss & O'Neill, Inc. (F&O);

4. Correspondence entitled **Client Project #: Lincoln Lace, Lab Project #: E0020**, received by the Department on January 27, 1998, prepared and submitted by Mitkem;
5. Correspondence entitled **Work Plan**, received by the Department on October 27, 1998, prepared and submitted by Cyn Environmental Services (Cyn);
6. **Short-Term Response Report (Response Report)**, dated February 10, 1999, prepared and submitted by Cyn;
7. Laboratory Analytical Data Reports, dated May 27, 1999, prepared and submitted by ESS Laboratory;
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9. Laboratory Analytical Data Reports, dated July 17, 1999, prepared and submitted by ESS Laboratory;
10. Correspondence entitled **Former Landfill / Dump Location and Extent**, received by the Department on October 2, 1999, prepared and submitted by F&O;
11. **Remedial Evaluation Report**, dated December 1999, prepared by the Department's Office of Waste Management;
12. Correspondence entitled **Testing Documentation**, dated December 1999, prepared and submitted by the Trust for Public Land;
13. Laboratory Analytical Data Reports, received by the Department on February 24, 2000, submitted by F&O;
14. **Pre-Design Investigation Report**, dated August 2000, prepared by the Department's Office of Waste Management;
15. Correspondence entitled **Proposal for Limited Subsurface Investigation**, received by the Department on January 11, 2002, prepared and submitted by F&O;
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17. **Remedial Evaluation Report Addendum**, received by the Department on February 11, 2003, prepared and submitted by F&O;

18. **Remedial Evaluation Report Addendum**, received by the Department on March 17, 2003, prepared and submitted by F&O;
19. **Remedial Evaluation Report Addendum**, dated April 2003, prepared by the Department's Office of Waste Management;
20. **Public Notice Letters** notifying abutters of investigation work, received by the Department on October 10, 2003, prepared and submitted by the Department of Planning and Development for the City of Providence;
21. Correspondence entitled **Site Security – Former Lincoln Lace and Braid Property, Providence**, received by the Department on August 10, 2004, prepared and submitted by the Department of Public Parks for the City of Providence;
22. Correspondence entitled **Remedial Alternatives Analysis**, received by the Department on May 11, 2009, prepared and submitted by EA Engineering, Science, and Technology, Inc. (EA);
23. Correspondence entitled **Revised Remedial Alternatives Analysis**, received by the Department on July 8, 2009, prepared and submitted by EA;
24. **\$1,000.00 Remedial Action Approval Application Fee**, received by the Department on July 14, 2009;
25. **Historical Site Characterization Site Plan**, received by the Department on July 23, 2009, prepared and submitted by EA;
26. **Lincoln Lace and Braid Supplemental Sampling and Analysis Plan**, received by the Department on July 30, 2009, prepared and submitted by EA;
27. **Sampling and Analysis Plan and Site-Specific Quality Assurance Project Plan for Supplemental Sediment and Surface Water Sampling**, received by the Department on August 21, 2009, prepared and submitted by EA;
28. **Sluiceway Sampling and Analysis Plan**, received by the Department on August 25, 2009, prepared and submitted by EA;
29. **Supplemental Sampling Analytical Results**, received by the Department on December 1, 2009, prepared and submitted by EA;
30. **Revised Remedial Alternative No. 3**, received by the Department on December 1, 2009, prepared and submitted by EA;

31. Correspondence entitled **Lincoln Lace and Braid Response to Comments**, received by the Department on February 1, 2010, prepared and submitted electronically by EA;
32. Correspondence entitled **Lincoln Lace and Braid Public Involvement**, received by the Department on February 11, 2010, prepared and submitted electronically by EA;
33. Correspondence entitled **Lincoln Lace and Braid Floodplain Revision**, received by the Department on March 23, 2010, prepared and submitted electronically by EA;
34. Correspondence entitled **Comments on Lincoln Lace & Braid clean up**, received by the Department on April 16, 2010, prepared and submitted electronically by Rhode Island Legal Services, Inc.;
35. Correspondence entitled **Lincoln Lace and Braid Public Involvement Letter**, received by the Department on April 23, 2010, prepared and submitted electronically by EA;
36. Correspondence entitled **Lincoln Lace and Braid Dioxin Sampling Summary**, received by the Department on May 20, 2010, prepared and submitted electronically by EA;
37. Correspondence entitled **Lincoln Lace and Braid Public Comments**, received by the Department on May 24, 2010, prepared and submitted electronically by EA;
38. Correspondence entitled **RE: Lincoln Lace and Braid Public Comments**, received by the Department on June 4, 2010, prepared and submitted electronically by EA;
39. Correspondence entitled **RE: Lincoln Lace and Braid Public Comments**, received by the Department on June 11, 2010, prepared and submitted electronically by EA;
40. **RIPDES Remediation General Permit Application**, received by the Department on June 9, 2010, prepared and submitted by EA;
41. **Stormwater Pollution Prevention Plan**, received by the Department on June 9, 2010, prepared and submitted by EA; and
42. **Remedial Action Work Plan**, received by the Department on June 9, 2010, prepared and submitted by EA.

Collectively, these documents define "Existing Contamination" at the Site, and fulfill the requirements of a Site Investigation Report (SIR) as described in Section 7.08 of the Remediation Regulations. In addition, according to our records, public notice was conducted to all abutting property owners and tenants, regarding the substantive findings of the completed investigation in accordance with Rules 7.07 and 7.09 of the Remediation Regulations. A public meeting was conducted in accordance with **Rhode Island General Laws (R.I.G.L.), Title 23, Health and Safety, Chapter 23-19.14, Industrial Property Remediation and Reuse Act, and 23-19.14-5 Environmental Equity and Public Participation** on March 4, 2010. The opportunity for public review and comment on the technical feasibility of the proposed remedial alternatives commenced on February 15, 2010, and the period closed on June 21, 2010. Public comments from Steven Fischbach on behalf of the Hartford Park Residents Association (HPRA) were responded to on June 11, 2010. No additional comments on the technical feasibility of the proposed remedy were received from HPRA or any other interested parties between June 11, 2010 and June 21, 2010.

On June 16, 2010, the Department received an e-mail from Steven Fischbach which did not include any additional comments on the technical feasibility of the proposed remedy, but did inquire about the process and timing for drafting and finalizing a separate agreement between the City of Providence and HPRA. On June 25, 2010, the Department responded via e-mail to Steven Fischbach's e-mail, indicating that any side agreement to cover items that would not otherwise be covered by the standard language and requirements included in a Department approved ELUR, was strictly between the City of Providence, HPRA, and himself. The Department's e-mail further stated that the proposed side agreement could be negotiated by the parties during the remedial action phase of the project and be finalized in time for the completion of the Site remedy.

The preferred remedial alternative, as stated in the abovementioned documents, consists of the following conceptual measures:

- **The encapsulation of the soils on the property with one (1) foot of certified clean fill (or one (1) foot of gravel in the area of the proposed bike path) underlain with a geotextile material.**
- **The encapsulation of the delineated area of contaminated sediments in the sluiceway with a geogrid, geotextile, and six (6) inches of 1.5 inch minus crushed stone.**
- **The maintenance and monitoring of the engineered controls through the recording of an institutional control in the form of a Department approved Environmental Land Usage Restriction (ELUR) and Soil Management Plan (SMP), followed by annual compliance certification of the ELUR.**

The Department hereby approves the SIR, with the above identified preferred remedial alternative, and shall begin review of the submitted Remedial Action Work Plan (RAWP). The RAWP review, approval, and implementation to achieve the objectives of the environmental clean-up shall be done in accordance with the following conditions:

1. Once the Department reviews the RAWP for consistency with Sections 8.0 and 9.0 of the Remediation Regulations, any written comments generated and forwarded as a result of the review(s) shall be incorporated forthwith into a revised RAWP, to be re-submitted for final approval.
2. Upon finalization of the RAWP, the Department will issue a Remedial Approval Letter, signifying Department approval. All remedial measures required by the Department shall be



implemented, in accordance with the approved schedule, to ensure all applicable exposure pathways at the site are appropriately addressed.

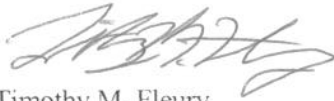
**Please be advised that the Department reserves the right to require additional actions under the aforementioned Remediation Regulations at the Property should any of the following occur:**

- A. Conditions at the Site previously unknown to the Department are discovered;
- B. Information previously unknown to the Department becomes available;
- C. Policy and/or regulatory requirements change; and/or
- D. Failure by the City of Providence or any future holder of any interest in the Property to adhere to the terms and conditions of the Department approved RAWP, schedule, RAL, ELUR and/or SMP for the Property.

Please note that the Department is in receipt of the RAWP and associated Remedial Action Approval Application Fee and will now begin review of the RAWP.

If you have any questions or are in need of any clarification regarding this document, please contact Timothy Fleury by telephone at (401) 222-2797 ext. 7147 or by e-mail at [tim.fleury@dem.ri.gov](mailto:tim.fleury@dem.ri.gov).

Sincerely,



Timothy M. Fleury  
Senior Engineer  
Office of Waste Management

Authorized by,



Kelly J. Owens  
Assoc. Supervising Engineer  
Office of Waste Management

Cc: Jeffrey P. Crawford, Office of Waste Management  
Elizabeth Stone, Office of the Director  
Ronald Gagnon, Office of Customer and Technical Assistance  
Martin Wencek, Office of Water Resources – Wetlands  
Aaron Mello, Office of Water Resources – RIPDES  
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Steven Fischbach, R.I. Legal Services, Inc.  
Gilberta Taylor, Hartford Park Residents Association  
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Frank Postma, EA Engineering, Science, and Technology, Inc.  
Ronald Mack, EA Engineering, Science, and Technology, Inc.



RHODE ISLAND  
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

235 Promenade Street, Providence, RI 02908-5767

TDD 401-222-4462

October 26, 2010

**CERTIFIED MAIL**

Mr. Robert McMahon, Director  
City of Providence Parks Department  
Roger Williams Park, Dalrymple Boathouse  
Providence, RI 02905

**RE: Remediation General Permit - RIPDES Permit No. RIG85G008  
Former Lincoln Lace & Braid, 55 - 61 Ponagansett Avenue, Providence, Rhode Island**

Dear Mr. McMahon:

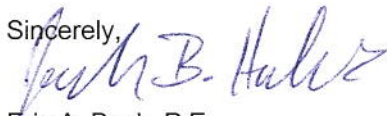
Enclosed is the final authorization to discharge treated waste waters associated with contaminated groundwater dewatering from a sluiceway remediation project at the above-mentioned site under the Rhode Island Pollutant Discharge Elimination System (RIPDES) Program. The Authorization to Discharge should be attached to a copy of the 2008 RIPDES Remediation General Permit and be kept on-site as verification of authorization to discharge. All terms and conditions, outlined in the Remediation General Permit, must be met. Any permit non-compliance constitutes a violation of Chapter 46-12 of the Rhode Island General Laws of 1956, as amended, and is grounds for enforcement. For future references and inquiry, the permit number for this project is RIPDES No. RIG85G008.

Information detailing sampling and testing procedures, monitoring period, and due dates are outlined in Part II.B of the Remediation General Permit. Specifically, this section requires that influent and effluent samples be taken on the 1<sup>st</sup>, 3<sup>rd</sup>, and 6<sup>th</sup> day during the first week of discharge and analyzed using 72-hour turnaround time. Sampling for the remainder of the first month shall be weekly. After the first month of discharge, sampling shall be at least twice per month. Also, if there is any indication of treatment system malfunction or violation of effluent limitations, the system must be turned off and the RIPDES Program notified within 24-hours. All sampling shall be reported on Discharge Monitoring Report (DMR) forms. Please be advised that, a copy of the facility's DMR forms and instructions will be sent to the permittee in approximately one (1) month. The DMRs may be duplicated, but an originally signed copy must be sent to the RIPDES Program at the address below:

Senior Computer Operator  
Rhode Island Department of Environmental Management  
RIPDES Program  
235 Promenade Street  
Providence, Rhode Island 02908-5767

If there are any questions regarding the Remediation General Permit, feel free to contact Aaron Mello at (401) 222-4700, Extension 7405.

Sincerely,

  
for Eric A. Beck, P.E.  
Supervising Sanitary Engineer  
RIPDES Permitting Section

cc: Annie McFarland, DEM/OWR (electronic)  
Traci Pena, DEM/OWR (electronic)  
Rob Schuster, RC&D, Inc. (electronic)

Tim Fleury, DEM/OWM (electronic)  
Ronald Mack, EA Engineering (electronic)



30% post-consumer fiber

**AUTHORIZATION TO DISCHARGE UNDER THE  
RHODE ISLAND POLLUTANT DISCHARGE ELIMINATION SYSTEM**

**2008 RIPDES Remediation General Permit**

In compliance with the provisions of Chapter 46-12 of the Rhode Island General Laws, as amended, the

**City of Providence Parks Department**  
Roger Williams Park, Dalrymple Boathouse  
Providence, RI 02905

And

**R C & D, Inc.**  
17 Gordon Avenue  
Providence, RI 02905

are authorized to discharge treated groundwater from the site located at the

**Former Lincoln Lace & Braid**  
55 – 61 Ponagansett Avenue  
Providence, RI 02909

to receiving waters named

**Woonasquatucket River**

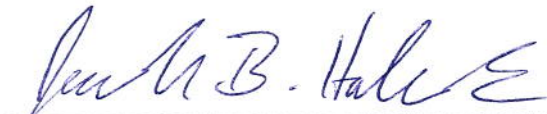
in accordance with the conditions and requirements set forth in the 2008 RIPDES Remediation General Permit including but not limited to the effluent limitations and monitoring requirements associated with Discharge Category G discharging to Non-Class AA Waters with a Dilution Factor of 10 to 20. The specific pollutants for which monitoring requirements and effluent limitations under Discharge Category G must be met are indicated in the attached limitations page. Pollutant specific permit limitations and monitoring frequencies are listed in Part II.D.20 and Part II.E for Dilution Factors of 10 to 20 of the Remediation General Permit. All groundwater pumped at the site shall be treated using the system described in the plans submitted to the Department on June 9, 2010 and amended on October 15, 2010. The maximum daily treatment and discharge flow rate shall not exceed 100 gpm.

Coverage under the RIPDES Remediation General Permit and the authorization to discharge shall become effective on the date of signature.

Coverage under the RIPDES Remediation General Permit and the authorization to discharge shall expire at midnight, on September 30, 2013.

The issuance of this authorization does not relieve the permittee from compliance with any other applicable laws or regulations administered by the Department of Environmental Management or any other governmental entity.

Signed this 26<sup>th</sup> day of October 2010.



for Eric A. Beck, P.E., Supervising Sanitary Engineer  
Office of Water Resources  
Rhode Island Department of Environmental Management  
Providence, Rhode Island

The following table indicates which pollutants within Discharge Category G, Non-Class AA Waters for dilution factors of 10 to 20 are applicable to Permit No. RIG85G008.

Pollutant	Monitoring & Limits Are Applicable If Checked	Pollutant	Monitoring & Limits Are Applicable If Checked
Flow	√	Total Group I PAHs	
Total Suspended Solids	√	Benzo (a) Anthracene	
Total Residual Chlorine		Benzo (a) Pyrene	
Total Petroleum Hydrocarbons	√	Benzo (b) Fluoranthene	
Cyanide		Benzo (k) Fluoranthene	
Benzene		Chrysene	
Toluene		Dibenzo (a,h) anthracene	
Ethylbenzene		Indeno (1,2,3-cd) Pyrene	
Total Xylenes (m,p,o)		Total Group II PAHs	
Total BTEX		Acenaphthene	
Ethylene dibromide		Acenaphthylene	
Methyl-t-Butyl Ether (MTBE)		Anthracene	
Tert-Amyl Methyl Ether		Benzo (ghi) Perylene	
Carbon Tetrachloride		Fluoranthene	
1,4 Dichlorobenzene		Fluorene	
1,2 Dichlorobenzene		Napthalene	
1,3 Dichlorobenzene		Phenanthrene	
Total Dichlorobenzene		Pyrene	
1,1 Dichloroethane		Total Polychlorinated Bipheyls	
1,2 Dichloroethane		Antimony (total recoverable)	
1,1 Dichloroethylene		Arsenic (total recoverable)	√
cis - 1,2 Dichloroethylene		Cadmium (total recoverable)	
Dichloromethane		Chromium III (total recoverable)	
Tetrachloroethylene		Chromium VI (total recoverable)	
1,1,1 Trichloroethane		Copper (total recoverable)	
1,1,2 Trichloroethane		Lead (total recoverable)	√
Trichloroethylene		Mercury (total recoverable)	
Vinyl Chloride		Nickel (total recoverable)	
Acetone		Selenium (total recoverable)	
1,4 Dioxane		Silver (total recoverable)	
Total Phenols		Zinc (total recoverable)	
Pentachlorophenol		Iron (total recoverable)	√
Total Phthalates		----	----
Bis (2-Ethylhexyl) Phthalate		----	----



RHODE ISLAND  
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

235 Promenade Street, Providence, RI 02908-5767

TDD 401-222-4462

October 18, 2010

**CERTIFIED MAIL**

Mr. Robert McMahon, Director  
City of Providence Parks Department  
Roger Williams Park, Dalrymple Boathouse  
Providence, RI 02905

RE: **RIPDES Storm Water General Permit for Construction Activity**  
Former Lincoln Lace & Braid – Mill Site  
55-61 Ponagansett Avenue, Providence, Rhode Island  
RIPDES No.: RIR100783

Dear Mr. McMahon:

Enclosed is your final authorization to discharge storm water associated with construction activity under the Rhode Island Pollutant Discharge Elimination System (RIPDES) Program. The Authorization to Discharge should be attached to your copy of the 2008 RIPDES General Permit for Storm Water Discharge Associated with Construction Activity (2008 Construction General Permit, which you already have on file), and be kept on-site as verification of authorization to discharge. All terms and conditions outlined in the 2008 Construction General Permit must be met. Any permit non-compliance constitutes a violation of Chapter 46-12 of the Rhode Island General Laws of 1956, as amended, and is grounds for enforcement. For future references and inquiry, your permit authorization number is RIPDES No. **RIR100783**.

RIDEM strongly recommends that you obtain written assurances from contractors or subcontractors retained to undertake construction activity that they will comply with all applicable requirements.

If you have any questions regarding the General Permit, you may contact Aaron Mello or myself at (401) 222-4700, Extensions 7405 and 7202, respectively.

Sincerely,

A handwritten signature in black ink, appearing to read "Eric A. Beck".

Eric A. Beck, P.E., Supervising Sanitary Engineer  
RIPDES Permitting Program

cc: Annie McFarland, DEM / OWR (Electronic Copy)  
Traci Pena, DEM / OWR (Electronic Copy)  
Timothy Fleury, DEM / OWM (Electronic Copy)  
Ronald Mack, EA Engineering, Science, & Technology (Electronic Copy)



AUTHORIZATION TO DISCHARGE UNDER THE  
RHODE ISLAND POLLUTANT DISCHARGE ELIMINATION SYSTEM  
2008 General Permit for Storm Water Discharge Associated with Construction Activity

In compliance with the provisions of Chapter 46-12 of the Rhode Island General Laws, as amended,

City of Providence Parks Department  
Roger Williams Park, Dalrymple Boathouse  
Providence, RI 02905

are authorized to discharge Storm Water Associated with Construction Activity from a facility located at

Former Lincoln Lace & Braid  
55 – 61 Ponagansett Avenue  
Providence, RI 02909

to receiving waters named

Woonasquatucket River

in accordance with the conditions and requirements set forth in the 2008 General Permit for Storm Water Discharge Associated with Construction Activity.

In accordance with Part I.C.2 of the 2008 General Permit for Storm Water Discharge Associated with Construction Activity, coverage became effective June 9, 2010.

Coverage under the General Permit for Storm Water Discharge Associated with Construction Activity and the authorization to discharge should expire at midnight, on September 25, 2013.

The issuance of this authorization does not relieve the permittee from compliance with any other applicable laws or regulations administered by the Department of Environmental Management or any other governmental entity.

Signed this 18<sup>th</sup> day of October, 2010.



---

Eric A. Beck, P.E.  
Supervising Sanitary Engineer  
RIPDES Permitting Program, Office of Water Resources  
Rhode Island Department of Environmental Management  
Providence, Rhode Island

*Appendix B*

*Final Design Plan Set*

# LINCOLN LACE AND BRAID REMEDICATION PROJECT

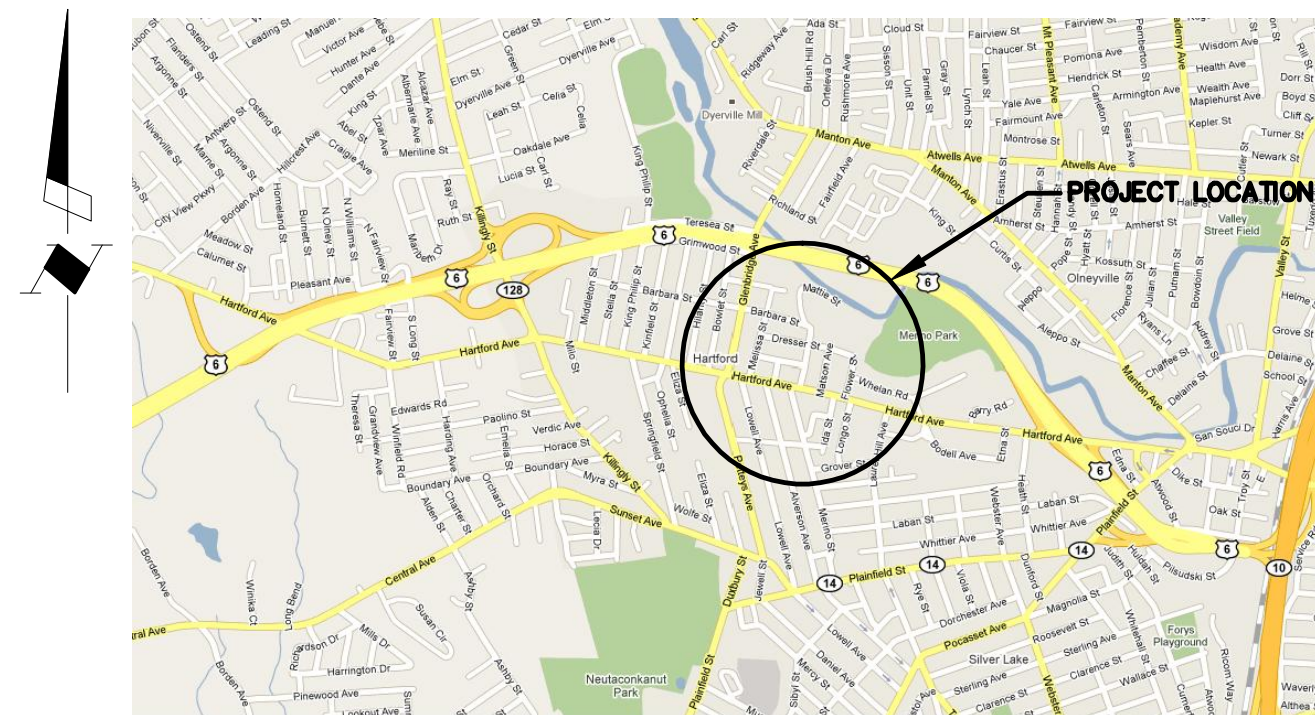
PROVIDENCE, RHODE ISLAND

PREPARED FOR:

## THE CITY OF PROVIDENCE PARKS DEPARTMENT

NO.	DATE	BY	DESCRIPTION
1	8/25/10	RCM	RESPONSE TO RIDEA COMMENTS

SEAL  
 CITY OF PROVIDENCE PARKS DEPARTMENT  
 LINCOLN LACE AND BRAID REMEDIATION PROJECT  
 PROVIDENCE, RHODE ISLAND  
 TITLE SHEET



GRAPHIC SCALE IN FEET  
2000 1000 0 2000 4000

VICINITY MAP



1000 Elmwood Avenue  
Providence, Rhode Island 02905  
(401) 785-9450

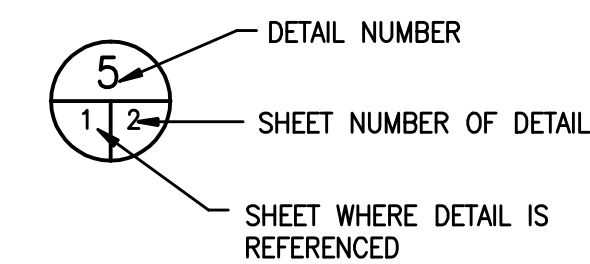
ABBREVIATIONS	
G	CENTERLINE
CD	COFFERDAM
CONC	CONCRETE
E	EASTING
EL	ELEVATION
EX	EXISTING
FL	FLOOD LEVEL
FEMA	FEDERAL EMERGENCY MANAGEMENT AGENCY
LOW	LIMIT OF WORK
N.T.S.	NOT TO SCALE
O.C.	ON CENTER
P.E.	PROFESSIONAL ENGINEER
REQ'D	REQUIRED
RET	RETAINING
RI	RHODE ISLAND
SF	SILT FENCE
SRW	STONE RETAINING WALL
TYP	TYPICAL
VERT	VERTICAL
WL	WETLAND
WF	WETLAND FLAG

PREPARED BY



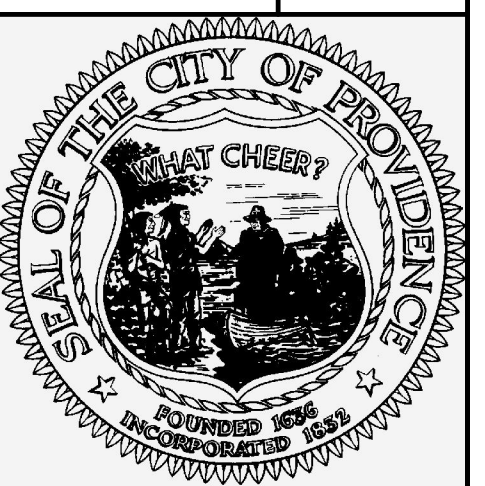
2350 Post Road  
Warwick, Rhode Island 02886  
(401) 736-3440

REFERENCE SYMBOLS



LEGEND	
	EXISTING MAJOR CONTOUR LINES
	EXISTING MINOR CONTOUR LINES
	PROPOSED CONTOUR LINES
	PROPERTY BOUNDARY
	TAILRACE EXTENT
	EDGE OF WATER
	LIMIT OF WORK
	LIMIT OF DISTURBANCE
	EROSION CONTROLS
	200 FOOT RIVERBANK OFFSET
	100-YEAR FLOOD PLAIN LINE
	EXTENT OF VEGETATION
	EXISTING TREES

DRAWING NUMBER	SHEET NUMBER	DRAWING TITLE
T-1	1 OF 7	TITLE SHEET
C-1	2 OF 7	EXISTING CONDITIONS PLAN
C-2	3 OF 7	PROPOSED CONDITIONS PLAN
C-3	4 OF 7	PROPOSED FILL AREA
C-4	5 OF 7	PROPOSED SLUICeway
C-5	6 OF 7	CONSTRUCTION MANAGEMENT PLAN
C-6	7 OF 7	PLANTING PLAN



DATE	MAY 2010
DESIGNED BY	RCM
DRAWN BY	DPA
CHECKED BY	SCM
PROJECT MANAGER	FBP
PROJECT NUMBER	61891.05
SCALE	NONE
FILE NAME	TITLE SHEET
DRAWING NUMBER	T-1
SHEET NUMBER	1 OF 7





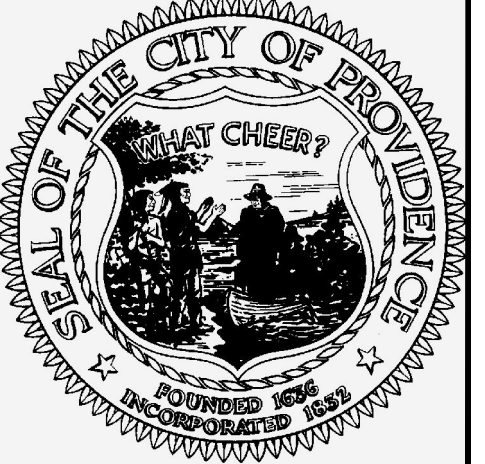
RI STATE PLANS (MID-83)

**NOTES**

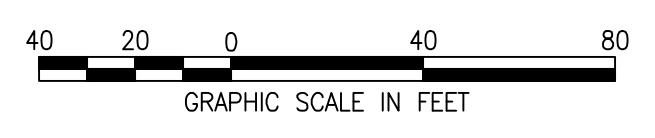
1. TOPOGRAPHY BASED ON ADDITIONAL FIELD WORK AND DATA COMPILATION PERFORMED BY DIPRETE ENGINEERING ASSOCIATES, INC. (DEA) ON SITE IN APRIL OF 2007. NO PROPERTY LINE SURVEY WAS PERFORMED BY DEA. SURVEY OF THE FORMER RACEWAY WAS PERFORMED BY DEA IN DECEMBER, 2004 AND MAY, 2005.
2. ADDITIONAL INFORMATION & BASEMAPPING PROVIDED TO DEA BY EA ENGINEERING, SCIENCE & TECHNOLOGY IN THE FORM OF THE FOLLOWING PLAN: "THE TRUST FOR PUBLIC LAND PONAGANSETT AVENUE REMEDIATION PROJECT, 67 MELISSA STREET, PROVIDENCE, RHODE ISLAND, FIGURE 2, EXISTING CONDITIONS PLAN, DATE: September 2005, PROJECT NO: 6184601"
3. BENCHMARKS PROVIDED BY EA ENGINEERING VIA PLAN REFERENCE IN NOTE #2. VERTICAL DATUM CONFIRMED BY DIPRETE ENGINEERING ASSOCIATES, INC. VIA GPS OBSERVATIONS IN APRIL 2007. THE VERTICAL DATUM IS NGVD'29. HORIZONTAL DATUM IS R.I. STATE PLANE, NAD-83.
4. WATER ELEVATIONS OBTAINED BY DIPRETE ENGINEERING ASSOCIATES, INC. ON MARCH 30 AND APRIL 3, 2007.
5. THERE IS A 100 YEAR FLOOD PLAIN LOCATED ON SITE. REFERENCE FEMA FLOOD INSURANCE RATE MAP 445406 0004 F, MAP REVISED JUNE 6, 2000. THE FLOOD ELEVATION RANGES BETWEEN ELEVATION 43 AND 41.7. OBSERVED ELEVATIONS ON SITE INDICATE MINIMAL FLOODING ON SITE (LESS THAN 1 FOOT ON AVERAGE).
6. THIS SURVEY AND PLAN CONFORM TO A CLASS III STANDARD AS ADOPTED BY THE RHODE ISLAND BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS (VERTICAL). THIS PLAN IS SUBSTANTIALLY CORRECT IN ACCORDANCE WITH CLASS IV STANDARD AS ADOPTED BY THE RHODE ISLAND BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS. THIS PLAN IS NOT TO BE CONSTRUED AS AN ACCURATE BOUNDARY SURVEY AND IS SUBJECT TO SUCH CHANGES AS AN ACCURATE BOUNDARY SURVEY MAY DISCLOSE. (BOUNDARY)
7. EXISTING CONCRETE PAD IS 6" THICK AND WITH ONE FOOT THICK FOOTINGS.

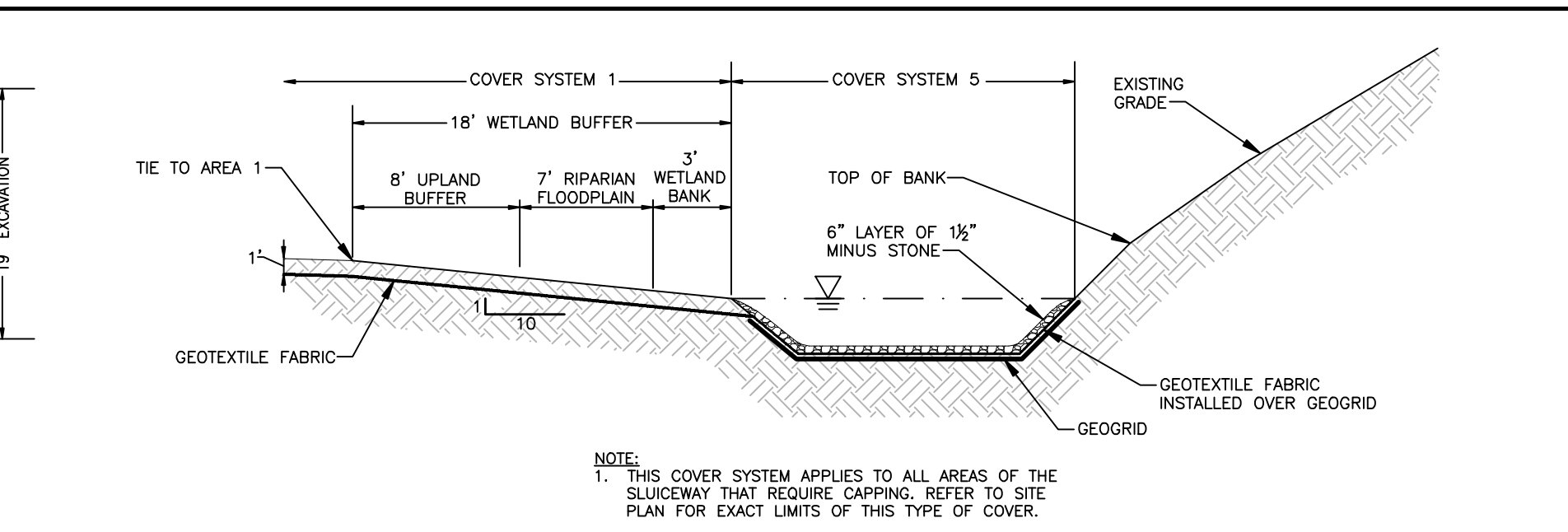
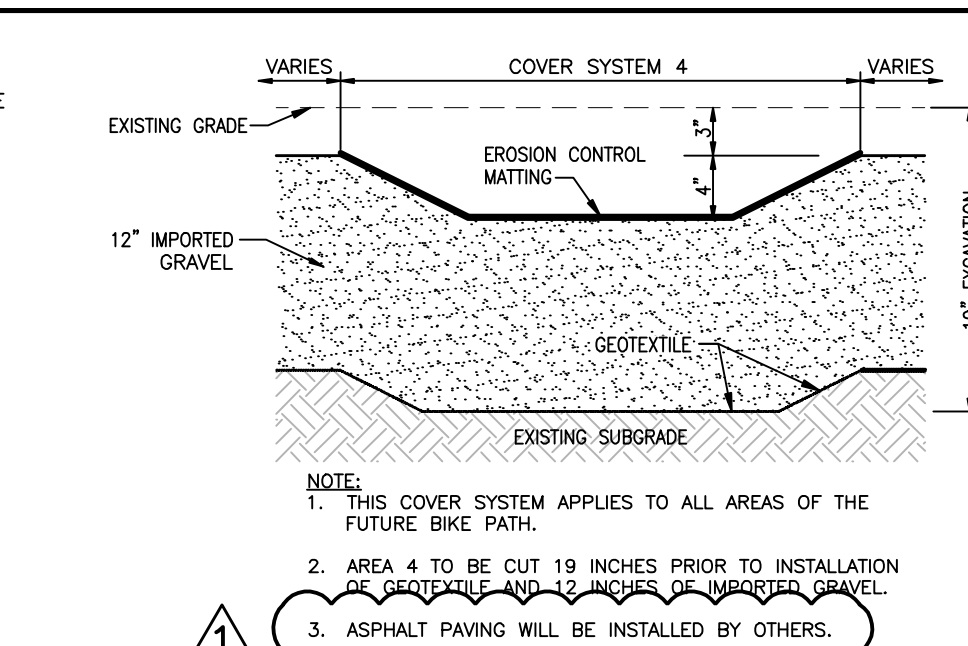
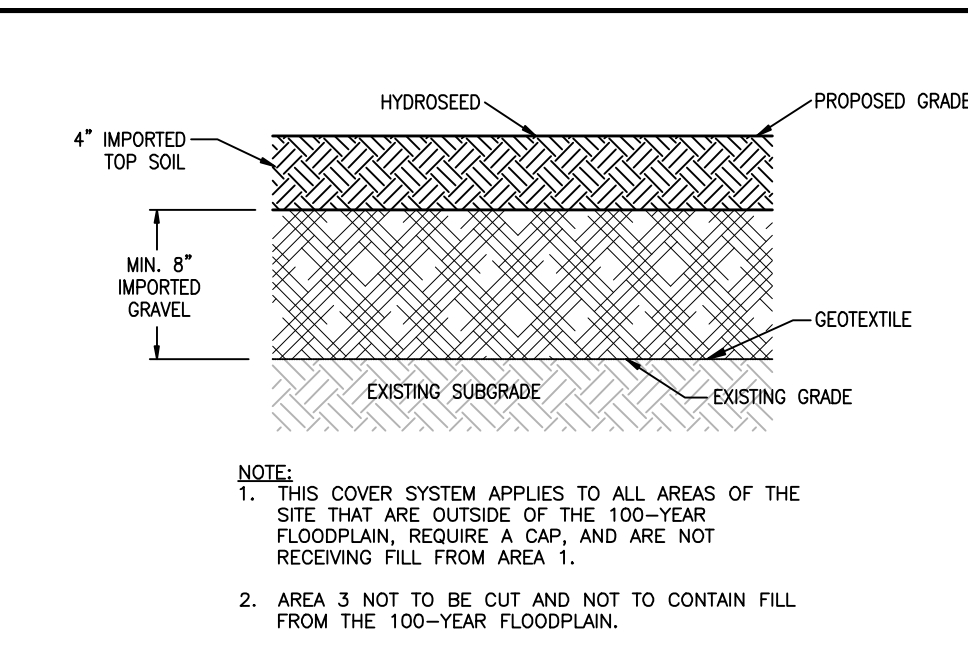
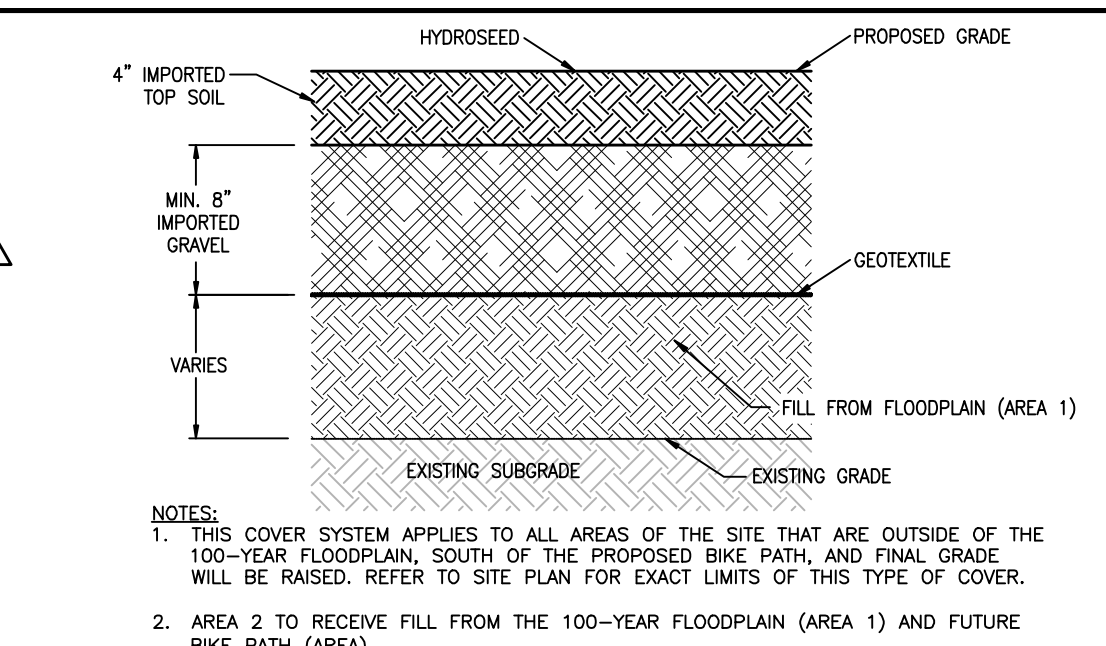
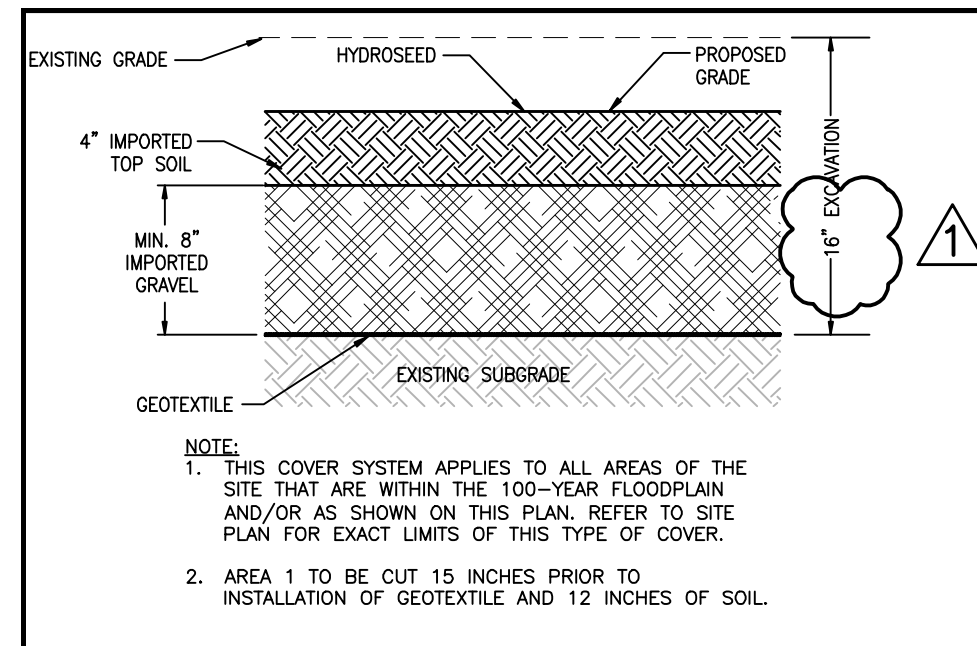
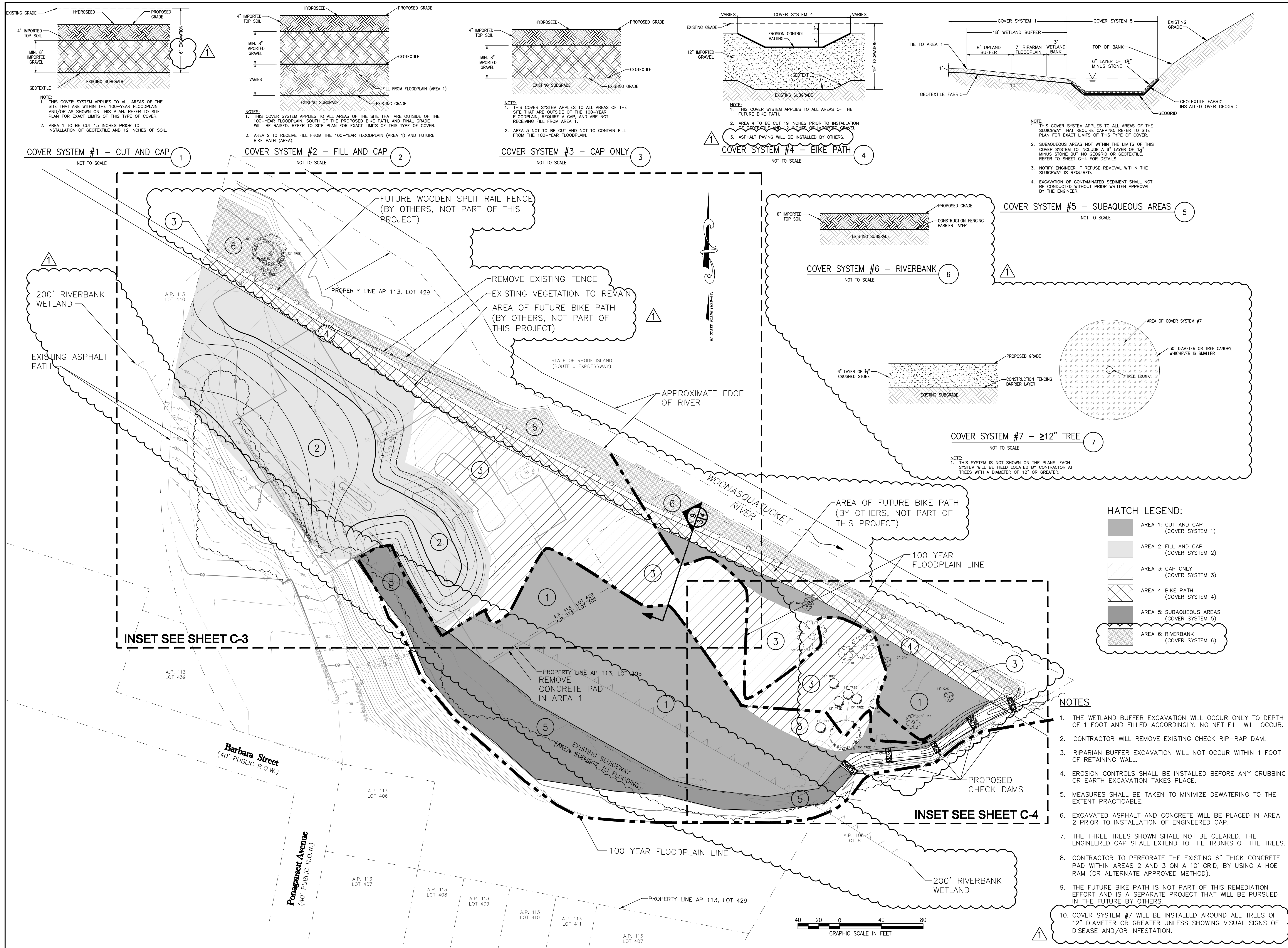
NO.	DATE	BY	DESCRIPTION
1	8/25/10	RCM	RESPONSE TO RIDEA COMMENTS

SEAL  
 CITY OF PROVIDENCE PARKS DEPARTMENT  
 LINCOLN LACE AND BRAID REMEDIATION PROJECT  
 PROVIDENCE, RHODE ISLAND  
 EXISTING CONDITIONS PLAN



DATE	MAY 2010
DESIGNED BY	RCM
DRAWN BY	DPA
CHECKED BY	SCM
PROJECT MANAGER	FBP
PROJECT NUMBER	61891.05
SCALE	1" = 40'
FILE NAME	EXISTING CONDITIONS
DRAWING NUMBER	C-1
SHEET NUMBER	2 OF 7





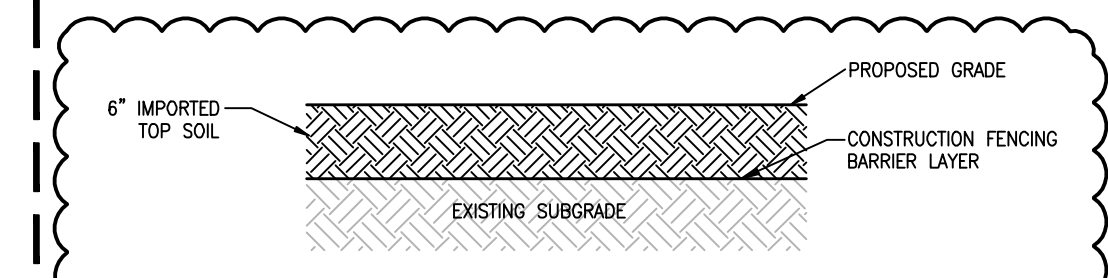
**COVER SYSTEM #1 - CUT AND CAP**  
NOT TO SCALE

**COVER SYSTEM #2 - FILL AND CAP**  
NOT TO SCALE

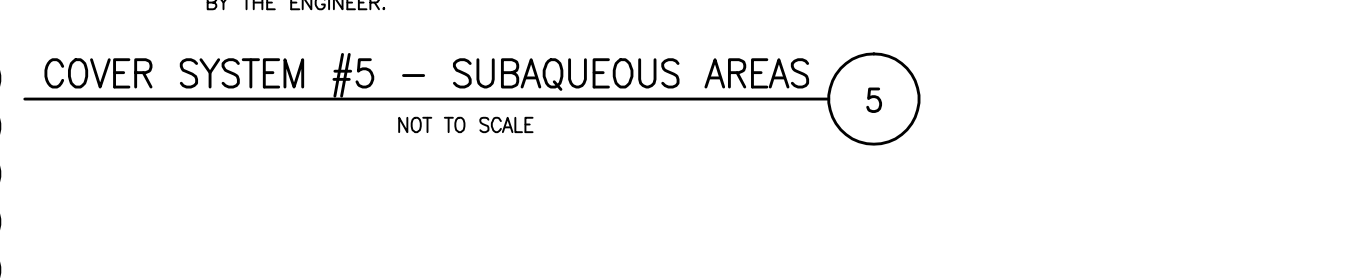
**COVER SYSTEM #3 - CAP ONLY**  
NOT TO SCALE

**COVER SYSTEM #4 - BIKE PATH**  
NOT TO SCALE

**COVER SYSTEM #5 - SUBAQUEOUS AREAS**  
NOT TO SCALE



**COVER SYSTEM #6 - RIVERBANK**  
NOT TO SCALE



**COVER SYSTEM #7 - ≥12\"/>**

**HATCH LEGEND:**

[Hatched Pattern 1]	AREA 1: CUT AND CAP (COVER SYSTEM 1)
[Hatched Pattern 2]	AREA 2: FILL AND CAP (COVER SYSTEM 2)
[Hatched Pattern 3]	AREA 3: CAP ONLY (COVER SYSTEM 3)
[Hatched Pattern 4]	AREA 4: BIKE PATH (COVER SYSTEM 4)
[Hatched Pattern 5]	AREA 5: SUBAQUEOUS AREAS (COVER SYSTEM 5)
[Hatched Pattern 6]	AREA 6: RIVERBANK (COVER SYSTEM 6)

- NOTES**
1. THE WETLAND BUFFER EXCAVATION WILL OCCUR ONLY TO DEPTH OF 1 FOOT AND FILLED ACCORDINGLY. NO NET FILL WILL OCCUR.
  2. CONTRACTOR WILL REMOVE EXISTING CHECK RIP-RAP DAM.
  3. RIPARIAN BUFFER EXCAVATION WILL NOT OCCUR WITHIN 1 FOOT OF RETAINING WALL.
  4. EROSION CONTROLS SHALL BE INSTALLED BEFORE ANY GRUBBING OR EARTH EXCAVATION TAKES PLACE.
  5. MEASURES SHALL BE TAKEN TO MINIMIZE DEWATERING TO THE EXTENT PRACTICABLE.
  6. EXCAVATED ASPHALT AND CONCRETE WILL BE PLACED IN AREA 2 PRIOR TO INSTALLATION OF ENGINEERED CAP.
  7. THE THREE TREES SHOWN SHALL NOT BE CLEARED. THE ENGINEERED CAP SHALL EXTEND TO THE TRUNKS OF THE TREES.
  8. CONTRACTOR TO PERFORATE THE EXISTING 6\"/>

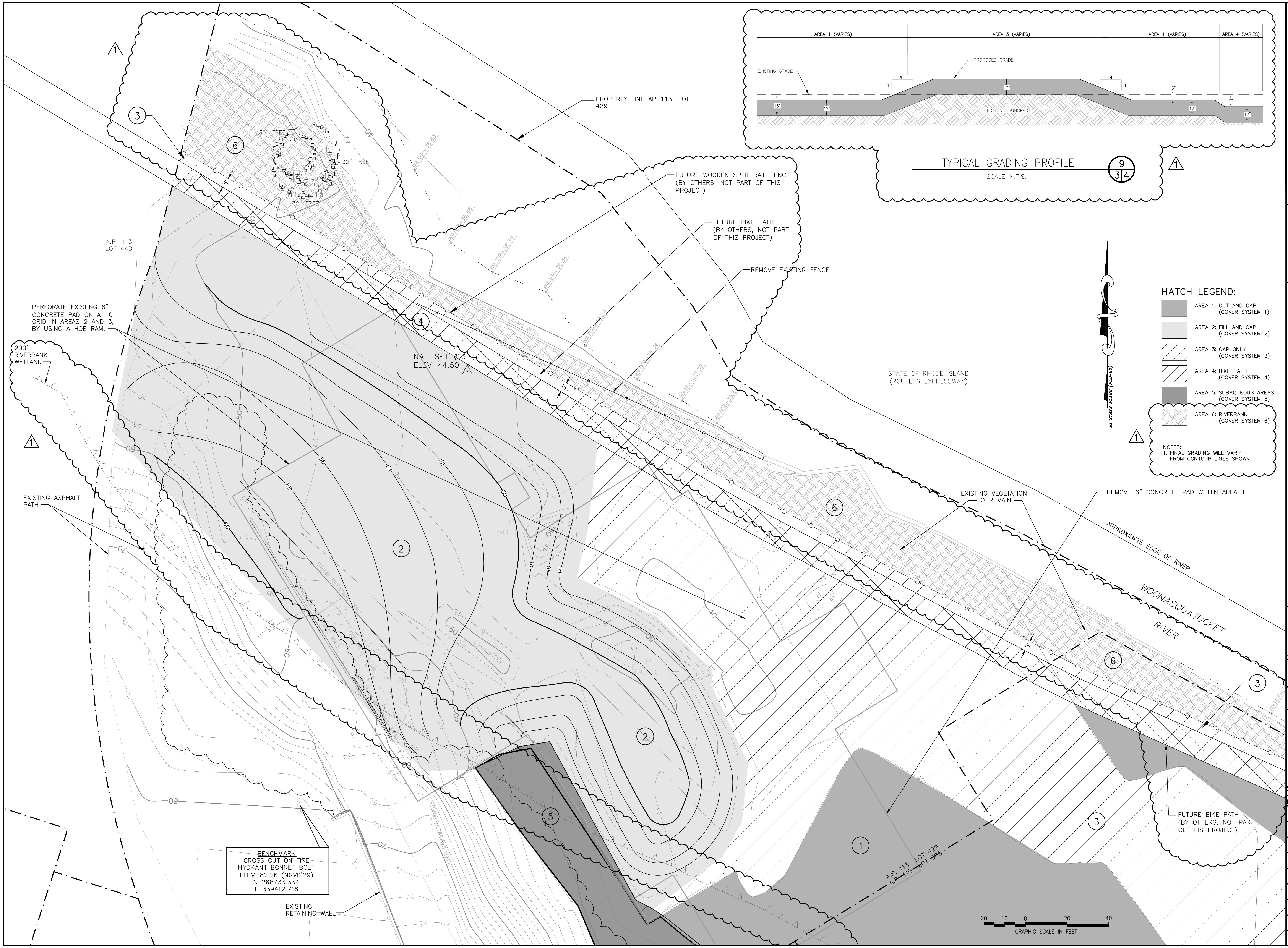
REVISIONS	DESCRIPTION
NO.	DATE
1	8/25/10
BY	ROOM
DATE	
NO.	

CITY OF PROVIDENCE PARKS DEPARTMENT  
LINCOLN LACE AND BRAID REMEDIATION PROJECT  
PROVIDENCE, RHODE ISLAND

PROPOSED CONDITIONS PLAN

**EA**  
EA ENGINEERING, SCIENCE, AND TECHNOLOGY  
2350 Post Road  
Warwick, Rhode Island 02886  
(401) 736-3440

DATE: MAY 2010  
DESIGNED BY: RGM  
DRAWN BY: DPA  
CHECKED BY: SCM  
PROJECT MANAGER: FBP  
PROJECT NUMBER: 61891.05  
SCALE: 1" = 40'  
FILE NAME: PROPOSED CONDITIONS  
DRAWING NUMBER: C-2  
SHEET NUMBER: 3 OF 7

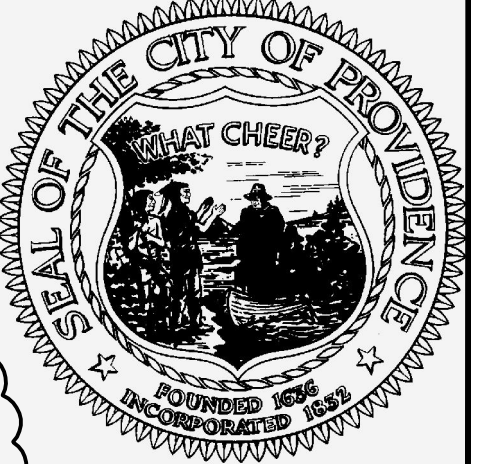


NO.	DATE	BY	DESCRIPTION
1	8/25/10	RCM	RESPONSE TO REVIEW COMMENTS

SEAL

CITY OF PROVIDENCE PARKS DEPARTMENT  
 LINCOLN LACE AND BRAID REMEDIATION PROJECT  
 PROVIDENCE, RHODE ISLAND

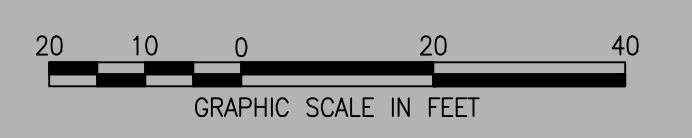
PROPOSED FILL AREA

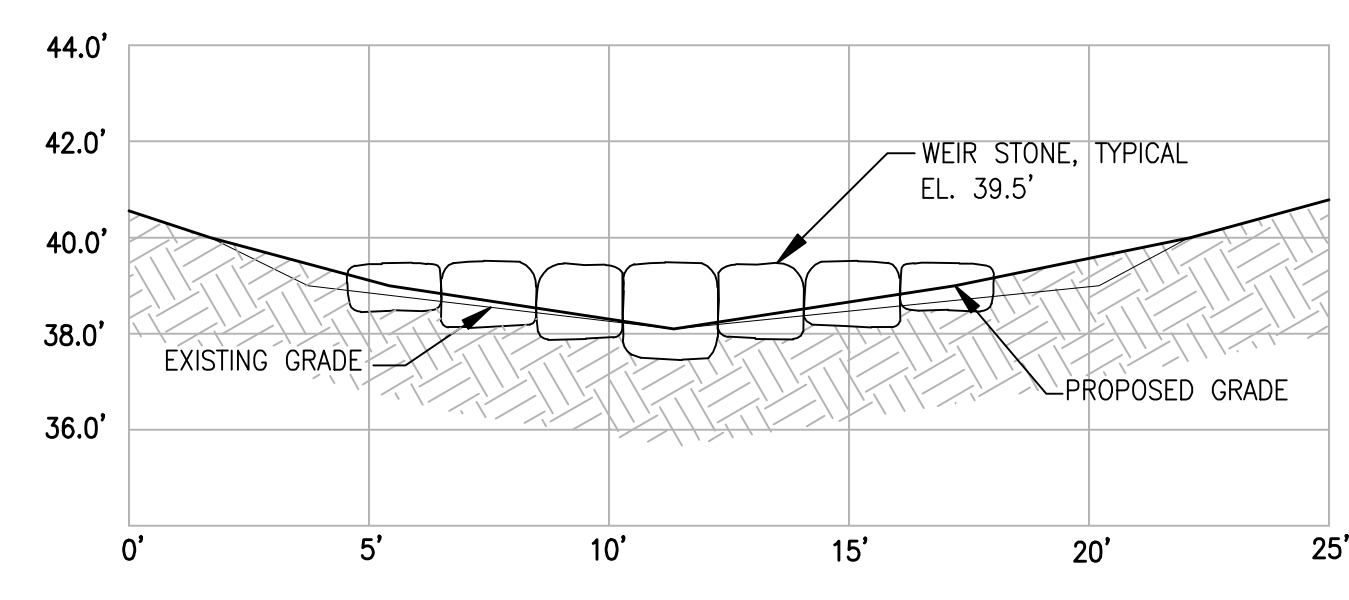
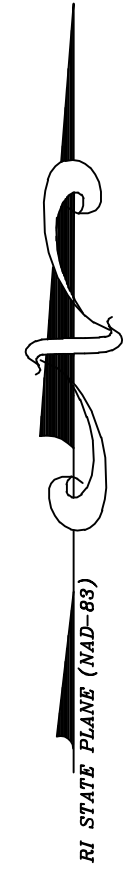
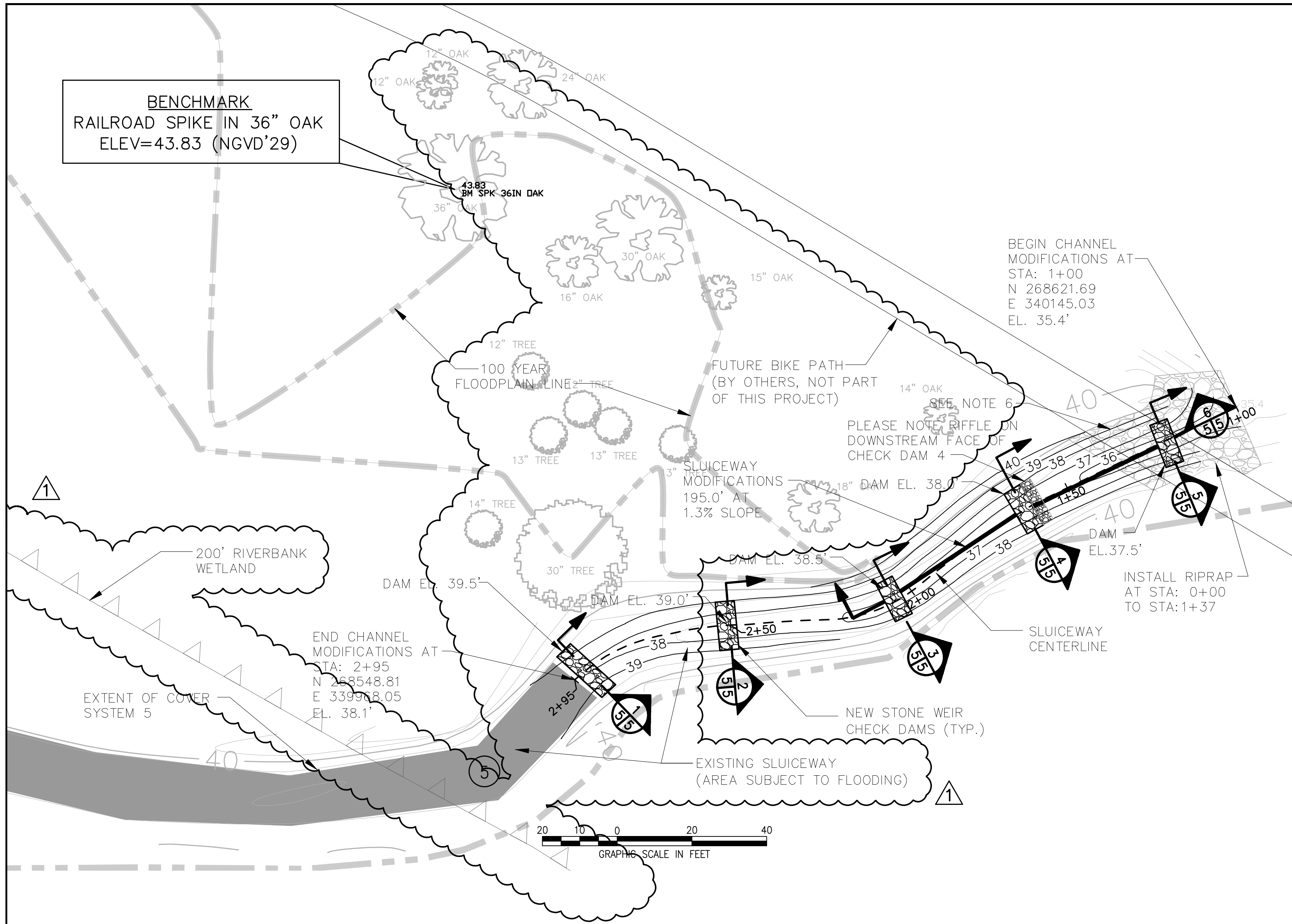


**EA**  
 EA ENGINEERING,  
 SCIENCE, AND  
 TECHNOLOGY

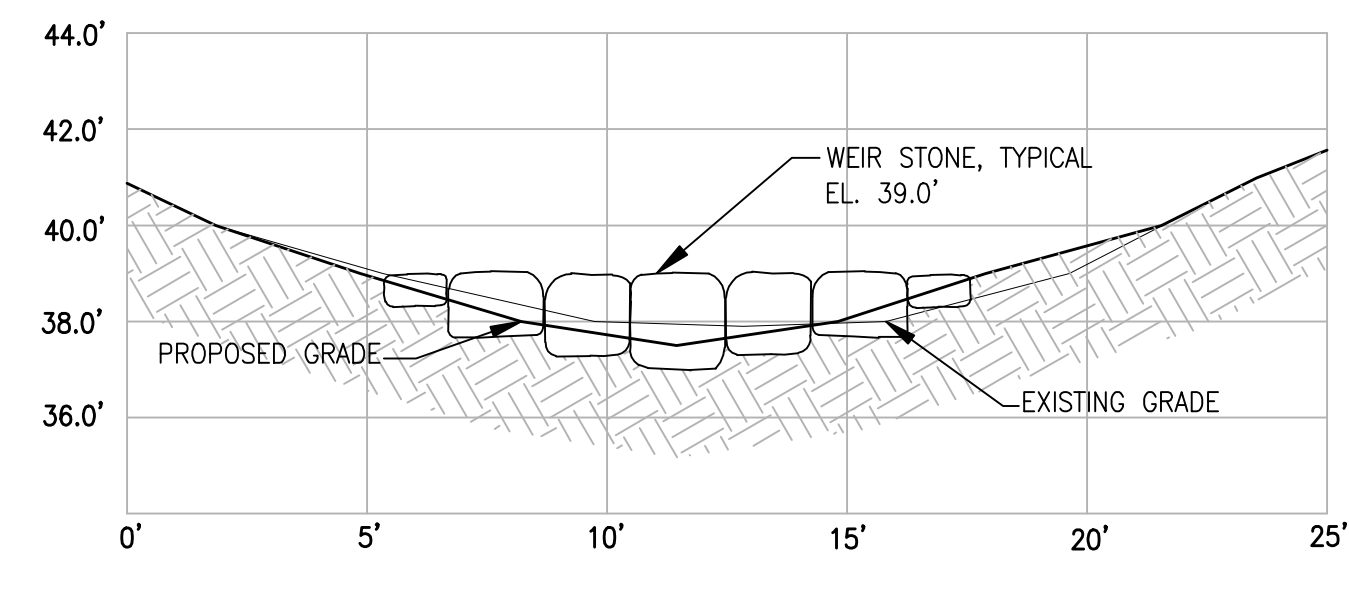
2350 Post Road  
 Warwick, Rhode Island 02886  
 (401) 736-3440

DATE	MAY 2010
DESIGNED BY	RCM
DRAWN BY	DPA
CHECKED BY	SCM
PROJECT MANAGER	FBP
PROJECT NUMBER	61891.05
SCALE	1" = 20'
FILE NAME	PROPOSED FILL AREA
DRAWING NUMBER	C-3
SHEET NUMBER	4 OF 7

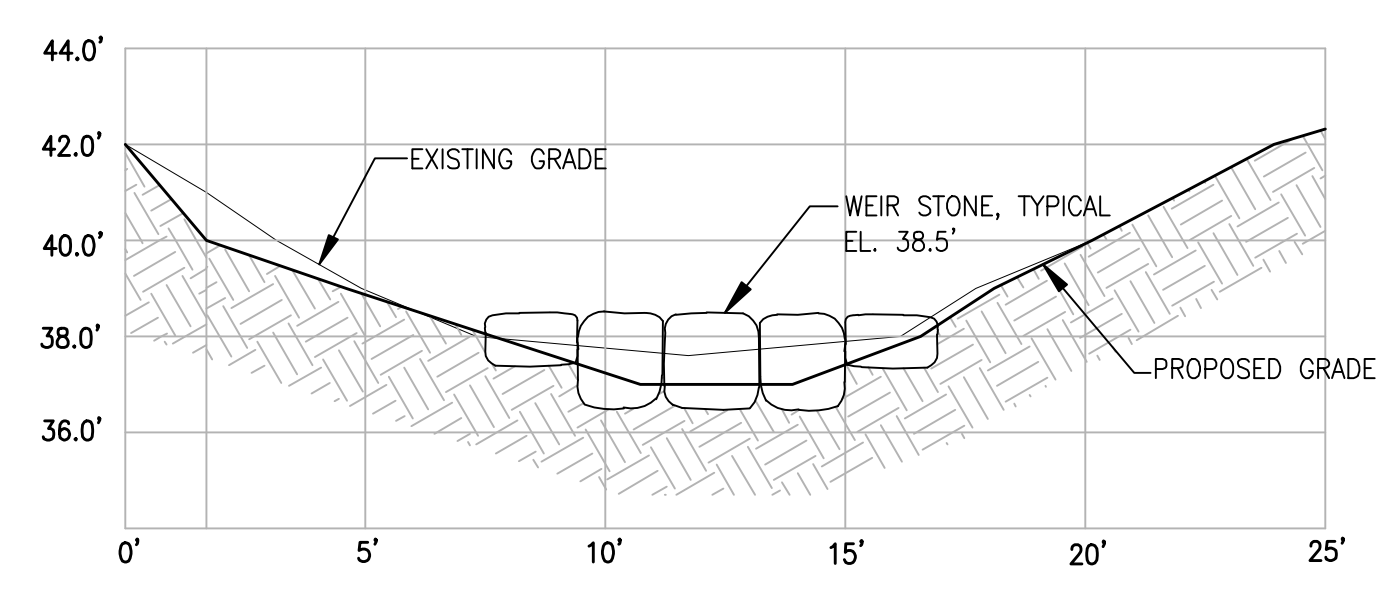




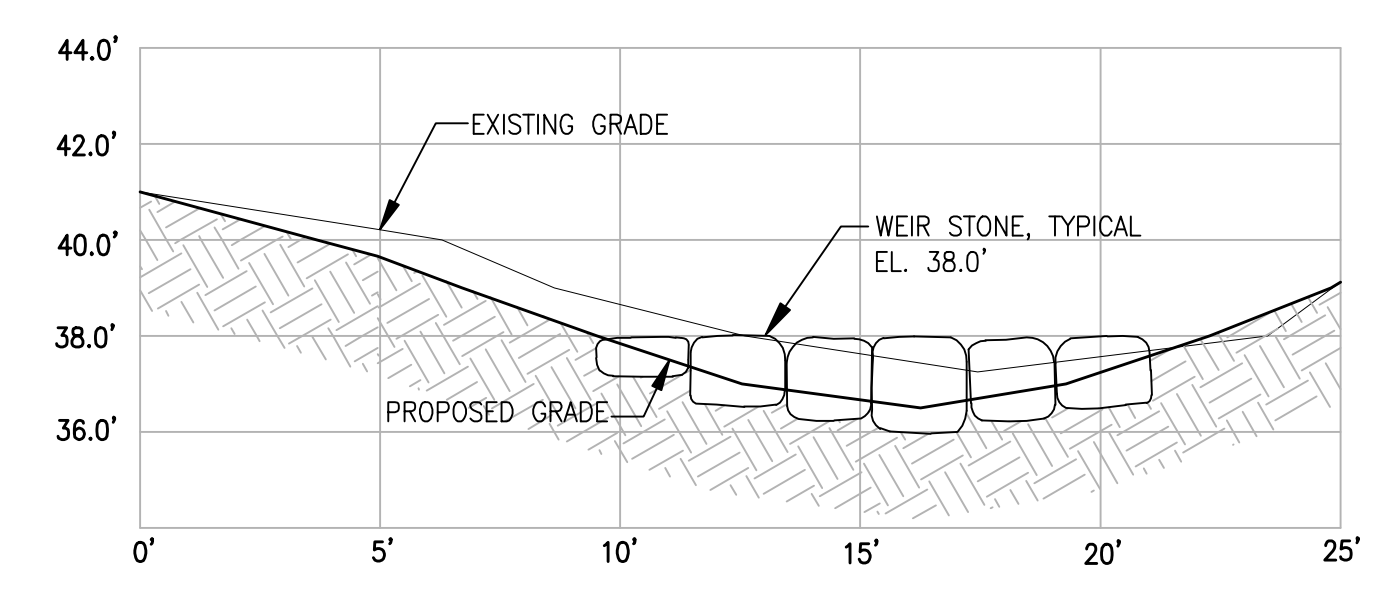
STA: 2+92 CHECK DAM 1  
SCALE: 1/4"=1'



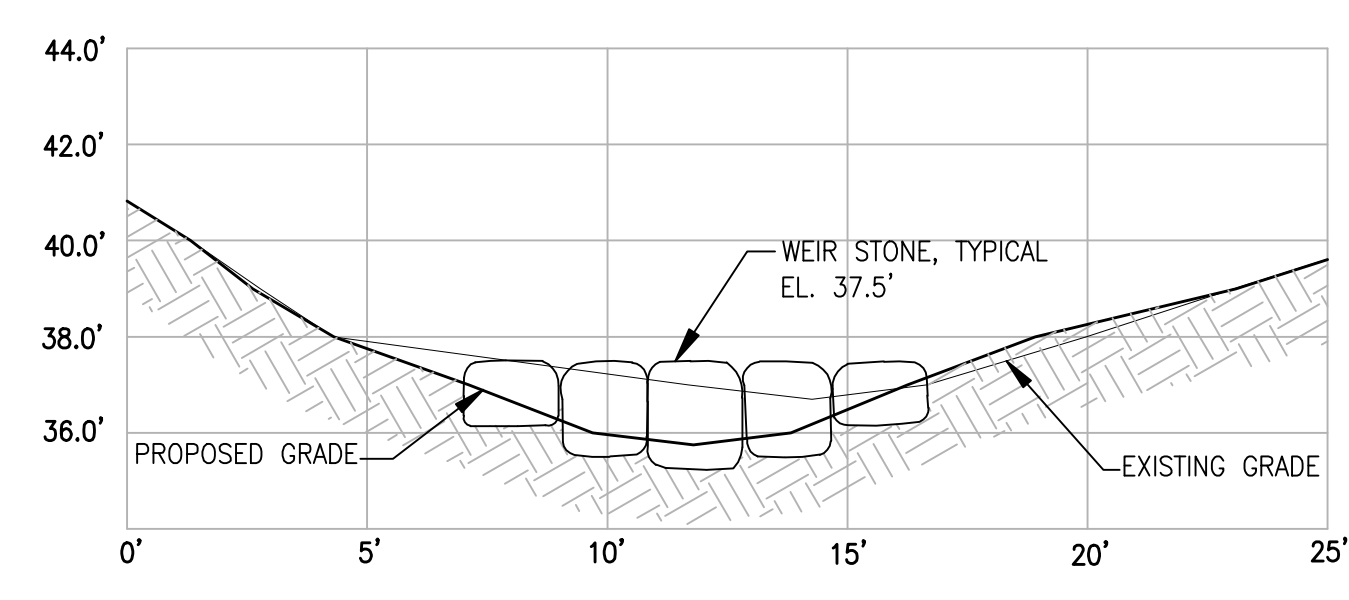
STA: 2+51 CHECK DAM 2  
SCALE: 1/4"=1'



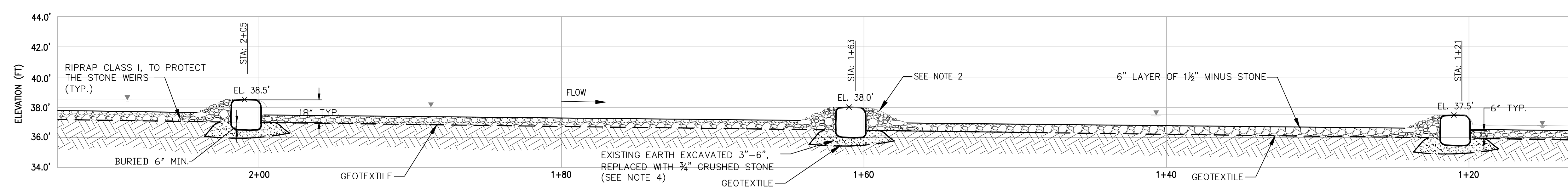
STA: 2+05 CHECK DAM 3  
SCALE: 1/4"=1'



STA: 1+63 CHECK DAM 4  
SCALE: 1/4"=1'



STA: 1+21 CHECK DAM 5  
SCALE: 1/4"=1'

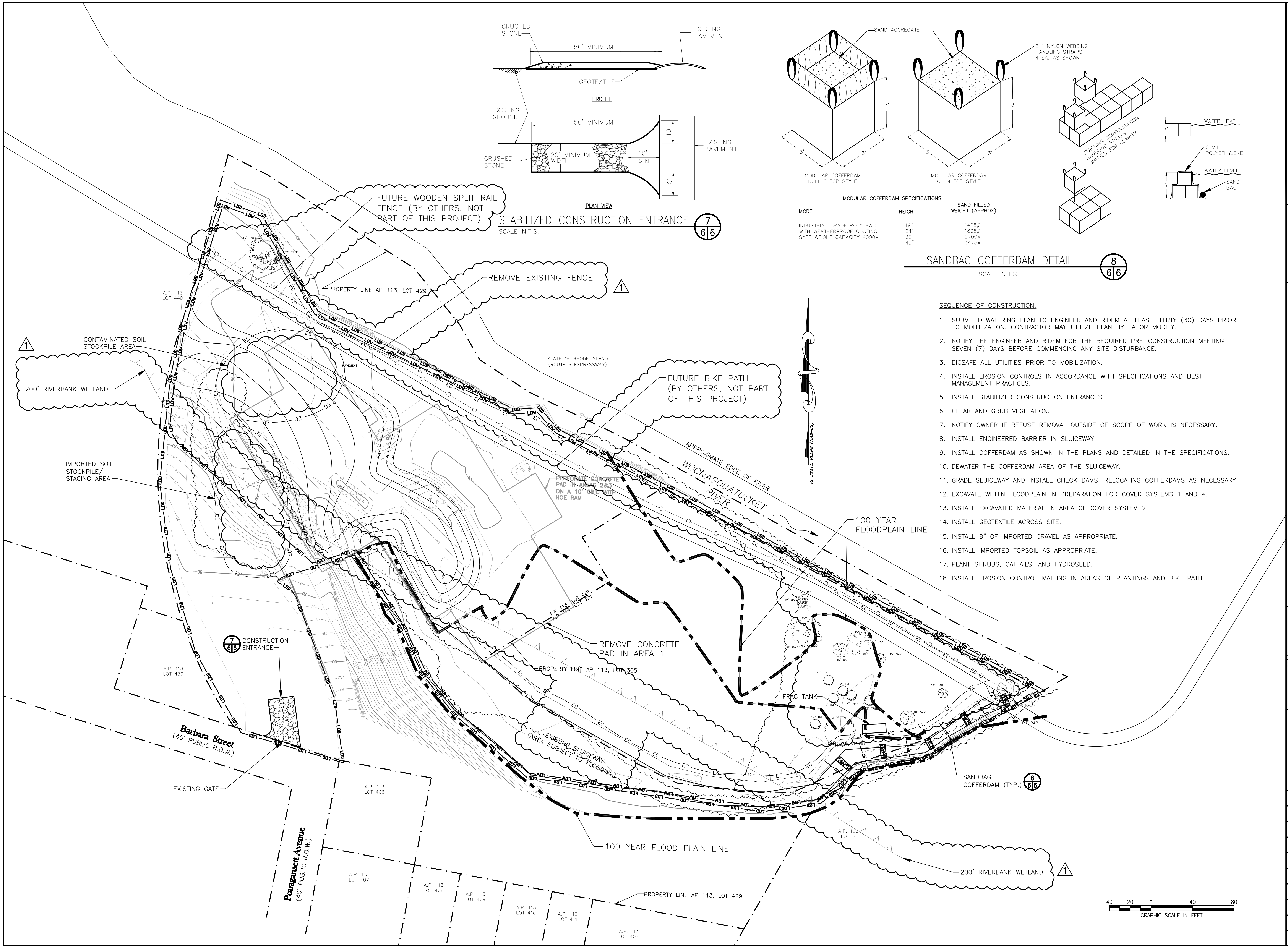


TYPICAL STONE WEIR PROFILE  
SCALE: 1/4"=1'

**NOTES**

1. EXCESS SEDIMENT GENERATED SHALL BE PLACED IN AREA 2 PRIOR TO CAP CONSTRUCTION.
2. INSTALL 18" OF RIPRAP ON THE DOWNSTREAM FACE OF THE CHECK DAM 4 LOCATED UPSTREAM FROM THE PROPOSED BIKE PATH BRIDGE (EL. 38.0').
3. TWO UPSTREAM CHECK DAMS NOT SHOWN ON PROFILE SHALL BE CONSTRUCTED WITH A DROP ON THE DOWNSTREAM FACE, SIMILAR TO CHECK DAMS 3 AND 5.
4. A MINIMUM 3" BED OF 3/4" CRUSHED STONE SHALL BE PREPARED FOR EACH CHECK DAM.
5. A MINIMUM 6" BED OF 1/2" CRUSHED STONE SHALL BE INSTALLED IN ALL DISTURBED AREAS OF SLUICWAY.
6. A MINIMUM 1" LAYER OF CLASS I RIPRAP SHALL BE INSTALLED ALONG SLUICWAY BANKS IN AREA BENEATH THE PROPOSED BIKE PATH BRIDGE.
7. GEOTEXTILE FABRIC SHALL BE INSTALLED BENEATH ALL INSTALLED SUBSTRATE.

REVISIONS		DESCRIPTION	
NO.	DATE	BY	RESPONSE TO ITEM COMMENTS
1	8/25/10	RGM	
SEAL			
CITY OF PROVIDENCE PARKS DEPARTMENT LINCOLN LACE AND BRAID REMEDIATION PROJECT PROVIDENCE, RHODE ISLAND			
PROPOSED SLUICWAY			
2350 Post Road Warwick, Rhode Island 02886 (401) 736-3440			
DATE	MAY 2010		
DESIGNED BY	RGM		
DRAWN BY	DPA		
CHECKED BY	SCM		
PROJECT MANAGER	FBP		
PROJECT NUMBER	61891.05		
SCALE	AS SHOWN		
FILE NAME	PROPOSED SLUICWAY		
DRAWING NUMBER	C-4		
SHEET NUMBER	5 OF 7		



REVISIONS	DESCRIPTION	RESPONSE TO RIDEM COMMENTS
NO.	DATE	BY
1	8/25/10	RCM

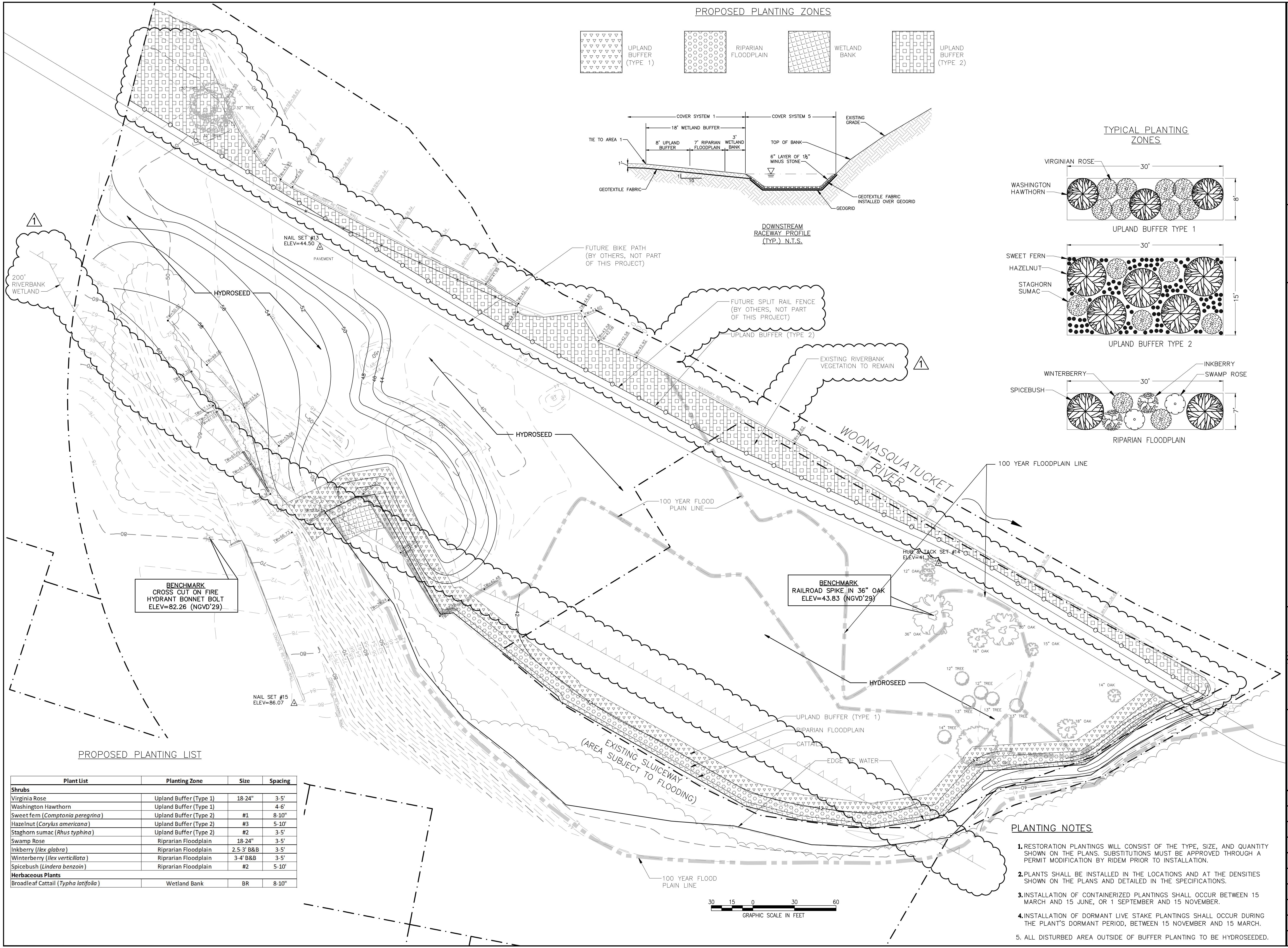
  

CITY OF PROVIDENCE PARKS DEPARTMENT LINCOLN LACE AND BRAID REMEDIATION PROJECT PROVIDENCE, RHODE ISLAND	
CONSTRUCTION MANAGEMENT PLAN	

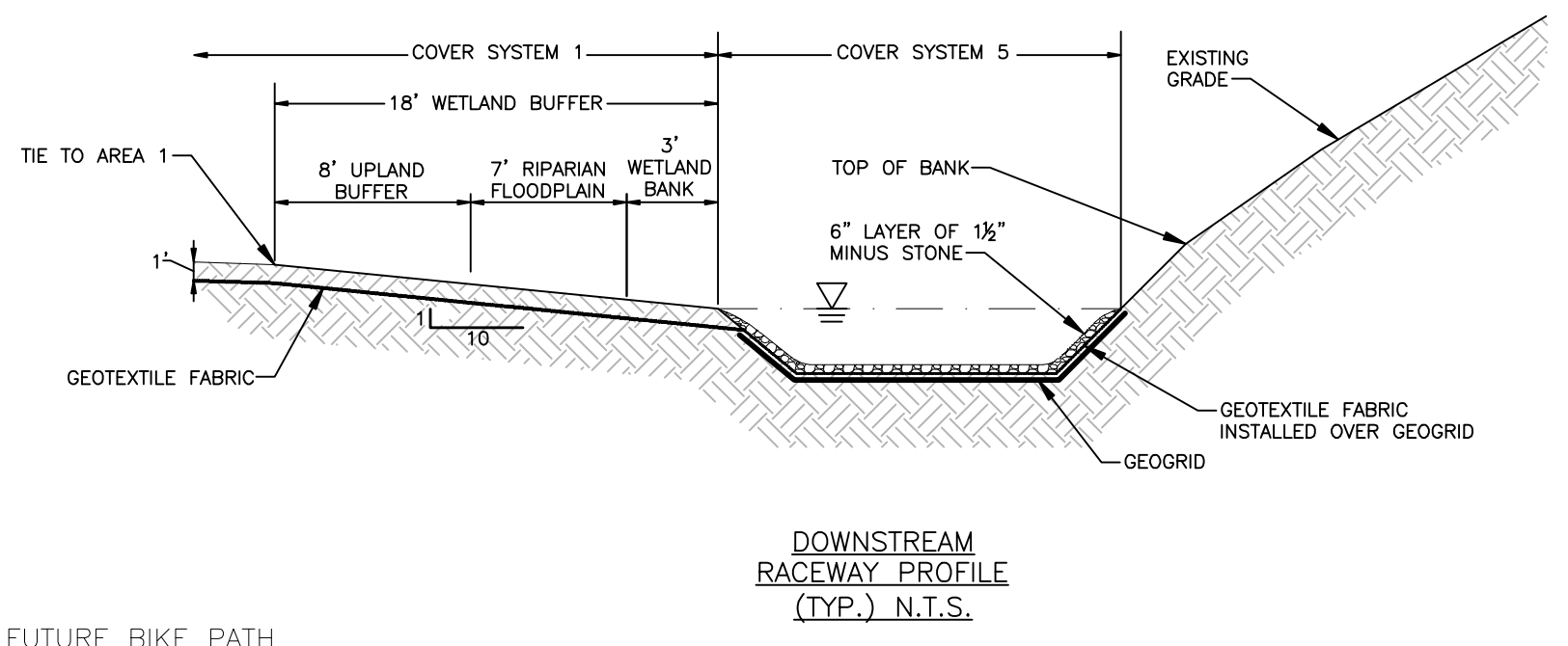
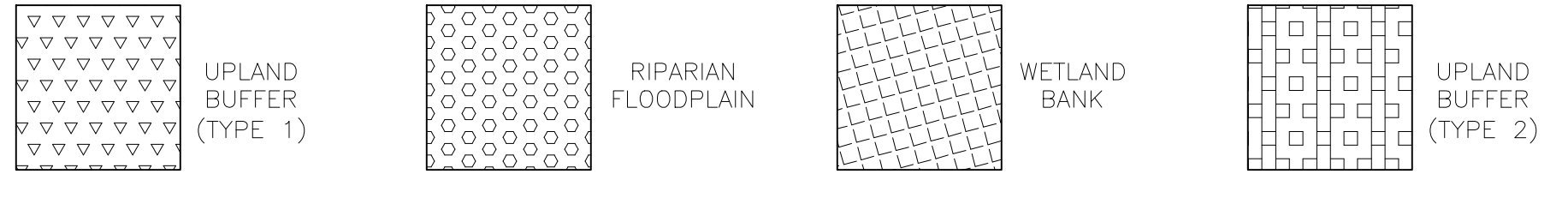
  
  

EA ENGINEERING, SCIENCE, AND TECHNOLOGY  
2350 Post Road  
Warwick, Rhode Island 02886  
(401) 736-3440

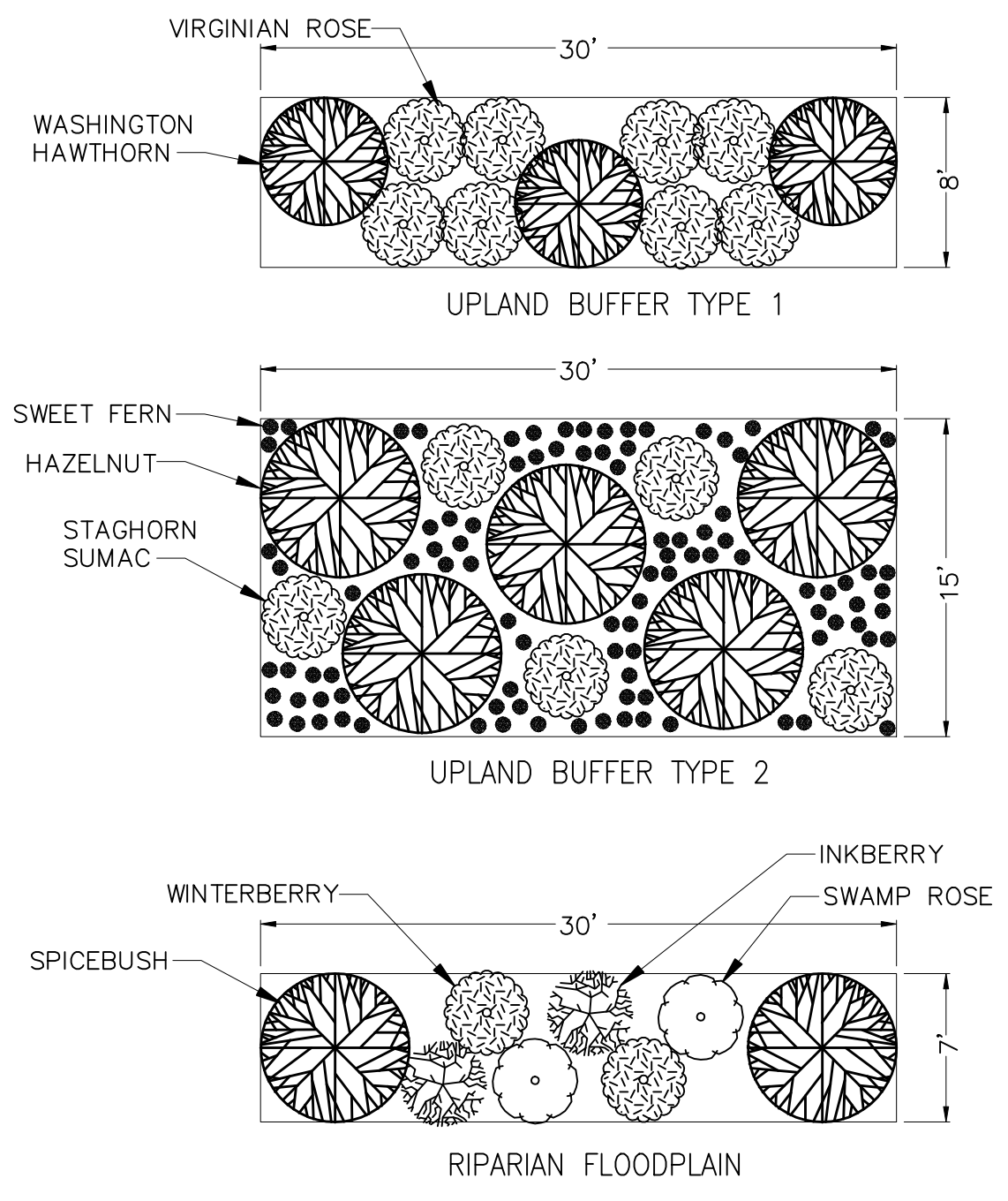
DATE	MAY 2010
DESIGNED BY	RCM
DRAWN BY	DPA
CHECKED BY	SCM
PROJECT MANAGER	FBP
PROJECT NUMBER	61891.05
SCALE	1" = 40'
FILE NAME	CONSTRUCTION MANAGEMENT
DRAWING NUMBER	C-5
SHEET NUMBER	6 OF 7



PROPOSED PLANTING ZONES



TYPICAL PLANTING ZONES



PROPOSED PLANTING LIST

Plant List	Planting Zone	Size	Spacing
<b>Shrubs</b>			
Virginia Rose	Upland Buffer (Type 1)	18-24"	3-5'
Washington Hawthorn	Upland Buffer (Type 1)		4-6'
Sweet fern ( <i>Comptonia peregrina</i> )	Upland Buffer (Type 2)	#1	8-10'
Hazelnut ( <i>Corylus americana</i> )	Upland Buffer (Type 2)	#3	5-10'
Staghorn sumac ( <i>Rhus typhina</i> )	Upland Buffer (Type 2)	#2	3-5'
Swamp Rose	Riparian Floodplain	18-24"	3-5'
Inkberry ( <i>Ilex glabra</i> )	Riparian Floodplain	2.5-3' B&B	3-5'
Winterberry ( <i>Ilex verticillata</i> )	Riparian Floodplain	3-4' B&B	3-5'
Spicebush ( <i>Lindera benzoin</i> )	Riparian Floodplain	#2	5-10'
<b>Herbaceous Plants</b>			
Broadleaf Cattail ( <i>Typha latifolia</i> )	Wetland Bank	BR	8-10"

PLANTING NOTES

- RESTORATION PLANTINGS WILL CONSIST OF THE TYPE, SIZE, AND QUANTITY SHOWN ON THE PLANS. SUBSTITUTIONS MUST BE APPROVED THROUGH A PERMIT MODIFICATION BY RIDEM PRIOR TO INSTALLATION.
- PLANTS SHALL BE INSTALLED IN THE LOCATIONS AND AT THE DENSITIES SHOWN ON THE PLANS AND DETAILED IN THE SPECIFICATIONS.
- INSTALLATION OF CONTAINERIZED PLANTINGS SHALL OCCUR BETWEEN 15 MARCH AND 15 JUNE, OR 1 SEPTEMBER AND 15 NOVEMBER.
- INSTALLATION OF DORMANT LIVE STAKE PLANTINGS SHALL OCCUR DURING THE PLANT'S DORMANT PERIOD, BETWEEN 15 NOVEMBER AND 15 MARCH.
- ALL DISTURBED AREA OUTSIDE OF BUFFER PLANTING TO BE HYDROSEED.

REVISIONS

NO.	DATE	BY	DESCRIPTION
1	8/25/10	RCM	RESPONSE TO RIDEM COMMENTS

SEAL

CITY OF PROVIDENCE PARKS DEPARTMENT  
LINCOLN LACE AND BRAID REMEDIATION PROJECT  
PROVIDENCE, RHODE ISLAND

PLANTING PLAN

EA ENGINEERING, SCIENCE, AND TECHNOLOGY

2350 Post Road  
Warwick, Rhode Island 02886  
(401) 736-3440

DATE: MAY 2010  
DESIGNED BY: RGM  
DRAWN BY: DPA  
CHECKED BY: SCM  
PROJECT MANAGER: FBP  
PROJECT NUMBER: 61891.05  
SCALE: 1" = 30'  
FILE NAME: PLANTING PLAN  
DRAWING NUMBER: C-6  
SHEET NUMBER: 7 OF 7

*Appendix C*

*As-Built Plan Set*

LEGEND	
	MONITORING WELL
	FIRE HYDRANT
	WATER VALVE
	ELEVATION CONTOUR
	LIMIT OF WORK
	APPROX. EDGE OF RIVER
	APPROX. BOUNDARY LINE

CONTROL  
STAKE/NAIL SET  
N=269003.373  
E=339240.567  
Z=61.29 (NGVD'29)

A.P. 113  
LOT 440

A.P. 113  
LOT 439

BENCHMARK  
CROSS CUT ON FIRE  
HYDRANT BONNET BOLT  
BY OTHERS  
ELEV=82.26 (NGVD'29)  
N=268733.334  
E=339412.716

CONTROL  
MAG NAIL FOUND  
N=268613.317  
E=339474.627  
Z=86.07 (NGVD'29)

CONTROL  
MAG NAIL SET  
N=268559.250  
E=339459.640  
Z=90.23 (NGVD'29)

A.P. 113  
LOT 406

CONTROL  
DRILL HOLE SET  
N=267893.03484  
E=339340.49485  
Z=83.86 (NGVD'29)

A.P. 113  
LOT 407

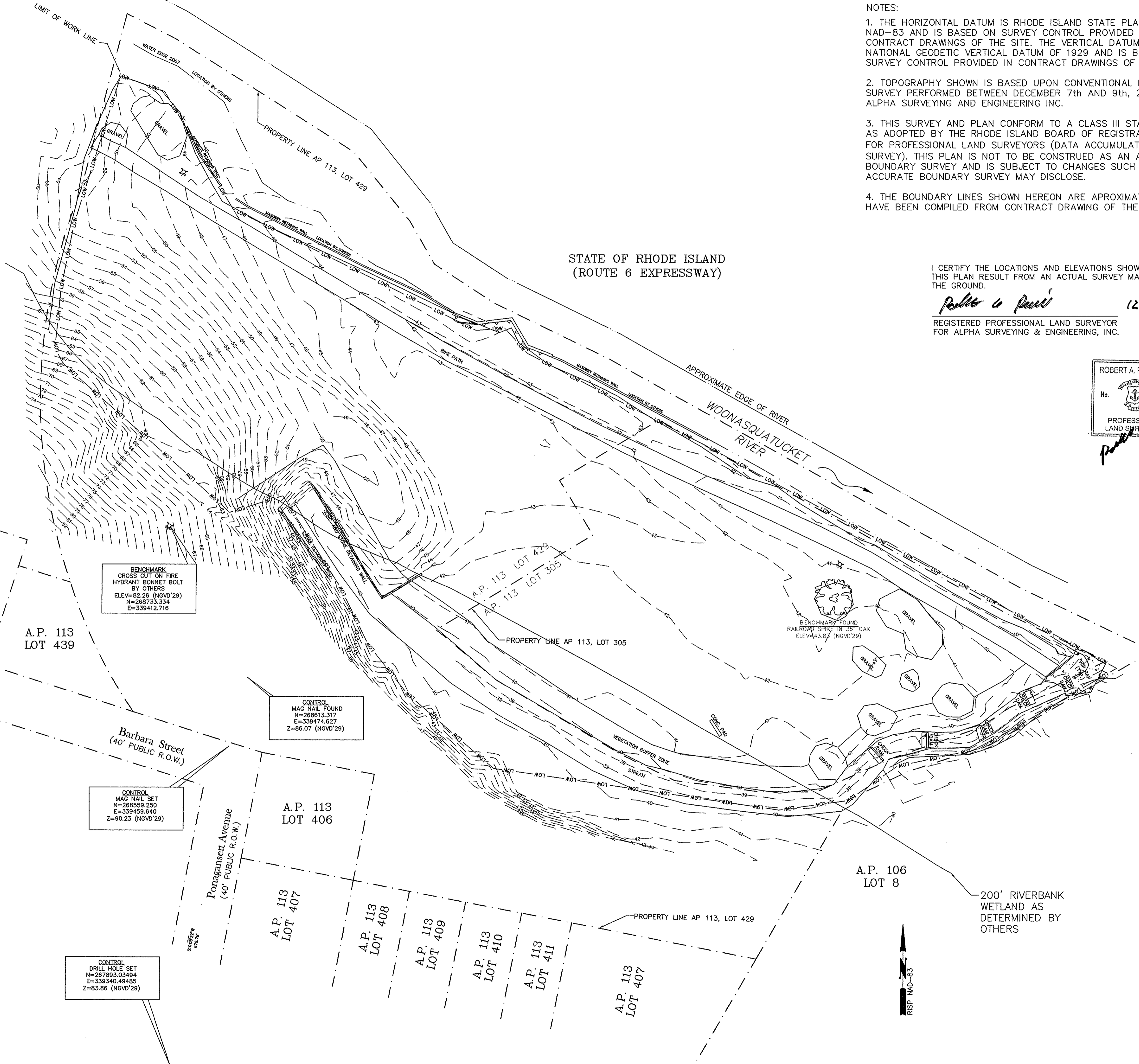
A.P. 113  
LOT 408

A.P. 113  
LOT 409

A.P. 113  
LOT 410

A.P. 113  
LOT 411

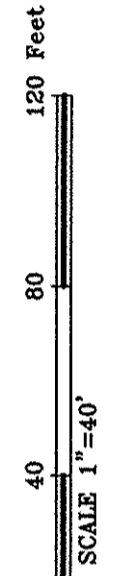
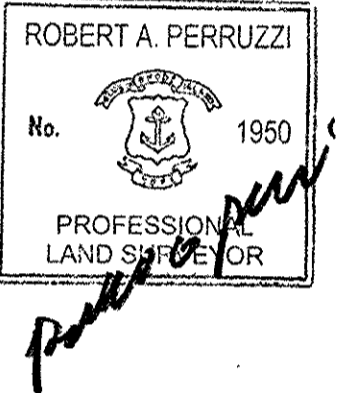
A.P. 113  
LOT 407



STATE OF RHODE ISLAND  
(ROUTE 6 EXPRESSWAY)

- NOTES:
1. THE HORIZONTAL DATUM IS RHODE ISLAND STATE PLANE NAD-83 AND IS BASED ON SURVEY CONTROL PROVIDED IN CONTRACT DRAWINGS OF THE SITE. THE VERTICAL DATUM IS NATIONAL GEODETIC VERTICAL DATUM OF 1929 AND IS BASED ON SURVEY CONTROL PROVIDED IN CONTRACT DRAWINGS OF THE SITE.
  2. TOPOGRAPHY SHOWN IS BASED UPON CONVENTIONAL FIELD SURVEY PERFORMED BETWEEN DECEMBER 7th AND 9th, 2010 BY ALPHA SURVEYING AND ENGINEERING INC.
  3. THIS SURVEY AND PLAN CONFORM TO A CLASS III STANDARD AS ADOPTED BY THE RHODE ISLAND BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS (DATA ACCUMULATION SURVEY). THIS PLAN IS NOT TO BE CONSTRUED AS AN ACCURATE BOUNDARY SURVEY AND IS SUBJECT TO CHANGES SUCH THAT AN ACCURATE BOUNDARY SURVEY MAY DISCLOSE.
  4. THE BOUNDARY LINES SHOWN HEREON ARE APPROXIMATE AND HAVE BEEN COMPILED FROM CONTRACT DRAWING OF THE SITE.

I CERTIFY THE LOCATIONS AND ELEVATIONS SHOWN ON THIS PLAN RESULT FROM AN ACTUAL SURVEY MADE ON THE GROUND.  
*Robert A. Perruzzi* 12-13-2010  
REGISTERED PROFESSIONAL LAND SURVEYOR DATE  
FOR ALPHA SURVEYING & ENGINEERING, INC.



AS-BUILT PLAN  
LAND IN PROVIDENCE, RHODE ISLAND  
LINCOLN LACE AND BRAID REMEDIATION PROJECT  
MAP 113 LOTS 429 & 305 - 55 & 59 PONAGANSETT AVENUE

PREPARED FOR  
R.C. & D. INC.  
17 GORDON AVE., SUITE 204  
PROVIDENCE, RI 02905

JOB NO. 10154  
SHEET NO. 1 OF 1  
DATE 12-13-2010

PROFESSIONAL LAND SURVEYOR  
SCALE 1"=40'  
DRAWN BY: R.A.P./R.A.P.  
CHECKED BY: R.A.P./R.A.P.

ALPHA SURVEYING AND ENGINEERING INC.  
695 WAREHAM STREET  
MIDDLEBOROUGH, MASSACHUSETTS 02346  
(508) 299-5005



## *Appendix D*

### *Weight Slips of Imported Soils*

Date: 12/10/10

Main Office  
175 Turnpike Street  
Canton, MA 02021

Sold to: **BCVD**

residential custom soils

Address: **Ronagansett ave**  
City/State: **Prov, Rence RI**

Job Name:

PO #

1-888-875-5526

Qty	Description	Unit Price	Amount
35 yds	1" Screened		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		
Change	CGD	Picked Up	Delivered
Gross:	Sub Total		
Tare:	Tax		
Net:	Delivery		
	Total		

38767

Received By: *[Signature]*

Date: 12/06/10

Main Office  
125 Turnpike Street  
Canton, MA 02021

Sold to: **RC & D**  
Address: **Panagansett ave**  
City/State: **Providence, R.I.**

read custom soils  
a Division of **WILL SUMM/CANTON**  
1-888-475-5526

Job Name: \_\_\_\_\_  
PO: \_\_\_\_\_

Qty	Description	Unit Price	Amount
25yds	Loam 1" Screened		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		
	Charge		
	Truck: <b>Blanton</b>		
	Gross:		
	Tax:		
	Net:		
			Delivered
			Sub Total
			Tax
			Delivery
			Total

38212

Received By: \_\_\_\_\_

Date: 12/06/10

Main Office  
125 Turnpike Street  
Canton, MA 02021

Sold to: **RC & D**  
Address: **Panagansett ave**  
City/State: **Providence**

read custom soils  
a Division of **WILL SUMM/CANTON**  
1-888-475-5526

Job Name: \_\_\_\_\_  
PO: \_\_\_\_\_

Qty	Description	Unit Price	Amount
25yds	Loam 1" Screened		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		
	Charge		
	Truck: <b>Blanton</b>		
	Gross:		
	Tax:		
	Net:		
			Delivered
			Sub Total
			Tax
			Delivery
			Total

38766

Received By: \_\_\_\_\_

Main Office  
125 Thimble Street  
Canton, MA 01021

Date: 11/6/10

read custom soils  
a Division of **MILAW/CATM**  
1-800-475-5526

Sold to: RC D  
Address: 65 Providence St  
City/State: Providence RI  
Job Name: \_\_\_\_\_  
PO # \_\_\_\_\_

Qty	Description	Unit Price	Amount
2500	Foam		
	Topdressing Sand		
	Banker Sand		
	Top Dressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		
Change		COD	Delivered
Gross:			Sub Total
Tax:			Tax
Net:			Delivery
			Total

37662

Received By: [Signature]

Main Office  
125 Thimble Street  
Canton, MA 01021

Date: 1/2/10

read custom soils  
a Division of **MILAW/CATM**  
1-800-475-5526

Sold to: RC D  
Address: 60 Biggssett Av  
City/State: Providence RI  
Job Name: \_\_\_\_\_  
PO # \_\_\_\_\_

Qty	Description	Unit Price	Amount
2500	Foam		
	Topdressing Sand		
	Banker Sand		
	Top Dressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		
Change		COD	Delivered
Gross:			Sub Total
Tax:			Tax
Net:			Delivery
			Total

37663

Received By: [Signature]

Date: 12/02/10

Main Office  
125 Turnpike Street  
Canton, MA 02021

read custom soils Sold to: RC & D  
Address: 55-61 Panagansett Ave  
City/State: Providence, R.I.  
Job Name: Lincoln face  
PO. # 1006-007

a Division of **WILL SAND/CANTON**  
**1-888-475-5526**

Qty	Description	Unit Price	Amount
25 yds	Loam 1" screened		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Roof Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		

Charge	COD	Picked Up	Delivered
Trucks: <u>Blanton</u>			
Gross:	Sub Total		
Tare:	Tax		
Net:	Delivery		
Total			

38763

Received By: [Signature]

Main Office  
125 Turnpike Street  
Canton, MA 02021

Date: 10.6.10

read custom soils Sold to: RC & D  
Address: 600 Pousgansett Av.  
City/State: Providence R.I.  
Job Name:   
PO. #

a Division of **WILL SAND/CANTON**  
**1-888-475-5526**

Qty	Description	Unit Price	Amount
25 yds	Loam 1"		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Roof Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		

Charge	COD	Picked Up	Delivered
Trucks: <u>Blanton</u>			
Gross:	Sub Total		
Tare:	Tax		
Net:	Delivery		
Total			

37661

Received By: [Signature]

Date: 12/02/10

Main Office  
125 Turnpike Street  
Canton, MA 02021

read custom soils Sold to: RC & D

Address: 55-61 Penagansett ave

City/State: Providence R.I.

Job Name: Pine Valley Lacc

PO. # 706-007

a Division of **WILL SIME/CANTON**  
1-888-475-5526

Qty	Description	Unit Price	Amount
25 yds	Loam 1" screened		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		
✓	Charge		Delivered
	Truck: Blanton		Sub Total
	Gross:		Tax
	Tare:		Delivery
	Net:		Total

38762

Received By: [Signature]

Date: 12-2-10

Main Office  
125 Turnpike Street  
Canton, MA 02021

read custom soils Sold to: RC & D

Address: 55-61 Penagansett

City/State: Providence R.I.

Job Name: Pine Valley Lacc

PO. # 706-007

a Division of **WILL SIME/CANTON**  
1-888-475-5526

Qty	Description	Unit Price	Amount
25 yds	Loam 1" Screen		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		
	Charge		Delivered
	Truck: LMD		Sub Total
	Gross:		Tax
	Tare:		Delivery
	Net:		Total

38264

Received By: [Signature]

Date: 1A-2-10

Main Office  
125 Turnpike Street  
Canton, MA 02021

read custom soils Sold to: R.C.D.  
Address: 55-61 PONDANSETT AVE  
City/State: PROVIDENCE R.I.

a Division of **WILL SAND/CANTON**  
1-888-475-5526

Job Name: LINCOLN LACE

PO. #

Qty	Description	Unit Price	Amount
25yds	Loam 1" SCF. LOAM		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		
Charge	COD	Picked Up	Delivered
Truck: <b>J.K. ANGUS INC</b>			Sub Total
Gross:			Tax
Tare:			Delivery
Net:			Total

38197

Received By: STC...

Date: 1A-2-10

Main Office  
125 Turnpike Street  
Canton, MA 02021

read custom soils Sold to: R.C.D.  
Address: 55-61 PONDANSETT AVE  
City/State: PROVIDENCE, R.I.

a Division of **WILL SAND/CANTON**  
1-888-475-5526

Job Name: LINCOLN LACE

PO. #

Qty	Description	Unit Price	Amount
25yds	Loam 1" SCF. LOAM		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		
Charge	COD	Picked Up	Delivered
Truck: <b>J.K. ANGUS INC</b>			Sub Total
Gross:			Tax
Tare:			Delivery
Net:			Total

38198

Received By: STC...

Date: 12-2-10

Main Office  
125 Turnpike Street  
Canton, MA 02021

read custom soils

Sold to: R.C.D.

Address: 55-61 PONAGANSETT AVE

City/State: PROVIDENCE R.I.

Job Name: LINCOLN LAKE

PO. #

a Division of **WIL SUB/CANTON**

1-888-475-5526

Qty	Description	Unit Price	Amount
25 yds	Loam 1" SCR LOAM		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		

Charge	COD	Picked Up	Delivered
Truck: J.K. ANGUS INC			
Gross:			
Tare:			
Net:			
			Sub Total
			Tax
			Delivery
			Total

38195

Received By: [Signature]

Date: 12-2-10

Main Office  
125 Turnpike Street  
Canton, MA 02021

read custom soils

Sold to: R.C.D.

Address: 55-61 PONAGANSETT AVE

City/State: PROVIDENCE R.I.

Job Name: LINCOLN LAKE

PO. #

a Division of **WIL SUB/CANTON**

1-888-475-5526

Qty	Description	Unit Price	Amount
25 yds	Loam 1" SCR LOAM		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		

Charge	COD	Picked Up	Delivered
Truck: J.K. ANGUS INC			
Gross:			
Tare:			
Net:			
			Sub Total
			Tax
			Delivery
			Total

38196

Received By: [Signature]



Date: 12-2-10

Main Office  
125 Turnpike Street  
Canton, MA 02021

Sold to: R.C.D

read custom soils

a Division of **WILL SANDS/CANTON**

1-888-475-5526

Address: 55-61 Providence St Av

City/State: Providence, RI

Job Name: LINCOLN LACE

PO. #

Qty	Description	Unit Price	Amount
25 yds	Loam 1" Screened		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		

Charge	COD	Picked Up	Delivered
Truck: L-143			
Gross:			
Tare:			
Net:			
Sub Total			Tax
Delivery			Total

30265

Received By: [Signature]

Main Office  
125 Turnpike Street  
Canton, MA 02021

Date: 12-3-10

Sold to: R.C.D

read custom soils

a Division of **WILL SANDS/CANTON**

1-888-475-5526

Address: 55-61 Providence St Av

City/State: Providence, RI

Job Name: LINCOLN LACE

PO. #

Qty	Description	Unit Price	Amount
25 yds	Loam 1" SCP. LOAM		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		

Charge	COD	Picked Up	Delivered
Truck: J.K. ANGUS INC			
Gross:			
Tare:			
Net:			
Sub Total			Tax
Delivery			Total

30194

Received By: [Signature]

Date: 12.2.10

Main Office  
125 Turnpike Street  
Canton, MA 02021

read custom soils  
Sold to: RCTD

Address: 55-61 PONAGANSETT AVE

City/State: PROVIDENCE R.I.

Job Name: LINCOLN LACE

P.O. # 1006-007

a Division of **WILL SARR/CANTON**  
**1-888-475-5526**

Qty	Description	Unit Price	Amount
25 yds	Loam 1" SCREENED		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		
✓	Charge		
	COD		
	Picked Up		
	Delivered		
Truck: <u>LINDQUIST</u>		Sub Total	
Gross:		Tax	
Tare:		Delivery	
Net:		Total	

38248

Received By: JTCOL

Date: 12.2.10

Main Office  
125 Turnpike Street  
Canton, MA 02021

read custom soils  
Sold to: RCTD

Address: 55-61 PONAGANSETT AVE

City/State: PROVIDENCE R.I.

Job Name: LINCOLN LACE

P.O. # 1006-007

a Division of **WILL SARR/CANTON**  
**1-888-475-5526**

Qty	Description	Unit Price	Amount
25 yds	Loam 1" SCREENED		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		
✓	Charge		
	COD		
	Picked Up		
	Delivered		
Truck: <u>BLANDIN</u>		Sub Total	
Gross:		Tax	
Tare:		Delivery	
Net:		Total	

38253

Received By: WILLIAMS

Date: 11-27-19

Main Office  
125 Hampshire Street  
Canton, MA 02021

read custom soils sold to RUD FOX

a Division of WILSON/SMITH

1-800-475-5526

Address:

City/State:

Job Name: Lincoln Ave + Brad  
PO # 124-007

Qty	Description	Unit Price	Amount
	Loam		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Roof Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		
Charge		COD	Delivered
Sub Total			Sub Total
Gross			Tax
Tare			Delivery
Net			Total

Received By: [Signature]

30710

Date:

Main Office  
125 Hampshire Street  
Canton, MA 02021

read custom soils sold to RUD FOX

a Division of WILSON/SMITH

1-800-475-5526

Address:

City/State:

Job Name: Lincoln Ave + Brad  
PO # 124-007

Qty	Description	Unit Price	Amount
	Loam		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Roof Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		
Charge		COD	Delivered
Sub Total			Sub Total
Gross			Tax
Tare			Delivery
Net			Total

Received By: [Signature]

30717

Date: 11-24-00

Main Office  
125 Turnpike Street  
Canton, MA 02021

read custom soils Sold to: RCD + D, INC

1800-755-5570

1800-755-5570

Job Name: Litchfield Inc + Brad  
PO # 1116-007

Qty	Description	Unit Price	Amount
	Loam / Sand		
	Top Dressing Sand		
	Bunker Sand		
	Top Dressing Mix		
	Root Zone Mix		
	Pinch Mix		
	Roof Garden Soil		
	Other		
<input type="checkbox"/> Change <input type="checkbox"/> Pick Up <input type="checkbox"/> COD <input checked="" type="checkbox"/> Picked Up		Sub Total	
Gross		Tax	
Tare		Delivery	
Net		Total	

Received By: [Signature]

28719



AND HEAVY EQUIPMENT  
75 Providence Street, Rehoboth, MA 02769  
Tel (508) 336-4272 - Fax (508) 336-4275

FOR CRONIN

LOCATION CANTON / PCD

DATE 11-24-2000

TRUCK# Stew's Express DRIVER STEVE

LOADS	YARDS	HOURS	DESCRIPTION
2	LOADS	LOAM	GRAVEL
2.1	COMPOST		FILL
	CANTON TO		LOAM
	PHOENIX		DOZER
630AM	TO 13D		LOADER
	7 HRS	TOTAL	TRUCKS
Gross			
Tare			
NET			

Signed [Signature]

2299



AND HEAVY EQUIPMENT  
 75 Providence Street, Rehoboth, MA 02769  
 Tel (508) 336-4272 • Fax (508) 336-4275

R CROWIN  
 CATION CANTON/PAW  
 TE 11-24 2010

TRUCK# B+B 45 DRIVER J Walls

LOADS	YARDS	HOURS	DESCRIPTION
2	LOADS	LOAM	GRAVEL
1	LOADS	Compost	FILL
		CANTON TO PAW	LOAM
			DOZER
30 PM			LOADER
30 PM			TRUCKS
GROSS			
TARE			
NET			

2580 Signed Steve G

Main Office  
 125 Turnpike Street  
 Canton, MA 02021

Date: 11-24-10

read custom soils Sold to: RUD INC.

a Division of MILSUM/CANTON  
 1-800-475-5526  
 Address: \_\_\_\_\_  
 City/State: \_\_\_\_\_  
 Job Name: Lincoln Asset Brad  
 PO: 1006-007

Qty	Description	Unit Price	Amount
2596	Loam / SICMAD		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		

Change	COB	Picked Up	Delivered
Gross:			Sub Total
Tare:			Tax
Net:			Delivery
			Total

38716 Received By: Jared Wells

Main Office  
125 Turnpike Street  
Canton, MA 02021

read custom soils

a Division of **WILL SAND/CANTON**

1-888-475-5526

Sold to: RUT + D INC.

Address: \_\_\_\_\_

City/State: \_\_\_\_\_

Job Name: Lynch Court Road

P.O. # 1006-007

Date: 11-23-11

Qty	Description	Unit Price	Amount
25 yds	Loam <sup>1</sup> Screen		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		

<input checked="" type="checkbox"/>	Charge		COD	<input checked="" type="checkbox"/>	Picked Up		Delivered
Truck: <u>Alpine 7</u>							Sub Total
Gross:							Tax
Tare:							Delivery
Net:							Total

37705

Received By: \_\_\_\_\_

Main Office  
125 Turnpike Street  
Canton, MA 02021

read custom soils

a Division of **WILL SAND/CANTON**

1-888-475-5526

Sold to: BU + D INC.

Address: \_\_\_\_\_

City/State: \_\_\_\_\_

Job Name: Lynch Court Road

P.O. # 1006-007

Date: 11-23-11

Qty	Description	Unit Price	Amount
25 yds	Loam <sup>1</sup> Screen		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		

<input checked="" type="checkbox"/>	Charge		COD	<input checked="" type="checkbox"/>	Picked Up		Delivered
Truck: <u>B+B #24</u>							Sub Total
Gross:							Tax
Tare:							Delivery
Net:							Total

37700

Received By: \_\_\_\_\_

Date: 11-25-10

Main Office  
125 Turnpike Street  
Canton, MA 02021

Sold to: RUT D INC.

read custom soils

a Division of **WILL SANDS/CANTON**  
1-888-475-5526

Address: \_\_\_\_\_  
City/State: \_\_\_\_\_  
Job Name: Lansdale Lane + Build  
PO. # 1006-007

Qty	Description	Unit Price	Amount
25	Loam 1" screened		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		
✓	Charge		
	Truck: <u>Alvada #7</u>		
	Gross:		
	Tare:		
	Net:		
	Sub Total		
	Tax		
	Delivery		
	Total		

37675 Received By: \_\_\_\_\_

Date: 11-01-10

Main Office  
125 Turnpike Street  
Canton, MA 02021

Sold to: RUT D INC.

read custom soils

a Division of **WILL SANDS/CANTON**  
1-888-475-5526

Address: \_\_\_\_\_  
City/State: \_\_\_\_\_  
Job Name: Lansdale Lane + Build  
PO. # 1006-007

Qty	Description	Unit Price	Amount
25	Loam 1" screened		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		
✓	Charge		
	Truck: <u>Alvada #7</u>		
	Gross:		
	Tare:		
	Net:		
	Sub Total		
	Tax		
	Delivery		
	Total		

37676 Received By: \_\_\_\_\_

Main Office  
125 Turnpike Street  
Canton, MA 02021

read custom soils Sold to: RCTD, Inc.

# Department: 771-5500/2007

1-800-475-5520

Address:

City/State:

Job Name: Lincoln Linc + Sand

PO # 1006-007

Qty	Description	Unit Price	Amount
2515	Loam <sup>TM</sup> screened		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root zone mix		
	Infield Mix		
	Roof Garden Soil		
	Other		
	Change <input type="checkbox"/> COD <input checked="" type="checkbox"/> Pick-up In		Delivered
	Gross:		Sub Total
	Tare:		Tax
	Net:		Delivery
			Total

Received By: \_\_\_\_\_



AND HEAVY EQUIPMENT  
75 Providence Street, Rehoboth, MA 02769  
Tel (508) 336-4272 • Fax (508) 336-4275

FOR CREAM  
LOCATION Canton to Proov  
DATE 11-23 2010  
TRUCK# Alameda # 7 DRIVER FRANK

LOADS	YARDS	HOURS	DESCRIPTION
<u>3</u>	<u>LOAMS</u>	<u>LOAM</u>	<b>GRAVEL</b>
	<u>CANTON TO</u>	<u>TO</u>	<b>FILL</b>
	<u>PROOV</u>		<b>LOAM</b>
			<b>DOZER</b>
<u>630</u>			<b>LOADER</b>
<u>400 m</u>			<b>TRUCKS</b>
Gross			
Tare			
NET			

Signed [Signature]

2577



Main Office  
125 Turnpike Street  
Canton, MA 02021

Date: 4-23-10

Main Office  
125 Turnpike Street  
Canton, MA 02021

Date: 11-1-10

read custom soils

Sold to: R&D Inc.

read custom soils

Sold to: R&D Inc.

a Division of **WILL SAND/CANTON**

Address: \_\_\_\_\_

a Division of **WILL SAND/CANTON**

Address: \_\_\_\_\_

**1-888-475-5526**

City/State: Lincoln Mass + Braid

**1-888-475-5526**

City/State: Lincoln Mass + Braid

Job Name: Lincoln Loc + Braid

Job Name: Lincoln Loc + Braid

Job Name: Lincoln Loc + Braid

PO. # 1006-007

PO. # 1006-007

Qty	Description	Unit Price	Amount
25 yds	Loam 1" screened		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		
<input checked="" type="checkbox"/>	Charge		
	Truck: B+D#5		
	Gross:		
	Tare:		
	Net:		
		<input checked="" type="checkbox"/>	Delivered
		<input checked="" type="checkbox"/>	Picked Up
			Sub Total
			Tax
			Delivery
			Total

37701

Received By: \_\_\_\_\_

Qty	Description	Unit Price	Amount
25 yds	Loam 1" screened		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		
<input checked="" type="checkbox"/>	Charge		
	Truck: B+D#5		
	Gross:		
	Tare:		
	Net:		
		<input checked="" type="checkbox"/>	Delivered
		<input checked="" type="checkbox"/>	Picked Up
			Sub Total
			Tax
			Delivery
			Total

37713

Received By: \_\_\_\_\_



AND HEAVY EQUIPMENT  
75 Providence Street, Rehoboth, MA 02769  
Tel (508) 336-4272 • Fax (508) 336-4275

FOR CROW MIN

LOCATION CANTON

DATE 11-23 2010

TRUCK# 5 DRIVER RANDY

LOADS	YARDS	HOURS	DESCRIPTION
3			GRAVEL
FROM	6:30		FILL
TO	3:30		LOAM
			DOZER
			LOADER
			TRUCKS
Gross			
Tare			
NET			

Signed

0573

Date 11-23-10  
Main Office  
125 Turnpike Street  
Canton, MA 02021  
read custom soils Sold to Ret D Inc  
a Division of CRW MIN  
1-800-475-5526  
Address:  
City/State:  
Job Name: Lynch West Road  
PO # 1006-007

Qty	Description	Unit Price	Amount
	Loam screened		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		

Charge	COB	Marked Up	Delivered
Gross:			Sub Total
Tare:			Tax
Net:			Delivery
			Total

Received By: [Signature]

0573

Date: 11-23-10

Main Office  
125 Turnpike Street  
Canton, MA 02021

read custom soils Sold to: RUTD INC.

a Division of WILL SAND/CANTON  
**1-888-475-5526**  
Address: \_\_\_\_\_  
City/State: Lincoln  
Job Name: Lace + Board  
PO. # 1006-007

Qty	Description	Unit Price	Amount
25 yds	Loam 1" screened		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		

<input checked="" type="checkbox"/>	Charge		COD	<input checked="" type="checkbox"/>	Picked Up	<input type="checkbox"/>	Delivered
Truck: <u>B+B #13</u>							
Gross:							
Tare:							
Net:							
						Sub Total	
						Tax	
						Delivery	
						Total	

37699 Received By: \_\_\_\_\_

Date: 11-23-10

Main Office  
125 Turnpike Street  
Canton, MA 02021

read custom soils Sold to: RUTD INC.

a Division of WILL SAND/CANTON  
**1-888-475-5526**  
Address: \_\_\_\_\_  
City/State: Lincoln  
Job Name: Lace + Board  
PO. # 1006-007

Qty	Description	Unit Price	Amount
25 yds	Loam 1" screened		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		

<input checked="" type="checkbox"/>	Charge		COD	<input checked="" type="checkbox"/>	Picked Up	<input type="checkbox"/>	Delivered
Truck: <u>B+B #13</u>							
Gross:							
Tare:							
Net:							
						Sub Total	
						Tax	
						Delivery	
						Total	

37709 Received By: \_\_\_\_\_



AND HEAVY EQUIPMENT  
75 Providence Street, Rehoboth, MA 02769  
Tel (508) 336-4272 • Fax (508) 336-4275

Date: 11-23-06  
Main Office  
125 Turnpike Street  
Canton, MA 02021  
read custom soils Sold to: RLT + D INC.  
a Division of: WILSON/CLM/IM  
1-800-475-5526

Address: \_\_\_\_\_  
City/State: \_\_\_\_\_  
Job Name: Laminum Wet + Dred  
PO # 1006-007

Qty	Description	Unit Price	Amount
2576	Loam screened		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Roof Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		

Change	0.00	Delivered	
Gross:		Sub Total	
Tare:		Tax	
NET		Delivery	
		Total	

37700

Received By: [Signature]

FOR CRONIN  
LOCATION Canton/PAW  
DATE 11-23 2006

TRUCK# B+B #13 DRIVER J Wells

LOADS	YARDS	HOURS	DESCRIPTION
3	loads	1 hour	GRAVEL
		1 hour	FILL
		1 hour	LOAM
			DOZER
			LOADER
			TRUCKS
630			
500			
Gross			
Tare			
NET			

2576 Signed [Signature]

Main Office  
125 Turnpike Street  
Canton, MA 02021

Date: 11-23-16

read custom soils

Sold to: K&D Inc.

a Division of **WELL SAND/CANTON**

1-888-475-5526

Address:

City/State:

Job Name: Lincoln Lacs + Bed

P.O. # 1006-007

Qty	Description	Unit Price	Amount
25 yds	Loam 1" screened		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		
<input checked="" type="checkbox"/>	Charge	<input type="checkbox"/>	<input type="checkbox"/>
		<input checked="" type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>

Truck: <u>Campbell # 11</u>	Delivered
Gross:	Sub Total
Tare:	Tax
Net:	Delivery
	Total

37707

Received By:

Main Office  
125 Turnpike Street  
Canton, MA 02021

Date: 11-25-16

read custom soils

Sold to: K&D Inc.

a Division of **WELL SAND/CANTON**

1-888-475-5526

Address:

City/State:

Job Name: Lincoln Lacs + Bed

P.O. # 1006-007

Qty	Description	Unit Price	Amount
25 yds	Loam 1" screened		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		
<input checked="" type="checkbox"/>	Charge	<input type="checkbox"/>	<input type="checkbox"/>
		<input checked="" type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>

Truck: <u>Campbell # 11</u>	Delivered
Gross:	Sub Total
Tare:	Tax
Net:	Delivery
	Total

37707

Received By:



AND HEAVY EQUIPMENT  
75 Providence Street, Rehoboth, MA 02769  
Tel (508) 336-4272 • Fax (508) 336-4275

FOR REPAIR

LOCATION Sutton to Dudley Rd

DATE 11/23 2016

TRUCK# 31 DRIVER # 1111  
Carroll

LOADS	YARDS	HOURS	DESCRIPTION
111	26	6.33	GRAVEL
			FILL
			LOAM
			DOZER
			LOADER
			TRUCKS
Gross			
Tare			
NET			

Signed [Signature]

0467

Date: 11/23/16

Main Office  
125 Turnpike Street  
Canton, MA 02021

read custom soils Sold to READ INC.

Address: [Blank]  
City/State: [Blank]  
Job Name: Leitch Ln F. Brand  
PO # 1016-007

1-800-475-5526

Qty	Description	Unit Price	Amount
25 yds	Loam / Sand		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		
Charge	COD	Delivered	
Tax		Sub Total	
Gross		Tax	
Tare		Delivery	
Net		Total	

Received By: [Signature]

11/23/16

Main Office  
125 Turnpike Street  
Canton, MA 02021

Date: 11-23-16

read custom soils Sold to: K&T + D Inc.

a Division of WILL SAMS/CANTON

1-888-475-5526

Address: \_\_\_\_\_

City/State: \_\_\_\_\_

Job Name: Lansbury Lane + Bond

P.O. # 1006-007

Qty	Description	Unit Price	Amount
25 yds	Loam 1" Sand		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		

<input checked="" type="checkbox"/>	Charge	COD	<input checked="" type="checkbox"/>	Picked Up	Delivered
Trucks: <u>Capacity #3</u>					
Gross:					
Tare:					
Net:					
					Sub Total
					Tax
					Delivery
					Total

37690

Received By: J. S. S.

Main Office  
125 Turnpike Street  
Canton, MA 02021

Date: 11-23-16

read custom soils Sold to: K&T + D Inc.

a Division of WILL SAMS/CANTON

1-888-475-5526

Address: \_\_\_\_\_

City/State: \_\_\_\_\_

Job Name: Lansbury Lane + Bond

P.O. # 1006-007

Qty	Description	Unit Price	Amount
25 yds	Loam 1" Sand		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		

<input checked="" type="checkbox"/>	Charge	COD	<input checked="" type="checkbox"/>	Picked Up	Delivered
Trucks: <u>Capacity #3</u>					
Gross:					
Tare:					
Net:					
					Sub Total
					Tax
					Delivery
					Total

37705

Received By: \_\_\_\_\_



AND HEAVY EQUIPMENT  
75 Providence Street, Rehoboth, MA 02769  
Tel (508) 336-4272 • Fax (508) 336-4275

FOR ROTO  
LOCATION Carroll to Roto  
DATE 11/12 20 10  
TRUCKS 3 DRIVER Berry  
Carroll A

LOADS	YARDS	HOURS	DESCRIPTION
111	21	020-330	GRAVEL
			FILL
			LOAM
			DOZER
			LOADER
			TRUCKS
Gross			
Tare			
NET			

Signed [Signature]  
0466

100-475-5526  
read custom soils  
a Division of BB TRUCKING  
Main Office: 125 Turnpike Street, Canton, MA 02021  
Date: 11-23-10  
Sold to: RUT-D INC.  
Address: \_\_\_\_\_  
City/State: \_\_\_\_\_  
Job Name: Windsor Inset Board  
PO: 1006-007

Qty	Description	Unit-Price	Amount
25	Loam sand		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Root Garden Soil		
	Other		
<input checked="" type="checkbox"/> Choice <input type="checkbox"/> COD <input checked="" type="checkbox"/> Preceded by		<input checked="" type="checkbox"/> Delivered	
Gross:		Sub Total	
Tare:		Tax	
Net:		Delivery	
		Total	

3715 Received By: \_\_\_\_\_



Main Office  
125 Turnpike Street  
Canton, MA 02021

Date: 11/07/14

Main Office  
125 Turnpike Street  
Canton, MA 02021

Date: 11/07/14

read custom soils

Sold to: R+D Inc.

a Division of WIL SANDS/CANTON

1-888-475-5526

a Division of WIL SANDS/CANTON

1-888-475-5526

Address:  
City/State:  
Job Name: Lincoln West + Blvd  
P.O. # 1006-007

Address:  
City/State:  
Job Name: Lincoln West + Blvd  
P.O. # 1006-007

Qty	Description	Unit Price	Amount
25 yds	Loam 1" screened		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		
<input checked="" type="checkbox"/>	Charge	<input type="checkbox"/> COD <input checked="" type="checkbox"/> Picked Up	Delivered
Truck: Steves X Gross			Sub Total
Gross:			Tax
Tare:			Delivery
Net:			Total

37674

Received By:

Qty	Description	Unit Price	Amount
25 yds	Loam 1" screened		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		
<input checked="" type="checkbox"/>	Charge	<input type="checkbox"/> COD <input checked="" type="checkbox"/> Picked Up	Delivered
Truck: Steves X Gross			Sub Total
Gross:			Tax
Tare:			Delivery
Net:			Total

37702

Received By:



AND HEAVY EQUIPMENT  
75 Providence Street, Rehoboth, MA 02769  
Tel (508) 336-4272 • Fax (508) 336-4275

FOR CROWIN  
LOCATION CANTON / ROAD  
DATE 11-23 2010

TRUCK# STEVES EXPRESS DRIVER STEVES

LOADS	YARDS	HOURS	DESCRIPTION
<u>3</u>	<u>LOADS LOAM</u>		<b>GRAVEL</b>
	<u>CAN to</u>		<b>FILL</b>
	<u>PROV</u>		<b>LOAM</b>
			<b>DOZER</b>
<u>630</u>			<b>LOADER</b>
<u>403</u>			<b>TRUCKS</b>
Gross			
Tare			
NET			

Signed [Signature]  
2579

Date 11-23-10  
Main Office  
125 Turnpike Street  
Canton, MA 02021  
read custom soils sold to Red D Inc.

Address  
City/State  
Job Name Linda Lane + Brad  
PO # 1006007

Qty	Description	Unit Price	Amount
<u>256</u>	<u>Loam / screened</u>		
	<u>Topdressing Sand</u>		
	<u>Bunker Sand</u>		
	<u>Topdressing Mix</u>		
	<u>Top Zone Mix</u>		
	<u>Infield Mix</u>		
	<u>Roof Garden Soil</u>		
	<u>Other</u>		

Charge	COD	Picked Up	Delivered
Gross:			
Tare:			
Net:			
		Sub Total	
		Tax	
		Delivery	
		Total	

Received By: \_\_\_\_\_

Main Office  
125 Turnpike Street  
Canton, MA 02021

Date: 11-23-10

read custom soils

Sold to: R&D Inc.

a Division of WEL SAND/CANTON

Address: \_\_\_\_\_

1-888-475-5526

City/State: \_\_\_\_\_

Job Name: Lansdown Lane + Brad

PO. # 1006-667

Qty	Description	Unit Price	Amount
25 yds	Loam 1" screened		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		
<input checked="" type="checkbox"/>	Charge	<input type="checkbox"/> COD	<input checked="" type="checkbox"/> Picked Up
Truck: <u>Alameda #4</u>			
Gross: _____			
Tare: _____			
Net: _____			
			Delivered
			Sub Total
			Tax
			Delivery
			Total

37704

Received By: \_\_\_\_\_

Main Office  
125 Turnpike Street  
Canton, MA 02021

Date: 11-05-10

read custom soils

Sold to: R&D Inc.

a Division of WEL SAND/CANTON

Address: \_\_\_\_\_

1-888-475-5526

City/State: \_\_\_\_\_

Job Name: Lansdown Lane + Brad

PO. # 1006-667

Qty	Description	Unit Price	Amount
25 yds	Loam 1" screened		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		
<input checked="" type="checkbox"/>	Charge	<input type="checkbox"/> COD	<input checked="" type="checkbox"/> Picked Up
Truck: <u>Alameda #4</u>			
Gross: _____			
Tare: _____			
Net: _____			
			Delivered
			Sub Total
			Tax
			Delivery
			Total

38714

Received By: \_\_\_\_\_

Main Office  
 125 Hornlike Street  
 Canton, MA 02024

read custom soils Sold to **RUTD INC.**

1-800-475-5520

1-800-475-5520

Address: **1000-007**  
 City/State: **MA**  
 Job Name: **Laticeta Luce + Braid**  
 PO # **1000-007**

Date: **11-23-10**

Qty	Description	Unit Price	Amount
25	Loam 1/2 Screened		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Roof/Garden Soil		
	Infield Mix		
	Other		

Charge	COD	Delivered
Gross		Sub Total
Tare		Tax
NET		Delivery Total

Received By: **J. G. ...**



AND HEAVY EQUIPMENT  
 75 Providence Street, Rehoboth, MA 02769  
 Tel (508) 336-4272 • Fax (508) 336-4275

FOR **CRAMER**  
 LOCATION **CANTON / PROV**  
 DATE **11-23-2010**

TRUCKS **AMAZONIA #4** DRIVER **BOB**

LOADS	YARDS	HOURS	DESCRIPTION
3	LOADS	Loam	GRAVEL
		can buy to	FILL
	PROV		LOAM
			DOZER
630			LOADER
400			TRUCKS

Signed: **[Signature]**  
 2578

Date: 11-22-16

Main Office  
125 Turnpike Street  
Canton, MA 02021

read custom soils Sold to: RC+D Inc.

a Division of **WILL SAND/CANTON**  
**1-888-475-5526**

Address: \_\_\_\_\_  
City/State: MA  
Job Name: Lincoln tract + Bield  
P.O. # 1006007

Qty	Description	Unit Price	Amount
25 yds	Loam 1" screened		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		
<input checked="" type="checkbox"/>	Charge	<input type="checkbox"/> COD	<input checked="" type="checkbox"/> Picked Up
Truck: <u>Candlight #11</u>			
Gross: _____			
Tare: _____			
Net: _____			
			Delivered
Sub Total			
Tax			
Delivery			
Total			

37690

Received By: \_\_\_\_\_

Main Office  
125 Turnpike Street  
Canton, MA 02021

Date: 11-22-16

read custom soils Sold to: RC+D Inc.

a Division of **WILL SAND/CANTON**  
**1-888-475-5526**

Address: \_\_\_\_\_  
City/State: MA  
Job Name: Lincoln tract + Bield  
P.O. # 1006007

Qty	Description	Unit Price	Amount
25 yds	Loam 1" screened		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		
<input checked="" type="checkbox"/>	Charge	<input type="checkbox"/> COD	<input checked="" type="checkbox"/> Picked Up
Truck: _____			
Gross: _____			
Tare: _____			
Net: _____			
			Delivered
Sub Total			
Tax			
Delivery			
Total			

30703

Received By: \_\_\_\_\_



AND HEAVY EQUIPMENT  
75 Providence Street, Rehoboth, MA 02769  
Tel (508) 336-4272 • Fax (508) 336-4275

FOR LC70  
LOCATION Canton to Pawlet  
DATE 11/27 20 14

TRUCKS 11 DRIVER Rich  
Carroll

LOADS	YARDS	HOURS	DESCRIPTION
3	25	6307330	GRAVEL
			FILL
			LOAM
			DOZER
			LOADER
			TRUCKS
Gross			
Tare			
NET			

Signed [Signature]  
0465

Date: 11/27/14

Main Office  
125 Bramble Street  
Canton, MA 02091

Sold to: RCTD Inc.

read custom soils

Division of MLL/MS/MSJ/JW

1-800-475-5526

Address:

City/State:

Job Name: Lincoln Forest Blvd

PO # 1005-007

Qty	Description	Unit Price	Amount
25yds	Loam <sup>1</sup> seasoned		
	Topdressing Sand		
	Runner Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		

Change	COD	Picked Up	Delivered
Sub Total			
Tax			
Delivery			
Net:			

Received By: [Signature]

33712

**Main Office**  
 125 Turnpike Street  
 Canton, MA 02021

Date: 11/20/10

**Main Office**  
 125 Turnpike Street  
 Canton, MA 02021

Date: 11/20/10

read custom soils  
 a Division of **HILL SAMP/CANTON**  
**1-888-475-5526**  
 Address: \_\_\_\_\_  
 City/State: \_\_\_\_\_  
 Job Name: Worcester Forest + Road  
 PO. # 1006-007

read custom soils  
 a Division of **HILL SAMP/CANTON**  
**1-888-475-5526**  
 Address: \_\_\_\_\_  
 City/State: \_\_\_\_\_  
 Job Name: Worcester Forest + Road  
 PO. # 1006-007

Qty	Description	Unit Price	Amount
254.5	Loam		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other <u>B:BF13</u>		
<input checked="" type="checkbox"/>	Charge	<input type="checkbox"/> COD	<input checked="" type="checkbox"/> Picked Up
	Truck:		Delivered
	Gross:		Sub Total
	Tare:		Tax
	Net:		Delivery
			Total

38700 Received By: [Signature]

Qty	Description	Unit Price	Amount
254.5	Loam <sup>1"</sup> Screened		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		
<input checked="" type="checkbox"/>	Charge	<input type="checkbox"/> COD	<input checked="" type="checkbox"/> Picked Up
	Truck:		Delivered
	Gross:		Sub Total
	Tare:		Tax
	Net:		Delivery
			Total

38700 Received By: [Signature]

Main Office  
125 Turnpike Street  
Canton, MA 02021

read custom soils Sold to **RED Inc**

Division of **WILLIAMS BROTHERS**  
1-800-475-5526

Address: \_\_\_\_\_  
City/State: \_\_\_\_\_  
Job Name: **Lincoln Lane & Blvd**  
PO # **1006000**

Qty	Description	Unit Price	Amount
2500	Loam screened		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		
<input type="checkbox"/> Charge <input type="checkbox"/> COD <input type="checkbox"/> Billable Up <input type="checkbox"/> Delivered			
<input type="checkbox"/> Truck <input type="checkbox"/> Gross		Sub Total	
<input type="checkbox"/> Tare		Tax	
<input type="checkbox"/> Net		Delivery	
		Total	

Received By: *[Signature]*



AND HEAVY EQUIPMENT  
75 Providence Street, Rehoboth, MA 02769  
Tel (508) 336-4272 • Fax (508) 336-4275

FOR **CRONIN**  
LOCATION **Carter / Prou**  
DATE **11-22** 20 **10**

TRUCK# **B+B #13** DRIVER **Juwels**

LOADS	YARDS	HOURS	DESCRIPTION
3	LOADS 6.0 AM		GRAVEL
	CANTON TO		FILL
	Prou		LOAM
			DOZER
6:30 AM			LOADER
			TRUCKS
Gross			
Tare			
NET			

2573

Signed *[Signature]*



Main Office  
125 Turnpike Street  
Canton, MA 02021

Date: 11-22-11

Main Office  
125 Turnpike Street  
Canton, MA 02021

Date: 11-22-11

read custom soils

Sold to: BUT D INC

read custom soils

Sold to: BUT D INC

a Division of **WILL SAND/CANTON**

Address:

a Division of **WILL SAND/CANTON**

Address:

1-888-475-5526

1-888-475-5526

City/State:

City/State:

Job Name: Lincoln Lane + Blvd

Job Name: Lincoln Lane + Blvd

PO. # 1000 007

PO. # 1000-007

Qty	Description	Unit Price	Amount
25 yds	Loam 1" screened		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		
<input checked="" type="checkbox"/>	Charge	COD	<input checked="" type="checkbox"/> Picked Up
	Truck:		Delivered
	Gross:		Sub Total
	Tare:		Tax
	Net:		Delivery
			Total

37694

Received By:

Qty	Description	Unit Price	Amount
	Loam 1" screened		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		
<input checked="" type="checkbox"/>	Charge	COD	<input checked="" type="checkbox"/> Picked Up
	Truck:		Delivered
	Gross:		Sub Total
	Tare:		Tax
	Net:		Delivery
			Total

38704

Received By:



AND HEAVY EQUIPMENT  
75 Providence Street, Rehoboth, MA 02769  
Tel (508) 336-4272 • Fax (508) 336-4275

FOR RC-10  
LOCATION Canton to Rome St.  
DATE 11 22 20 10  
TRUCK# 3 DRIVER Denny  
Canon H

LOADS	YARDS	HOURS	DESCRIPTION
3	26	630.330	GRAVEL
			FILL
			LOAM
			DOZER
			LOADER
			TRUCKS
Gross			
Tare			
NET			

Signed [Signature]

0464

Date: 11-22-10  
Main Office: 125 Turnpike Street, Canton, MA 02021  
read custom soils Sold to: RHD Inc.

Address: [Blank]  
City/State: [Blank]  
Job Name: Lincoln Lact Sand  
PO # 10065007

Qty	Description	Unit Price	Amount
<u>33710</u>	<u>10mm selected</u>		
	<u>Topdressing Sand</u>		
	<u>Bunker Sand</u>		
	<u>Topdressing Mix</u>		
	<u>Root Zone Mix</u>		
	<u>Infield Mix</u>		
	<u>Roof Garden Soil</u>		
	<u>Other</u>		

Charge	COG	Picked Up	Delivered
Sub Total			
Tax			
Delivery			
Total			

Received By: [Signature]

Date: 11-22-16

Main Office  
125 Turnpike Street  
Canton, MA 02021

read custom soils Sold to: Aut D Inc.

Address:

City/State:

Job Name: Landscaping + Seal

P.O. # 1006-007

Main Office  
125 Turnpike Street  
Canton, MA 02021

Date: 11-22-16

read custom soils Sold to: Aut D Inc.

Address:

City/State:

Job Name: Landscaping + Seal

P.O. # 1006-007

a Division of **WILL SAND/CANTON**  
**1-888-475-5526**

Qty	Description	Unit Price	Amount
25 yds	Loam / <u>screened</u>		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		
<input checked="" type="checkbox"/>	Charge	COD	<input checked="" type="checkbox"/> Picked Up
Truck: <u>Aut D Inc #7</u>			Delivered
Gross:			Sub Total
Tare:			Tax
Net:			Delivery
			Total

37693

Received By: [Signature]

Qty	Description	Unit Price	Amount
25 yds	Loam / <u>screened</u>		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other <u>Aut D Inc #7</u>		
<input checked="" type="checkbox"/>	Charge	COD	<input checked="" type="checkbox"/> Picked Up
Truck:			Delivered
Gross:			Sub Total
Tare:			Tax
Net:			Delivery
			Total

30705

Received By: \_\_\_\_\_



AND HEAVY EQUIPMENT  
75 Providence Street, Rehoboth, MA 02769  
Tel (508) 336-4272 • Fax (508) 336-4275

FOR CRONIA  
LOCATION CANTON / PROU  
DATE 11-22 2010

TRUCK# Alameda #7 DRIVER FRANK

LOADS	YARDS	HOURS	DESCRIPTION
3	LOAOS	LOAMY	GRAVEL
	CANTON	to	FILL
	PROU		LOAM
			DOZER
			LOADER
			TRUCKS
Gross			
Tare			
NET			

Signed [Signature]  
2574

Date 11-22-10  
Main Office  
125 Firmpike Street  
Canton, MA 02021  
read custom soils Sold to AL + D INC  
Address  
City/State  
Job Name: Linncoln Ave + Blvd  
CO # 1006-007

Qty	Description	Unit Price	Amount
25 yds	Loam / soil		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Reef Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		

Charge  COD  Picked Up  Delivered  
Gross: 2574  
Tare:  
Net:  
Sub-Total  
Tax  
Delivery  
Total  
Received By: [Signature]  
30711

Date: 11/22/14

Main Office  
125 Turnpike Street  
Canton, MA 02021

read custom soils

Sold to: ALBERT W...

Address: \_\_\_\_\_

City/State: \_\_\_\_\_

Job Name: ALBERT W...

PO. # 1-888-475-5526

a Division of **WELL SAND/CANTON**

1-888-475-5526

Qty	Description	Unit Price	Amount
25	Loam		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		
<input checked="" type="checkbox"/>	Charge	<input type="checkbox"/> COD	<input checked="" type="checkbox"/> Picked Up
	Truck:		Delivered
	Gross:		Sub Total
	Tare:		Tax
	Net:		Delivery
			Total

Received By: ALBERT W...

38699

Date: 11/22/14

Main Office  
125 Turnpike Street  
Canton, MA 02021

read custom soils

Sold to: K... + D...

Address: \_\_\_\_\_

City/State: \_\_\_\_\_

Job Name: K... + D...

PO. # 1-888-475-5526

a Division of **WELL SAND/CANTON**

1-888-475-5526

Qty	Description	Unit Price	Amount
25	Loam		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		
<input checked="" type="checkbox"/>	Charge	<input type="checkbox"/> COD	<input checked="" type="checkbox"/> Picked Up
	Truck:		Delivered
	Gross:		Sub Total
	Tare:		Tax
	Net:		Delivery
			Total

Received By: \_\_\_\_\_

38701



AND HEAVY EQUIPMENT  
75 Providence Street, Rehoboth, MA 02769  
Tel (508) 336-4272 • Fax (508) 336-4275

FOR CRONIN  
LOCATION CANTON / PROV  
DATE 11-22 20 10

TRUCK#  
DRIVER  
Almeida B 9 STREUB

LOADS	YARDS	HOURS	DESCRIPTION
<u>3</u>	<u>LOAMS</u>	<u>LOAMS</u>	<u>GRAVEL</u>
	<u>CANTON to</u>		<u>FILL</u>
	<u>PROV.</u>		<u>LOAM</u>
			<u>DOZER</u>
			<u>LOADER</u>
			<u>TRUCKS</u>
Gross			
Tare			
NET			

Signed [Signature]

2575

Main Office  
125 Jumper Street  
Canton, MA 02021

ready custom soils Sold to: RUTD IA

Phone: 508-336-4272

City/State: CANTON / MA  
Job Name: Landscape Use + Brod  
PO # 1101-007

Qty	Description	Unit Price	Amount
<u>25 yds</u>	<u>Loam / silted</u>		
	<u>Topdressing Sand</u>		
	<u>Bunker Sand</u>		
	<u>Topdressing Mix</u>		
	<u>Root Zone Mix</u>		
	<u>Infield Mix</u>		
	<u>Root Garden Soil</u>		
	<u>Other</u>		

Change	COB	Picked Up	Delivered
Gross:			Sub Total
Tare:			Tax
Net:			Delivery
			Total

Received By: [Signature]

25707



AND HEAVY EQUIPMENT  
75 Providence Street, Rehoboth, MA 02769  
Tel (508) 336-4272 • Fax (508) 336-4275

OR C Row NIN  
LOCATION CANTON TO PROJ  
DATE 11-22-2010

TRUCK# 5 DRIVER Paul

LOADS	YARDS	HOURS	DESCRIPTION
2			GRAVEL
FROM	6.30		FILL
TO	12.00		LOAM
			DOZER
			LOADER
			TRUCKS
Gross			
Tare			
NET			

Signed [Signature]  
0572

Date: 11-22-2010

125 Sunnyside Street  
Canton, MA 02021

read custom soils  
1-800-475-5526

Sold to: FC&D Inc  
Address: Barre Rd Canton MA  
City/State: Canton MA  
Job Name: Barre Rd Cant + Barre  
PO # 1006-0027

Qty	Description	Unit Price	Amount
250	Loam		
	Topdressing Sand		
	Runker Sand		
	Topdressing Mix		
	Runker Mix		
	Infield Mix		
	Roof Carrier Soil		
	Other B.B.S		
	Charge		
	Tax		
	Net		
	Sub Total		
	Tax		
	Delivery		
	Total		

Received By: [Signature]

Main Office  
 125 Turnpike Street  
 Canton, MA 02021  
 Date: 11-17-17

Main Office  
 125 Turnpike Street  
 Canton, MA 02021  
 Date: 11-17-17

read custom soils  
 Sold to: [Redacted]  
 Address: [Redacted]  
 City/State: [Redacted]  
 Job Name: [Redacted]  
 P.O. # [Redacted]

read custom soils  
 Sold to: [Redacted]  
 Address: [Redacted]  
 City/State: [Redacted]  
 Job Name: [Redacted]  
 P.O. # [Redacted]

a Division of **WILL SARRI/CANTON**  
**1-888-475-5526**

a Division of **WILL SARRI/CANTON**  
**1-888-475-5526**

Qty	Description	Unit Price	Amount
2.00	Loam		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		

Qty	Description	Unit Price	Amount
2.00	Loam		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		

<input checked="" type="checkbox"/>	Charge	COD	<input checked="" type="checkbox"/>	Picked Up	<input type="checkbox"/>	Delivered
Trucks: 1						
Gross:						
Tare:						
Net:						
					Sub Total	
					Tax	
					Delivery	
					Total	

<input checked="" type="checkbox"/>	Charge	COD	<input checked="" type="checkbox"/>	Picked Up	<input type="checkbox"/>	Delivered
Trucks: 1						
Gross:						
Tare:						
Net:						
					Sub Total	
					Tax	
					Delivery	
					Total	

Received By: [Signature]

38597

Received By:

38596



Date: 1-17-12

Main Office  
125 Turnpike Street  
Canton, MA 02021

Main Office  
125 Turnpike Street  
Canton, MA 02021

Date: 1-17-12

read custom soils

Sold to: BCP

read custom soils

Sold to: BCP

a Division of **WAL SHAW/CANTON**

Address:

a Division of **WAL SHAW/CANTON**

Address:

1-888-475-5526

1-888-475-5526

City/State:

City/State:

Job Name: L15 (200' x 100' + 100' x 100')

Job Name: L15 (200' x 100' + 100' x 100')

PO. # 1234567

PO. # 1234567

Qty	Description	Unit Price	Amount
	Loam		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		
<input checked="" type="checkbox"/>	Charge		
	Truck: 1 hr		
	Gross:		
	Tare:		
	Net:		
		<input checked="" type="checkbox"/>	Picked Up
			Delivered
			Sub Total
			Tax
			Delivery
			Total

33696

Received By: Mark Vito

Qty	Description	Unit Price	Amount
	Loam		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		
<input checked="" type="checkbox"/>	Charge		
	Truck: 1 hr		
	Gross:		
	Tare:		
	Net:		
		<input checked="" type="checkbox"/>	Picked Up
			Delivered
			Sub Total
			Tax
			Delivery
			Total

33693

Received By: [Signature]

**Main Office**  
125 Turnpike Street  
Canton, MA 02021

Date: \_\_\_\_\_

read custom soils

Sold to: \_\_\_\_\_

Address: \_\_\_\_\_

a Division of **WELL SAND/CANTON**

**1-888-475-5526**

City/State: \_\_\_\_\_

Job Name: \_\_\_\_\_

PO. # 106-007

Qty	Description	Unit Price	Amount
	Loam		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		
<input checked="" type="checkbox"/>	Charge	COD	Delivered
	Truck:	Picked Up	Sub Total
	Gross:		Tax
	Tare:		Delivery
	Net:		Total

30692 Received By: \_\_\_\_\_

**Main Office**  
125 Turnpike Street  
Canton, MA 02021

Date: \_\_\_\_\_

read custom soils

Sold to: \_\_\_\_\_

Address: \_\_\_\_\_

a Division of **WELL SAND/CANTON**

**1-888-475-5526**

City/State: \_\_\_\_\_

Job Name: \_\_\_\_\_

PO. # 106-007

Qty	Description	Unit Price	Amount
	Loam		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		
<input checked="" type="checkbox"/>	Charge	COD	Delivered
	Truck:	Picked Up	Sub Total
	Gross:		Tax
	Tare:		Delivery
	Net:		Total

30694 Received By: Jarrell

TRUCKING



AND HEAVY EQUIPMENT  
75 Providence Street, Rehoboth, MA 02769  
Tel (508) 336-4272 • Fax (508) 336-4275

FOR CROWN

LOCATION Carton / Prou

DATE 11/19 2010

TRUCK#

018 #13

DRIVER

J Wells

LOADS	YARDS	HOURS	DESCRIPTION
3	LOADS		GRAVEL
			FILL
			LOAM
			DOZER
			LOADER
			TRUCKS
			Gross
			Tare
			NET

2568

Signed

*[Signature]*

TRUCKING



AND HEAVY EQUIPMENT  
75 Providence Street, Rehoboth, MA 02769  
Tel (508) 336-4272 • Fax (508) 336-4275

FOR CROWN

LOCATION Carton to Prou

DATE 11-19 2010

TRUCK#

5

DRIVER

Randy

LOADS	YARDS	HOURS	DESCRIPTION
3			GRAVEL
			FILL
			LOAM
			DOZER
			LOADER
			TRUCKS
			Gross
			Tare
			NET

0571

Signed

*[Signature]*

Main Office  
125 Turnpike Street  
Canton, MA 02021

Date: 11-16-10

Main Office  
125 Turnpike Street  
Canton, MA 02021

Date: 11-16-10

read custom soils

Sold to: RC+D INC

read custom soils

Sold to: RC+D INC

a Division of HILL SAND/CANTON

Address:

City/State: PROVIDENCE RI

Job Name: LINCOLN PLACE

a Division of HILL SAND/CANTON

Address:

City/State: PROVIDENCE RI

Job Name: LINCOLN PLACE

1-888-475-5526

1-888-475-5526

P.O.# 1006-007

P.O.# 1006-007

Qty	Description	Unit Price	Amount
25 yd	Loam <del>SP</del> SPAN		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		
<input checked="" type="checkbox"/>	Charge	COD	<input checked="" type="checkbox"/> Picked Up
Truck: OURN ALBANY 7			Delivered
Gross: SPAN			Sub Total
Tare:			Tax
Net:			Delivery
			Total

38690

Received By:

Qty	Description	Unit Price	Amount
25 yd	Loam <del>SP</del> SPAN		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		
<input checked="" type="checkbox"/>	Charge	COD	<input checked="" type="checkbox"/> Picked Up
Truck: OURN ALBANY 9			Delivered
Gross: SPAN			Sub Total
Tare:			Tax
Net:			Delivery
			Total

38691

Received By:



AND HEAVY EQUIPMENT  
 75 Providence Street, Rehoboth, MA 02769  
 Tel (508) 336-4272 • Fax (508) 336-4275

DR C. R. RIVILU  
 LOCATION CANTON - PAQU  
 DATE 11-16-2012  
 TRUCKER ALMEIDA #9 DRIVER STEVE

LOADS	YARDS	HOURS	DESCRIPTION
<u>3</u>	<u>LOADS</u>	<u>LOAM</u>	<b>GRAVEL</b>
	<u>CAN FOR TD</u>		<b>FILL</b>
	<u>PREV.</u>		<b>LOAM</b>
			<b>DOZER</b>
<u>1/30 April</u>			<b>LOADER</b>
<u>1/30 April</u>			<b>TRUCKS</b>
Gross			
Tare			
NET			

Signed [Signature]

2559

Date: 11-16-10  
 Main Office  
 125 Turnpike Street  
 Canton, MA 02021  
 Sold to: RTD Job  
 Address: PROVIDENCE RI  
 City/State: PROVIDENCE RI  
 Job Name: LAWLOR PLACE  
 PO # 1006-007

read custom soils  
 a Division of HILL SUMMIT/UNITED  
 1-888-475-5526

Qty	Description	Unit Price	Amount
<u>25 yd</u>	<u>Loam</u>		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		

Charge	COD	Picked Up	Delivered
<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
Truck: <u>OWN</u> <u>Alameda</u>			
Gross:			
Tare: <u>SPM</u>			
Net:			
Sub Total			
Tax			
Delivery			
Total			

38689

Received By:

Main Office  
125 Turnpike Street  
Canton, MA 02021

Date: 11-16-10

read custom soils

Sold to: RCTD Inc

a Division of WILL SAND/CANTON

Address:

1-888-475-5526

City/State:

Job Name: LINCOLN PLACE

PO. # 1006-007

Qty	Description	Unit Price	Amount
25 yd	Loam 1" SCREENED		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		
Charge		COD	Picked Up
Truck: DWAP		ALBANY 7	Delivered
Gross:			Sub Total
Tare:			Tax
Net:			Delivery
			Total

38681

Received By: *Betts*

Main Office  
125 Turnpike Street  
Canton, MA 02021

Date: 11-16-10

read custom soils

Sold to: RCTD Inc

a Division of WILL SAND/CANTON

Address:

1-888-475-5526

City/State:

Job Name: LINCOLN PLACE

PO. # 1006-007

Qty	Description	Unit Price	Amount
25 yd	Loam 1" SCREENED		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		
Charge		COD	Picked Up
Truck: ALBANY 7			Delivered
Gross:			Sub Total
Tare:			Tax
Net:			Delivery
			Total

38682

Received By: *Betts*



AND HEAVY EQUIPMENT  
 75 Providence Street, Rehoboth, MA 02769  
 Tel (508) 336-4272 • Fax (508) 336-4275

DRIVER: FRANK  
 TRUCK # ALMEIDIA # 7  
 LOCATION CANTON - PAV.  
 DATE 11-20-10

LOADS	YARDS	HOURS	DESCRIPTION
3	LOADS LOAM		GRAVEL
	CANTON TO PAV.		FILL
			LOAM
			DOZER
			LOADER
			TRUCKS
Gross			
Tare			
NET			

Signed Frank

2558

Date: 11-16-10

Main Office  
 125 Turnpike Street  
 Canton, MA 02021

Sold to: RC+D INC

read custom soils

a Division of WAL SAND/CANTON

1-800-475-5526

Address:  
 City/State:  
 Job Name: LINCOLN PLACE  
 PO # 1006-007

Qty	Description	Unit Price	Amount
	Loam 1" <u>SCREENED</u>		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		
<input checked="" type="checkbox"/>	Charge	<input checked="" type="checkbox"/>	Delivered
	Truck: <u>OWN ALMEIDIA 7</u>	<input checked="" type="checkbox"/>	Picked Up
Gross:			Sub Total
Tare:			Tax
Net:			Delivery
			Total

38680

Received By: Frank

Date: 11-16-10

Main Office  
125 Turnpike Street  
Canton, MA 02021

read custom soils Sold to: RC + D INC

Address: PROVIDENCE RI  
City/State: PROVIDENCE RI  
Job Name: LINCOLN PLACE  
PO. # 1006-007

a Division of **WELLS SONS/CANTON**  
**1-888-475-5526**

Qty	Description	Unit Price	Amount
25 yd	Loam 1" SCREENED		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		
✓	Charge	COD	Delivered
	Truck: <u>OWN</u>	<u>12413</u>	<u>13</u>
	Gross:		Sub Total
	Tare:		Tax
	Net:		Delivery
			Total

38607

Received By: Jack Will

Main Office  
125 Turnpike Street  
Canton, MA 02021

Date: 11-12-10

read custom soils Sold to: RC + D INC

Address: PROVIDENCE RI  
City/State: PROVIDENCE RI  
Job Name: LINCOLN PLACE  
PO. # 1006-007

a Division of **WELLS SONS/CANTON**  
**1-888-475-5526**

Qty	Description	Unit Price	Amount
25 yd	Loam 1" SCREENED		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		
✓	Charge	COD	Delivered
	Truck: <u>OWN</u>	<u>B+13</u>	<u>13</u>
	Gross:		Sub Total
	Tare:		Tax
	Net:		Delivery
			Total

38608

Received By: Jack Will





AND HEAVY EQUIPMENT  
75 Providence Street, Rehoboth, MA 02769  
Tel (508) 336-4272 • Fax (508) 336-4275

FOR CRONIN

LOCATION CANTON - PROV.

DATE 11-15 2010

TRUCK#

DRIVER

B+B # 13 J Wells

LOADS	YARDS	HOURS	DESCRIPTION
3	LOADS	LOAN	GRAVEL
	CANTON	RD	FILL
	PROV		LOAM
			DOZER
6:30 AM			LOADER
4:00 PM			TRUCKS
Gross			
Tare			
NET			

Signed ATC 05

2557

Main Office  
125 Turnpike Street  
Canton, MA 02021

Date: 11-16-10

read custom soils Sold to: PC&D Inc

a Division of WILL SHAW/CANTON

1-888-475-5526

Address:

City/State: PROVIDENCE RI


Job Name: WINDCORN PLACE

PO. # 1806-007

Qty	Description	Unit Price	Amount
<u>25 yds</u>	<u>Loam 1" screened</u>		
	<u>Topdressing Sand</u>		
	<u>Bunker Sand</u>		
	<u>Topdressing Mix</u>		
	<u>Roof Zone Mix</u>		
	<u>Infield Mix</u>		
	<u>Roof Garden Soil</u>		
	<u>Other</u>		
<input checked="" type="checkbox"/>	Charge	<input type="checkbox"/>	Delivered
	Truck	<input checked="" type="checkbox"/>	Picked Up
	Gross:		Sub Total
	Tare:		Tax
	Net:		Delivery
			Total

38686

Received By: Jack Wells


 Main Office  
 125 Turnpike Street  
 Canton, MA 02021  
 Date: 11-16-10

read custom soils  
 Sold to: RC4D Inc  
 a Division of HILL SUBS/CANTON  
 1-888-475-5526  
 Address:  
 City/State: PROVIDENCE R.I.  
 Job Name: HUNLON PLACE  
 PO. # 1006-007

Qty	Description	Unit Price	Amount
25yb	Loam 1" SCREENED		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		

<input checked="" type="checkbox"/>	Charge		COD	<input checked="" type="checkbox"/>	Picked Up		Delivered
Truck: <u>OWN</u>						Sub Total	
Gross:						Tax	
Tare:						Delivery	
Net:						Total	

38684 Received By: [Signature]

Main Office  
 125 Turnpike Street  
 Canton, MA 02021  
 Date: 11-16-10

read custom soils  
 Sold to: RC4D Inc  
 a Division of HILL SUBS/CANTON  
 1-888-475-5526  
 Address:  
 City/State: PROVIDENCE R.I.  
 Job Name: HUNLON PLACE  
 PO. # 1006-007

Qty	Description	Unit Price	Amount
25yb	Loam 1" SCREENED		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		

<input checked="" type="checkbox"/>	Charge		COD	<input checked="" type="checkbox"/>	Picked Up		Delivered
Truck: <u>OWN</u>						Sub Total	
Gross:						Tax	
Tare:						Delivery	
Net:						Total	

38685 Received By: [Signature]

Date: 11-16-10

Main Office  
125 Turnpike Street  
Canton, MA 02021

read custom soils Sold to: RCT D INC

Address: PROVIDENCE RI  
City/State: PROVIDENCE RI  
Job Name: WINCOLN PLACE  
PO. # 1006-007

a Division of WET SANDS/CANTON  
1-888-475-5526

Qty	Description	Unit Price	Amount
25 yds	Loam 1" screened		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		

<input checked="" type="checkbox"/>	Charge	<input checked="" type="checkbox"/>	COD	<input checked="" type="checkbox"/>	Picked Up	Delivered
Truck: <u>OWN</u>						Sub Total
Gross:						Tax
Tare:						Delivery
Net:						Total

*Ray M Price*

Received By: \_\_\_\_\_

38683



AND HEAVY EQUIPMENT  
75 Providence Street, Rehoboth, MA 02769  
Tel (508) 336-4272 • Fax (508) 336-4275

FOR CROW MIN  
LOCATION CANTON TO PROV  
DATE 11-16-2010

TRUCK# 5 DRIVER Grandy

LOADS	YARDS	HOURS	DESCRIPTION
3			GRAVEL
FROM	6:30		FILL
TO	3:30		<del>LOAM</del>
			DOZER
			LOADER
			TRUCKS
Gross			
Tare			
NET			

Signed Michael Mack

0568

# Lincoln Lace & Braid

55 Ponagansett Ave. Providence, RI

## Compost

Load Date	Truck Number	Agresource Ticket No.	Load Volume (CY)	No. of Loads	Hours	Cummulative Total (CY)
11/18/2010	B&B 13	21669-21671	25.00	3.00	4.50	75.00
<b>11/18/2010</b>				<b>3.00</b>	<b>4.50</b>	<b>75.00</b>
11/22/2010	B&B 24	21672-21677	25.00	8.00	8.50	200.00
<b>11/22/2010</b>				<b>8.00</b>	<b>8.50</b>	<b>275.00</b>
11/23/2010	B&B 24	21678-21682	25.00	5.00	6.50	125.00
<b>11/23/2010</b>				<b>5.00</b>	<b>6.50</b>	<b>400.00</b>
11/24/2010	B&B 5	21683	25.00	1.00	1.00	425.00
11/24/2010	Steve's Xpress	21684	25.00	1.00	1.00	450.00
<b>11/24/2010</b>				<b>2.00</b>	<b>2.00</b>	<b>450.00</b>
12/1/2010			27.00	1.00	1.00	477.00
12/1/2010			35.00	2.00	2.00	547.00
<b>12/1/2010</b>				<b>3.00</b>	<b>3.00</b>	<b>547.00</b>
12/6/2010			27.00	3.00	4.00	628.00
<b>12/6/2010</b>				<b>3.00</b>	<b>4.00</b>	<b>628.00</b>
						628.00
						628.00
						628.00
						628.00
				<b>24.00</b>	<b>28.50</b>	<b>628.00</b>

Load Date	Truck Number	Read Custom Soils Ticket No.	Load Volume (CY)	Hours	Cummulative Total (CY)
12/7/2010	JK Angus Inc	37771	25.00		2,193.00
<b>12/7/2010</b>			<b>168.00</b>		<b>2,193.00</b>
					2,193.00
					2,193.00
					2,193.00
					2,193.00
			<b>2193.00</b>	<b>225.50</b>	<b>2,193.00</b>

Load Date	Truck Number	Read Custom Soils Ticket No.	Load Volume (CY)	Hours	Cummulative Total (CY)
11/23/2010	B&B 13	37699	25.00		1,075.00
11/23/2010	B&B 13	37709	25.00	9.50	1,100.00
11/23/2010	B&B 13	37710	25.00		1,125.00
11/23/2010	Candigit 11	37697	25.00		1,150.00
11/23/2010	Candigit 11	37707	25.00	9.00	1,175.00
11/23/2010	Candigit 11	37708	25.00		1,200.00
11/23/2010	Candigit 3	37698	25.00		1,225.00
11/23/2010	Candigit 3	37705	25.00	9.00	1,250.00
11/23/2010	Candigit 3	37706	25.00		1,275.00
11/23/2010	Steves Xpress	37674	25.00		1,300.00
11/23/2010	Steves Xpress	37702	25.00	9.50	1,325.00
11/23/2010	Steves Xpress	37715	25.00		1,350.00
11/23/2010	Almeida 4	37704	25.00		1,375.00
11/23/2010	Almeida 4	38714	25.00	9.50	1,400.00
11/23/2010	Almeida 4	38715	25.00		1,425.00
<b>11/23/2010</b>			<b>550.00</b>	<b>67.00</b>	<b>1,425.00</b>
11/24/2010	B&B 5	38716	25.00		1,450.00
11/24/2010	B&B 5	38719	25.00	6.00	1,475.00
11/24/2010	Steves Xpress	38717	25.00		1,500.00
11/24/2010	Steves Xpress	38718	25.00	6.00	1,525.00
<b>11/24/2010</b>			<b>100.00</b>	<b>12.00</b>	<b>1,525.00</b>
12/2/2010	Lindquist	38248	25.00	8.00	1,550.00
12/2/2010	Blanton	38253	25.00		1,575.00
12/2/2010	Lindquist	38263	25.00		1,600.00
12/2/2010	JK Angus Inc	38194	25.00		1,625.00
12/2/2010	JK Angus Inc	38195	25.00		1,650.00
12/2/2010	JK Angus Inc	38196	25.00	9.00	1,675.00
12/2/2010	JK Angus Inc	38197	25.00		1,700.00
12/2/2010	JK Angus Inc	38198	25.00		1,725.00
12/2/2010	Blanton	38762	25.00	8.00	1,750.00
12/2/2010	Lindquist	38264	25.00		1,775.00
12/2/2010	Blanton	38763	25.00		1,800.00
<b>12/2/2010</b>			<b>275.00</b>	<b>25.00</b>	<b>1,800.00</b>
12/3/2010			25.00	2.00	1,825.00
<b>12/3/2010</b>			<b>25.00</b>		<b>1,825.00</b>
12/6/2010	Lindquist	37661	25.00		1,850.00
12/6/2010	Lindquist	37662	25.00	6.00	1,875.00
12/6/2010	Lindquist	37663	25.00		1,900.00
12/6/2010	Blanton	38212	25.00		1,925.00
12/6/2010	Blanton	38766	25.00	6.00	1,950.00
12/6/2010	Blanton	38767	25.00		1,975.00
12/6/2010	JK Angus Inc	38564	25.00	5.00	2,000.00
12/6/2010	JK Angus Inc	38192	25.00		2,025.00
<b>12/6/2010</b>			<b>200.00</b>	<b>17.00</b>	<b>2,025.00</b>
12/7/2010	JK Angus Inc	38191	25.00		2,050.00
12/7/2010	Blanton	38213	25.00		2,075.00
12/7/2010	JK Angus Inc	38190	25.00		2,100.00
12/7/2010	Lindquist	37665	25.00		2,125.00
12/7/2010	Blanton	38214	25.00		2,150.00
12/7/2010	Tobin	38528	18.00		2,168.00

**Lincoln Lace & Braid**  
55 Ponagansett Ave. Providence, RI

**Loam**

<b>Load Date</b>	<b>Truck Number</b>	<b>Read Custom Soils Ticket No.</b>	<b>Load Volume (CY)</b>	<b>Hours</b>	<b>Cummulative Total (CY)</b>
11/16/2010	B&B 5	38683	25.00		25.00
11/16/2010	B&B 5	38684	25.00	9.00	50.00
11/16/2010	B&B 5	38685	25.00		75.00
11/16/2010	B&B 13	38686	25.00		100.00
11/16/2010	B&B 13	38687	25.00	9.50	125.00
11/16/2010	B&B 13	38688	25.00		150.00
11/16/2010	Almeida 7	38680	25.00		175.00
11/16/2010	Almeida 7	38681	25.00	8.50	200.00
11/16/2010	Almeida 7	38682	25.00		225.00
11/16/2010	Almeida 9	38689	25.00		250.00
11/16/2010	Almeida 9	38690	25.00	8.50	275.00
11/16/2010	Almeida 9	38691	25.00		300.00
<b>11/16/2010</b>			<b>300.00</b>	<b>35.50</b>	<b>300.00</b>
11/19/2010	B&B 5	38693	25.00		325.00
11/19/2010	B&B 5	38695	25.00	9.00	350.00
11/19/2010	B&B 5	38697	25.00		375.00
11/19/2010	B&B 13	38692	25.00		400.00
11/19/2010	B&B 13	38694	25.00	8.50	425.00
11/19/2010	B&B 13	38696	25.00		450.00
<b>11/19/2010</b>			<b>150.00</b>	<b>17.50</b>	<b>450.00</b>
11/22/2010	Candigit 11	37696	25.00		475.00
11/22/2010	Candigit 11	38703	25.00	9.00	500.00
11/22/2010	Candigit 11	38708	25.00		525.00
11/22/2010	B&B 13	38700	25.00		550.00
11/22/2010	B&B 13	38706	25.00	9.00	575.00
11/22/2010	B&B 13	38712	25.00		600.00
11/22/2010	Candigit 3	37694	25.00		625.00
11/22/2010	Candigit 3	38704	25.00	9.00	650.00
11/22/2010	Candigit 3	38709	25.00		675.00
11/22/2010	Almeida 7	37693	25.00		700.00
11/22/2010	Almeida 7	38705	25.00	9.00	725.00
11/22/2010	Almeida 7	38710	25.00		750.00
11/22/2010	Almeida 9	38699	25.00		775.00
11/22/2010	Almeida 9	38701	25.00	9.00	800.00
11/22/2010	Almeida 9	38711	25.00		825.00
11/22/2010	B&B 5	38702	25.00	5.50	850.00
11/22/2010	B&B 5	38707	25.00		875.00
<b>11/22/2010</b>			<b>425.00</b>	<b>50.50</b>	<b>875.00</b>
11/23/2010	B&B 24	37700	25.00	2.00	900.00
11/23/2010	Almeida 7	37675	25.00		925.00
11/23/2010	Almeida 7	37676	25.00	9.50	950.00
11/23/2010	Almeida 7	37703	25.00		975.00
11/23/2010	B&B 5	37701	25.00		1,000.00
11/23/2010	B&B 5	37713	25.00	9.00	1,025.00
11/23/2010	B&B 5	37714	25.00		1,050.00

**MATERIAL DELIVERY SLIPS –  
LOAM & COMPOST**



**73576 G. LOPES CONSTRUCTION, INC.**  
 490 Wintthrop Street, Taunton, MA 02780  
 (508) 824-4834 • 1-800-562-2479 • Fax (508) 880-3115  
**TRUCK SLIP**

JOB # 16937 DATE 12-6-10  
 SOLD TO: R E B D  
 DELIVERED AT: PROVIDENCE LOT#

PICK UP AT: FEDERAL FURNACE  
 TRUCK NO.: 124 TD TA TW DRIVER: Luis Ote

RENTAL  TIME IN: \_\_\_\_\_ TIME OUT: \_\_\_\_\_  
 P. O. # \_\_\_\_\_

Yds.	Material	# Lds.	Yds.	Material	# Lds.
	Sep. Sand			3/4" Loam	
	Screen Sand			1" Loam	
				3" Loam	
	Common Fill			Mulch / Compost	
	Structural Fill			Clay	
	<u>28 SANDY FILL</u>			Other	
	Bank Gravel				
	3" Screened Gravel				
	1/2" Process Gravel				
	3/4" Blue Stone				
	Blue Stone Dust				

Received by X [Signature]  
 By signing this ticket, I agree with the above quantity (volume/tonnage). We assume no responsibility for damage to property when delivery is made without unloading.

79032

G. LOPES CONSTRUCTION, INC.  
490 Winthrop Street, Taunton, MA 02780  
(508) 824-4834 • 1-800-562-2479 • Fax (508) 880-3115  
TRUCK SLIP

JOB # 16937 DATE 12-3-10  
SOLD TO: KC #0  
DELIVERED AT: POWAGANBETT ASLOT #  
Flow RT  
PICK UP AT: FED FURNACE  
TRUCK NO.: 202 TD TA TW DRIVER: DAVE  
RENTAL:  TIME IN: \_\_\_\_\_ TIME OUT: \_\_\_\_\_  
P. O. #: 1006-006

Yds.	Material	# Lds.	Yds.	Material	# Lds.
	Sep. Sand			3/4" Loam	
	Screen Sand			1" Loam	
	Common Fill			3" Loam	
	Structural Fill			Mulch / Compost	
	Bank Gravel			Clay	
	3" Screened Gravel			Other	
	3/4" Process Gravel				
	3/4" Blue Stone				
	Blue Stone Dust				

Received by X [Signature]  
By signing this ticket, I agree with the above quantity (yardage/tonnage). We assume no responsibility for damage to property when delivery is made inside curbing.

73575

G. LOPES CONSTRUCTION, INC.  
490 Winthrop Street, Taunton, MA 02780  
(508) 824-4834 • 1-800-562-2479 • Fax (508) 880-3115  
TRUCK SLIP

JOB # 16937 DATE 12-3-10  
SOLD TO: RC #0  
DELIVERED AT: PROVIDENCE LOT # \_\_\_\_\_  
PICK UP AT: FEDERAL FURNACE  
TRUCK NO.: 124 TD TA TW DRIVER: Luis [Signature]  
RENTAL:  TIME IN: \_\_\_\_\_ TIME OUT: \_\_\_\_\_  
P. O. #: \_\_\_\_\_

Yds.	Material	# Lds.	Yds.	Material	# Lds.
	Sep. Sand			3/4" Loam	
	Screen Sand			1" Loam	
	Common Fill			3" Loam	
	Structural Fill			Mulch / Compost	
	<u>22 SANDY FILL</u>		<u>3</u>	Clay	
	Bank Gravel				
	3" Screened Gravel			Other	
	3/4" Process Gravel				
	3/4" Blue Stone				
	Blue Stone Dust				

Received by X [Signature]  
By signing this ticket, I agree with the above quantity (yardage/tonnage). We assume no responsibility for damage to property when delivery is made inside curbing.

**62790 G. LOPES CONSTRUCTION, INC.**  
 490 Winthrop Street, Taunton, MA 02780  
 (508) 824-4834 • 1-800-562-2479 • Fax (508) 880-3115  
**TRUCK SLIP**

JOB # 16934 DATE 12/3/10  
 SOLD TO: ROAD INC  
 DELIVERED AT: PONDANSETT AVE LOT #  
PROVIDENCE  
 PICK UP AT: FED FURNACE

TRUCK NO.: 190 TD TA TW DRIVER: RICK  
 RENTAL:  TIME IN: \_\_\_\_\_ TIME OUT: \_\_\_\_\_  
 P. O. #: \_\_\_\_\_

Yds.	Material	# Lds.	Yds.	Material	# Lds.
	Sep. Sand			3/4" Loam	
	Screen Sand			1" Loam	
				3" Loam	
<u>28</u>	Common Fill SAND	<u>3</u>		Mulch / Compost	
	Structural Fill			Clay	
	Bank Gravel			Other	
	3" Screened Gravel			<u>1 1/2 HR WAIT</u>	
	1/2" Process Gravel			<u>YIMIZ</u>	
	3/4" Blue Stone				
	Blue Stone Dust				

Received by X [Signature]  
 By signing this ticket, I agree with the above quantity (yardage/tonnage). We assume no responsibility for damage to property when delivery is made inside curbing.

**64632 G. LOPES CONSTRUCTION, INC.**  
 490 Winthrop Street, Taunton, MA 02780  
 (508) 824-4834 • 1-800-562-2479 • Fax (508) 880-3115  
**TRUCK SLIP**

JOB # 16937 DATE 12/3/10  
 SOLD TO: RED INC  
 DELIVERED AT: ROAD RI LOT # \_\_\_\_\_  
 PICK UP AT: FEDERAL FURNACE

TRUCK NO.: 171 TD TA TW DRIVER: [Signature]  
 RENTAL:  TIME IN: 8:30 TIME OUT: 9:00  
 P. O. #: 1066-006 WARNING TIME 12 HR

Yds.	Material	# Lds.	Yds.	Material	# Lds.
	Sep. Sand			3/4" Loam	
	Screen Sand			1" Loam	
				3" Loam	
	Common Fill			Mulch / Compost	
	Structural Fill			Clay	
	Bank Gravel			Other	
	3" Screened Gravel		<u>28</u>	<u>SAND</u>	<u>3</u>
	1/2" Process Gravel			<u>FILL</u>	
	3/4" Blue Stone				
	Blue Stone Dust				

Received by X [Signature]  
 By signing this ticket, I agree with the above quantity (yardage/tonnage). We assume no responsibility for damage to property when delivery is made inside curbing.

**79031 G. LOPES CONSTRUCTION, INC.**  
 490 Winthrop Street, Taunton, MA 02780  
 (508) 824-4834 • 1-800-562-2479 • Fax (508) 880-3115  
**TRUCK SLIP**

JOB # 16937 DATE 12-2-16  
 SOLD TO: RCE  
 DELIVERED AT: PANAGANSETT RD LOT #  
PLW RD  
 PICK UP AT: FED FURNACE

TRUCK NO.: 202 TA TW DRIVER: DAVE  
 RENTAL:  TIME IN: \_\_\_\_\_ TIME OUT: \_\_\_\_\_  
 P. O. #: \_\_\_\_\_

Yds.	Material	# Lds.	Yds.	Material	# Lds.
	Sep. Sand			1/2" Loam	
	Screen Sand			1" Loam	
	Common Fill			3" Loam	
	Structural Fill			Mulch / Compost	
	Bank Gravel			Clay	
	3" Screened Gravel			Other	
	1/2" Process Gravel			<u>20</u> <u>Sandy Fill</u> <u>(3)</u>	
	1/2" Blue Stone				
	Blue Stone Dust				

Received by X  
 By signing this ticket, I agree with the above quantity (yardage/tonnage). We assume no responsibility for damage to property when delivery is made inside curbing.

**79032 G. LOPES CONSTRUCTION, INC.**  
 490 Winthrop Street, Taunton, MA 02780  
 (508) 824-4834 • 1-800-562-2479 • Fax (508) 880-3115  
**TRUCK SLIP**

JOB # 16937 DATE 10 2 10  
 SOLD TO: R-C-D INC  
 DELIVERED AT: PROVIDENCE RD LOT #  
PANAGANSETT AVE  
 PICK UP AT: FED-FURNACE

TRUCK NO.: 88-149 TA TW DRIVER: [Signature]  
 RENTAL:  TIME IN: \_\_\_\_\_ TIME OUT: \_\_\_\_\_  
 P. O. #: \_\_\_\_\_

Yds.	Material	# Lds.	Yds.	Material	# Lds.
	Sep. Sand			1/2" Loam	
	Screen Sand			1" Loam	
	<u>20</u> <u>SANDY FILL</u> <u>(3)</u>			3" Loam	
	Common Fill			Mulch / Compost	
	Structural Fill			Clay	
	<u>XXXX</u>			Other	
	Bank Gravel				
	3" Screened Gravel				
	1/2" Process Gravel				
	1/2" Blue Stone				
	Blue Stone Dust				

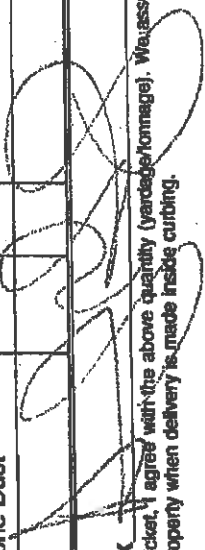
Received by X  
 By signing this ticket, I agree with the above quantity (yardage/tonnage). We assume no responsibility for damage to property when delivery is made inside curbing.

**62789 G. LOPES CONSTRUCTION, INC.**  
 490 Winthrop Street, Taunton, MA 02780  
 (508) 824-4834 • 1-800-562-2479 • Fax (508) 880-3115  
**TRUCK SLIP**

JOB # 16937 DATE 12/2/10  
 SOLD TO: BC & D INC  
 DELIVERED AT: FOUNTAINESETT LOT # \_\_\_\_\_  
PROV RI  
 PICK UP AT: FED FURNACE

TRUCK NO.: 190 TD TA TW DRIVER: RICK  
 RENTAL:  TIME IN: \_\_\_\_\_ TIME OUT: \_\_\_\_\_  
 P. O. #: \_\_\_\_\_

Yds.	Material	# Lds.	Yds.	Material	# Lds.
	Sep. Sand			1/2" Loam	
	Screen Sand			1" Loam	
				3" Loam	
<u>28</u>	Common Fill <u>SANDY</u>	<u>3</u>		Mulch / Compost	
	Structural Fill			Clay	
	Bank Gravel			Other	
	3" Screened Gravel				
	1/2" Process Gravel				
	1/2" Blue Stone				
	Blue Stone Dust				

Received by X   
 By signing this ticket, I agree with the above quantity (yardage/tonnage). We assume no responsibility for damage to property when delivery is made inside curbing.

**73574 G. LOPES CONSTRUCTION, INC.**  
 490 Winthrop Street, Taunton, MA 02780  
 (508) 824-4834 • 1-800-562-2479 • Fax (508) 880-3115  
**TRUCK SLIP**

JOB # 16937 DATE 12.2.10  
 SOLD TO: R E B D  
 DELIVERED AT: PROVIDENCE LOT # \_\_\_\_\_  
 PICK UP AT: FEDERAL FURNACE

TRUCK NO.: 124 TD TA TW DRIVER: David JH  
 RENTAL:  TIME IN: \_\_\_\_\_ TIME OUT: \_\_\_\_\_  
 P. O. #: \_\_\_\_\_

Yds.	Material	# Lds.	Yds.	Material	# Lds.
	Sep. Sand			1/2" Loam	
	Screen Sand			1" Loam	
				3" Loam	
	Common Fill			Mulch / Compost	
	Structural Fill			Clay	
<u>28</u>	<u>SANDY FILL</u>	<u>3</u>		Other	
	Bank Gravel				
	3" Screened Gravel				
	1/2" Process Gravel				
	1/2" Blue Stone				
	Blue Stone Dust				

Received by X   
 By signing this ticket, I agree with the above quantity (yardage/tonnage). We assume no responsibility for damage to property when delivery is made inside curbing.

**7573 G. LOPES CONSTRUCTION, INC.**  
 490 Winthrop Street, Taunton, MA 02780  
 (508) 824-4834 • 1-800-562-2479 • Fax (508) 880-3115  
**TRUCK SLIP**

JOB # 16937 DATE 12-1-10  
 SOLD TO: RC 3 J  
 DELIVERED AT: PROVINCIALS R.I. LOT # \_\_\_\_\_  
 PICK UP AT: FEDERAL FURNACE

TRUCK NO.: 124 (TD) TA TW DRIVER: JMS GF  
 RENTAL:  TIME IN: \_\_\_\_\_ TIME OUT: \_\_\_\_\_  
 P. O. #: \_\_\_\_\_

Yds.	Material	# Lds.	Yds.	Material	# Lds.
	Sep. Sand			3/4" Loam	
	Screen Sand			1" Loam	
	Common Fill			3" Loam	
	Structural Fill			Mulch / Compost	
<u>22</u>	<u>SANDY FILL</u>	<u>3</u>		Clay	
	Bank Gravel			Other	
	3" Screened Gravel				
	3/4" Process Gravel				
	3/4" Blue Stone				
	Blue Stone Dust				

Received by X [Signature]  
 By signing this ticket, I agree with the above quantity (yardage/tonnage). We assume no responsibility for damage to property when delivery is made inside curbing.

**62965 G. LOPES CONSTRUCTION, INC.**  
 490 Winthrop Street, Taunton, MA 02780  
 (508) 824-4834 • 1-800-562-2479 • Fax (508) 880-3115  
**TRUCK SLIP**

JOB # 16937 DATE 12/1/10  
 SOLD TO: RC AD  
 DELIVERED AT: POWAGANSETT AVE LOT # \_\_\_\_\_  
PROV.  
 PICK UP AT: FEDERAL FURNACE

TRUCK NO.: 204 (TD) TA TW DRIVER: M BRAGA  
 RENTAL:  TIME IN: \_\_\_\_\_ TIME OUT: \_\_\_\_\_  
 P. O. #: \_\_\_\_\_

Yds.	Material	# Lds.	Yds.	Material	# Lds.
	Sep. Sand			3/4" Loam	
	Screen Sand			1" Loam	
	Common Fill			3" Loam	
<u>28</u>	<u>Common Fill SANDY</u>	<u>3</u>		Mulch / Compost	
	Structural Fill			Clay	
	Bank Gravel			Other	
	3" Screened Gravel				
	3/4" Process Gravel				
	3/4" Blue Stone				
	Blue Stone Dust				

Received by X [Signature]  
 By signing this ticket, I agree with the above quantity (yardage/tonnage). We assume no responsibility for damage to property when delivery is made inside curbing.

**30785 G. LOPES CONSTRUCTION, INC.**  
 490 Winthrop Street, Taunton, MA 02780  
 (508) 824-4834 • 1-800-562-2479 • Fax: (508) 880-3115  
**TRUCK SLIP**

**79859 G. LOPES CONSTRUCTION, INC.**  
 490 Winthrop Street, Taunton, MA 02780  
 (508) 824-4834 • 1-800-562-2479 • Fax: (508) 880-3115  
**TRUCK SLIP**

JOB # \_\_\_\_\_ DATE 11/19/10  
 SOLD TO: RC-D LOT # \_\_\_\_\_  
 DELIVERED AT: \_\_\_\_\_  
 PICK UP AT: Federal Pkwy  
 TRUCK NO.: TD TA TW DRIVER: Dee-Lee Lopez fill  
 RENTAL:  TIME IN: \_\_\_\_\_ TIME OUT: \_\_\_\_\_  
 P. O. #: \_\_\_\_\_

JOB # \_\_\_\_\_ DATE 12-1-10  
 SOLD TO: RC-D LOT # \_\_\_\_\_  
 DELIVERED AT: Cowan's II Ave  
 PICK UP AT: Fed Furn  
 TRUCK NO.: 108 TD TA TW DRIVER: Carry  
 RENTAL:  TIME IN: \_\_\_\_\_ TIME OUT: \_\_\_\_\_  
 P. O. #: \_\_\_\_\_

Yds.	Material	# Lds.	Yds.	Material	# Lds.
	Sep. Sand			3/4" Loam	
	Screen Sand			1" Loam	
	<u>fill</u>			3" Loam	
	Common-Fill			Mulch / Compost	
	Structural-Fill			Clay	
	Bank Gravel			Other	
	3" Screened Gravel				
	1/2" Process Gravel				
	3/4" Blue Stone				
	Blue Stone Dust				

Yds.	Material	# Lds.	Yds.	Material	# Lds.
	Sep. Sand			3/4" Loam	
	Screen Sand			1" Loam	
	Common-Fill			3" Loam	
	Structural-Fill			Mulch / Compost	
	<u>28 Sney F. 113</u>			Clay	
	Bank Gravel			Other	
	3" Screened Gravel				
	1/2" Process Gravel				
	3/4" Blue Stone				
	Blue Stone Dust				

Received by X Dave  
 By signing this ticket, I agree with the above quantity (yardage/tonnage). We assume no responsibility for damage to property when delivery is made inside curbing.

Received by X [Signature]  
 By signing this ticket, I agree with the above quantity (yardage/tonnage). We assume no responsibility for damage to property when delivery is made inside curbing.



AND HEAVY EQUIPMENT  
75 Providence Street, Rehoboth, MA 02769  
Tel (508) 336-4272 • Fax (508) 336-4275

FOR Crowne Trucking  
LOCATION Job Providence Rd  
DATE 11-19 2010

TRUCK# 24 DRIVER David

LOADS	YARDS	HOURS	DESCRIPTION
3	86 yds A load		GRAVEL
	LOPES AT CARRIER		FILL
			LOAM
7:00	START		DOZER
3:00	FINISH		LOADER
8	TOTAL HOURS		TRUCKS
Gross			
Tare			
NET			

2392

Signed [Signature]



AND HEAVY EQUIPMENT  
75 Providence Street, Rehoboth, MA 02769  
Tel (508) 336-4272 • Fax (508) 336-4275

FOR CROWN  
LOCATION CARVER / PROV.  
DATE 11-19 2010

TRUCK# Almedia #7 DRIVER FRANK

LOADS	YARDS	HOURS	DESCRIPTION
3	LOADS SANDY FILL		GRAVEL
	CARVER TO		FILL
	PROV		LOAM
			DOZER
7:00 AM			LOADER
3:00 PM			TRUCKS
Gross			
Tare			
NET			

2570

Signed [Signature]





AND HEAVY EQUIPMENT  
75 Providence Street, Rehoboth, MA 02769  
Tel (508) 336-4272 • Fax (508) 336-4275

FOR CRONIN  
LOCATION CARVER / Paws  
DATE 11-19 2010

TRUCK# Almeida #9 DRIVER SELO

LOADS	YARDS	HOURS	DESCRIPTION
33	Loads Spady fill		GRAVEL
	CARVER to		FILL
	Paws.		LOAM
			DOZER
700 AM			LOADER
3:00 PM			TRUCKS
Gross			
Tare			
NET			

2569

Signed [Signature]



AND HEAVY EQUIPMENT  
75 Providence Street, Rehoboth, MA 02769  
Tel (508) 336-4272 • Fax (508) 336-4275

FOR CRONIN  
LOCATION PROV RT  
DATE 11/19 2010

TRUCK# 3 DRIVER DELUIS  
Carver

LOADS	YARDS	HOURS	DESCRIPTION
3	28	20-330	GRAVEL
			FILL
			LOAM
			DOZER
			LOADER
			TRUCKS
Gross			
Tare			
NET			

0461

Signed [Signature]



AND HEAVY EQUIPMENT  
 75 Providence Street, Rehoboth, MA 02769  
 Tel (508) 336-4272 • Fax (508) 336-4275

FOR PLT

LOCATION PLT

DATE 11/19 2010

TRUCK# 17  
Camp

DRIVER  
M. King

LOADS	YARDS	HOURS	DESCRIPTION
3	28	7:00-7:30	GRAVEL
			FILL
			LOAM
			DOZER
			LOADER
			TRUCKS
Gross			
Tare			
NET			

0463

Signed [Signature]



AND HEAVY EQUIPMENT  
 75 Providence Street, Rehoboth, MA 02769  
 Tel (508) 336-4272 • Fax (508) 336-4275

FOR PLT

LOCATION PLT

DATE 11/19 2010

TRUCK# 11  
Camp

DRIVER  
R. King

LOADS	YARDS	HOURS	DESCRIPTION
3	28	7:00-7:30	GRAVEL
			FILL
			LOAM
			DOZER
			LOADER
			TRUCKS
Gross			
Tare			
NET			

0462

Signed [Signature]

80760

G. LOPES CONSTRUCTION, INC.

490 Winthrop Street, Taunton, MA 02780

(508) 824-4834 • 1-800-562-2479 • Fax (508) 880-3115

TRUCK SLIP

JOB # \_\_\_\_\_

DATE 11/12/10

SOLD TO: R.C. - D

DELIVERED AT: \_\_\_\_\_ LOT # \_\_\_\_\_

PICK UP AT: Federal Pit

23 trailer loads fill

TRUCK NO.: \_\_\_\_\_ (TD) TA TW DRIVER: \_\_\_\_\_

RENTAL:  TIME IN: \_\_\_\_\_ TIME OUT: \_\_\_\_\_

P. O. #: \_\_\_\_\_

Yds.	Material	# Lds.	Yds.	Material	# Lds.
	Sep. Sand			3/4" Loam	
	Screen Sand			1" Loam	
				3" Loam	
	Common Fill				
	Structural Fill			Mulch / Compost	
				Clay	
	Bank Gravel				
	3" Screened Gravel			Other	
	3/4" Process Gravel				
	3/4" Blue Stone				
	Blue Stone Dust				

Received by X Jack [Signature]

By signing this ticket, I agree with the above quantity (yardage/tonnage). We assume no responsibility for damage to property when delivery is made inside curbing.



AND HEAVY EQUIPMENT

75 Providence Street, Rehoboth, MA 02769  
Tel (508) 336-4272 • Fax (508) 336-4275

FOR CRONIN

LOCATION Carroll / Prou

DATE 11-18 2010

TRUCK# Almeria #9 DRIVER Kenny

LOADS	YARDS	HOURS	DESCRIPTION
<u>3</u>	<u>LOADS</u>	<u>GRAVEL</u>	<b>GRAVEL</b>
	<u>Carroll</u>	<u>to</u>	<b>FILL</b>
	<u>Prou</u>		<b>LOAM</b>
			<b>DOZER</b>
<u>700 AM</u>			<b>LOADER</b>
<u>330 PM</u>			<b>TRUCKS</b>
Gross			
Tare			
NET			

2567

Signed Steve G



AND HEAVY EQUIPMENT

75 Providence Street, Rehoboth, MA 02769  
Tel (508) 336-4272 • Fax (508) 336-4275

FOR CRONIN

LOCATION Carroll / Prou

DATE 11-18 2010

TRUCK# Almeria #9 DRIVER STEVE

LOADS	YARDS	HOURS	DESCRIPTION
<u>3</u>	<u>LOADS</u>	<u>GRAVEL</u>	<b>GRAVEL</b>
	<u>Carroll</u>	<u>to</u>	<b>FILL</b>
	<u>Prou</u>		<b>LOAM</b>
			<b>DOZER</b>
<u>700 AM</u>			<b>LOADER</b>
<u>330 PM</u>			<b>TRUCKS</b>
Gross			
Tare			
NET			

2566

Signed Steve G



AND HEAVY EQUIPMENT

75 Providence Street, Rehoboth, MA 02769  
Tel (508) 336-4272 • Fax (508) 336-4275

FOR CROWN

LOCATION CARVER / PROV

DATE 11-18 20 10

TRUCK# ALmeida # 7 DRIVER FRANK

LOADS	YARDS	HOURS	DESCRIPTION
<u>3</u>	<u>LOAD</u>	<u>GRAVEL</u>	<b>GRAVEL</b>
	<u>CARVER TO</u>		<b>FILL</b>
	<u>PROV</u>		<b>LOAM</b>
			<b>DOZER</b>
<u>700 AM</u>			<b>LOADER</b>
<u>330 PM</u>			<b>TRUCKS</b>
Gross			
Tare			
NET			

2564

Signed STEVEN



AND HEAVY EQUIPMENT

75 Providence Street, Rehoboth, MA 02769  
Tel (508) 336-4272 • Fax (508) 336-4275

FOR CROWN

LOCATION CARVER TO PROV

DATE 11-18 20 10

TRUCK# 5 DRIVER RANDY

LOADS	YARDS	HOURS	DESCRIPTION
<u>3</u>			<b>GRAVEL</b>
<u>From</u>	<u>7:00</u>		<b>FILL</b>
<u>To</u>	<u>3:30</u>		<b>LOAM</b>
			<b>DOZER</b>
			<b>LOADER</b>
			<b>TRUCKS</b>
Gross			
Tare			
NET			

0570

Signed STEVEN



AND HEAVY EQUIPMENT  
75 Providence Street, Rehoboth, MA 02769  
Tel (508) 336-4272 • Fax (508) 336-4275

FOR PLT

LOCATION CAVON + PAVAT

DATE 11/14 20 10

TRUCK# <u>17</u> <u>CALVIN</u>	DRIVER <u>MARY</u>
-----------------------------------	-----------------------

LOADS	YARDS	HOURS	DESCRIPTION
<u>3</u>	<u>24</u>	<u>700</u>	GRAVEL
			FILL
			LOAM
			DOZER
			LOADER
			TRUCKS
Gross			
Tare			
NET			

0460

Signed Steve G



AND HEAVY EQUIPMENT  
75 Providence Street, Rehoboth, MA 02769  
Tel (508) 336-4272 • Fax (508) 336-4275

FOR PLT

LOCATION CAVON + PAVAT

DATE 11/14 20 10

TRUCK# <u>11</u> <u>CALVIN</u>	DRIVER <u>DERRE</u>
-----------------------------------	------------------------

LOADS	YARDS	HOURS	DESCRIPTION
<u>3</u>	<u>24</u>	<u>700</u>	GRAVEL
			FILL
			LOAM
			DOZER
			LOADER
			TRUCKS
Gross			
Tare			
NET			

0459

Signed Steve G



AND HEAVY EQUIPMENT  
75 Providence Street, Rehoboth, MA 02769  
Tel (508) 336-4272 • Fax (508) 336-4275

FOR CARROLL

LOCATION CARROLL TRUCKING

DATE 11/18 20 10

TRUCK# 3 DRIVER Dennis  
CARROLL

LOADS	YARDS	HOURS	DESCRIPTION
5	28	700	GRAVEL
			FILL
			LOAM
			DOZER
			LOADER
			TRUCKS
Gross			
Tare			
NET			

0458

Signed [Signature]



AND HEAVY EQUIPMENT  
75 Providence Street, Rehoboth, MA 02769  
Tel (508) 336-4272 • Fax (508) 336-4275

FOR CRONIN

LOCATION CARROLL / PROV.

DATE 11-18 20 10

TRUCK# B+B TRUCKING #13 DRIVER Jewell

LOADS	YARDS	HOURS	DESCRIPTION
2	LOADS	600	GRAVEL
	CARROLL TO		FILL
	PROV.		LOAM
3 LOADS	COMPOST	FROM	DOZER
	JOHNSON	LANDS	
700 AM			LOADER
330 PM			TRUCKS
Gross			
Tare			
NET			

2563

Signed [Signature]

# G. LOPES CONSTRUCTION, INC.

565 Winthrop Street  
Taunton, MA 02780

Telephone (508) 824-4834 Fax (508) 880-3115

# 344559

DATE 11/17/90

SOLD TO: R.C. - D.

DELIVERED AT: PICKED UP AT

Federal Pit + trailer loads Fill

TRUCK NO.: \_\_\_\_\_ DRIVER: \_\_\_\_\_

TIME IN: \_\_\_\_\_ P.O. #: \_\_\_\_\_

TIME OUT: \_\_\_\_\_ LOT #: \_\_\_\_\_

GROSS: \_\_\_\_\_

TARE: \_\_\_\_\_

NET: \_\_\_\_\_

Yds.	Material	# Lds.	Yds.	Material	# Lds.
	Sep. Sand			3/4" Process Gravel	
	Gravel			1 1/2" Process Gravel	
<u>30</u>	Fill			3/4" Dense Graded	
	3" Screened Loam			3/8" Dense Graded	
	3/4" Screened Loam			3/4" Stone Washed <input type="checkbox"/>	
	3/4" Screened Gravel			1 1/2" Stone Washed <input type="checkbox"/>	
	3" Screened Gravel			3/4" Recycled Concrete	
	Other			1 1/2" Recycled Asphalt	

Received by X [Signature]  
 By signing this ticket, I agree with the above quantity (yardage/tonnage). We assume no responsibility for damage to property when delivery is made inside curbing.





AND HEAVY EQUIPMENT  
75 Providence Street, Rehoboth, MA 02769  
Tel (508) 336-4272 • Fax (508) 336-4275

FOR CRONIN  
LOCATION CARVER / PROV.  
DATE 11-17 2010

TRUCK# Almeida A 9 DRIVER STEVE

LOADS	YARDS	HOURS	DESCRIPTION
<u>3</u>	<u>LOADS</u>	<u>GRAVEL</u>	<b>GRAVEL</b>
	<u>CARVER to</u>		<b>FILL</b>
	<u>PROV.</u>		<b>LOAM</b>
			<b>DOZER</b>
			<b>LOADER</b>
<u>7:00 AM</u>			<b>TRUCKS</b>
<u>3:30 PM</u>			
Gross			
Tare			
NET			

2562

Signed [Signature]



AND HEAVY EQUIPMENT  
75 Providence Street, Rehoboth, MA 02769  
Tel (508) 336-4272 • Fax (508) 336-4275

FOR CRONIN  
LOCATION CARVER / PROV.  
DATE 11-17 2010

TRUCK# Almeida A 7 DRIVER FRANK

LOADS	YARDS	HOURS	DESCRIPTION
<u>3</u>	<u>LOADS</u>	<u>GRAVEL</u>	<b>GRAVEL</b>
	<u>CARVER to</u>		<b>FILL</b>
	<u>PROV.</u>		<b>LOAM</b>
			<b>DOZER</b>
			<b>LOADER</b>
<u>7:00 AM</u>			<b>TRUCKS</b>
<u>3:30 PM</u>			
Gross			
Tare			
NET			

2561

Signed [Signature]



AND HEAVY EQUIPMENT  
75 Providence Street, Rehoboth, MA 02769  
Tel (508) 336-4272 • Fax (508) 336-4275

FOR CRAMIN

LOCATION CARVER / PROV.

DATE 11-17 2010

TRUCK# <u>B+B # 13</u>	DRIVER <u>Jwells</u>
---------------------------	-------------------------

LOADS	YARDS	HOURS	DESCRIPTION
<u>3</u>	<u>LOADS GRAV</u>	<u>LOADS</u>	<u>GRAVEL</u>
	<u>CARVER TO</u>		<u>FILL</u>
	<u>PROV.</u>		<u>LOAM</u>
			<u>DOZER</u>
<u>7:00 AM</u>			<u>LOADER</u>
<u>3:30 PM</u>			<u>TRUCKS</u>
Gross			
Tare			
NET			

2560

Signed [Signature]



AND HEAVY EQUIPMENT  
75 Providence Street, Rehoboth, MA 02769  
Tel (508) 336-4272 • Fax (508) 336-4275

FOR Cramin Trucking

LOCATION Barnegate Rd Prov

DATE 11-17 2010

TRUCK# <u>24</u>	DRIVER <u>DAVID</u>
---------------------	------------------------

LOADS	YARDS	HOURS	DESCRIPTION
<u>3</u>	<u>26 yds a load</u>	<u>From</u>	<u>GRAVEL</u>
	<u>Lopes At Carver MA</u>		<u>FILL</u>
			<u>LOAM</u>
			<u>DOZER</u>
<u>7:00</u>	<u>START</u>		<u>DOZER</u>
<u>3:30</u>	<u>FINISH</u>		<u>LOADER</u>
	<u>8 1/2 Total Hours</u>		<u>TRUCKS</u>
Gross			
Tare			
NET			

2391

Signed [Signature]



AND HEAVY EQUIPMENT  
75 Providence Street, Rehoboth, MA 02769  
Tel (508) 336-4272 • Fax (508) 336-4275

FOR CROWNAVAL  
LOCATION CARVER / PROVIDENCE  
DATE 11/17 20 10

TRUCK# 6 DRIVER FRANK

LOADS	YARDS	HOURS	DESCRIPTION
<u>2</u>	<u>26</u>	<u>10:30 AM</u> <u>3:30 AM</u>	<b>GRAVEL</b>
			<b>FILL</b>
			<b>LOAM</b>
			<b>DOZER</b>
			<b>LOADER</b>
			<b>TRUCKS</b>
Gross			
Tare			
NET			

1554

Signed [Signature]



AND HEAVY EQUIPMENT  
75 Providence Street, Rehoboth, MA 02769  
Tel (508) 336-4272 • Fax (508) 336-4275

FOR CROWN IV  
LOCATION CARVER to PROD  
DATE 11-17 20 10

TRUCK# 5 DRIVER RANDY

LOADS	YARDS	HOURS	DESCRIPTION
<u>3</u>			<b>GRAVEL</b>
<u>from</u>	<u>7:00</u>		<b>FILL</b>
<u>to</u>	<u>3:30</u>		<b>LOAM</b>
			<b>DOZER</b>
			<b>LOADER</b>
			<b>TRUCKS</b>
Gross			
Tare			
NET			

0569

Signed [Signature]

**B.B. COLELLO, INC.**

75 Providence Street • Rehoboth, MA 02769  
 Tel (508) 336-4272 • Fax (508) 336-4275

FOR CROWN  
 LOCATION over to Providence  
 DATE 11-17 20 10

TRUCK# 44 DRIVER [Signature]

LOADS	YARDS	HOURS	DESCRIPTION
<u>211</u>			GRAVEL
	<u>Start</u>	<u>10:30</u>	FILL
	<u>Finish</u>	<u>4:00</u>	LOAM
	<u>hrs</u>	<u>3 1/2</u>	DOZER
			LOADER
			TRUCKS
Gross			
Tare			
Net			

0466 Signed [Signature]



AND HEAVY EQUIPMENT  
 75 Providence Street, Rehoboth, MA 02769  
 Tel (508) 336-4272 • Fax (508) 336-4275

FOR CROWN R.  
 LOCATION Parven mas to Pen. Rte  
 DATE 10-15 20 10

TRUCK# 84 DRIVER LIBBY ANGELLA

LOADS	YARDS	HOURS	DESCRIPTION
<u>74</u>	<u>264</u>		GRAVEL
<u>20</u>		<u>1 1/2</u>	FILL
	<u>2 Loads</u>		LOAM
			DOZER
			LOADER
			TRUCKS
Gross			<u>10:30</u>
Tare			<u>2:00</u>
NET			

0025 Signed [Signature]



AND HEAVY EQUIPMENT  
75 Providence Street, Rehoboth, MA 02769  
Tel (508) 336-4272 • Fax (508) 336-4275

FOR CROWN HILL Road

LOCATION CROWN HILL ROAD

DATE 11/17 2016

TRUCK# 11 DRIVER Oertel  
CROWN HILL

LOADS	YARDS	HOURS	DESCRIPTION
3	28	7:00-3:30	GRAVEL
		2	FILL
			LOAM
			DOZER
			LOADER
			TRUCKS
Gross			
Tare			
NET			

0456

Signed [Signature]



AND HEAVY EQUIPMENT  
75 Providence Street, Rehoboth, MA 02769  
Tel (508) 336-4272 • Fax (508) 336-4275

FOR CROWN HILL Road

LOCATION CROWN HILL ROAD

DATE 11/17 2016

TRUCK# 3 DRIVER Dennis  
CROWN HILL

LOADS	YARDS	HOURS	DESCRIPTION
3	28	7:00-3:30	GRAVEL
		2	FILL
			LOAM
			DOZER
			LOADER
			TRUCKS
Gross			
Tare			
NET			

0455

Signed [Signature]



AND HEAVY EQUIPMENT  
75 Providence Street, Rehoboth, MA 02769  
Tel (508) 336-4272 • Fax (508) 336-4275

FOR Gravel

LOCATION Gravel to Road

DATE 11/17 2010

TRUCK# 17 DRIVER MARY  
CARDON

LOADS	YARDS	HOURS	DESCRIPTION
3	28	7:00-3:00	GRAVEL
		8:00	FILL
			LOAM
			DOZER
			LOADER
			TRUCKS
Gross			
Tare			
NET			

0457

Signed [Signature]



AND HEAVY EQUIPMENT  
75 Providence Street, Rehoboth, MA 02769  
Tel (508) 336-4272 • Fax (508) 336-4275

FOR Gravel

LOCATION Gravel to Road

DATE 11/16 2010

TRUCK# 3 DRIVER DEWITT  
CHADWICK

LOADS	YARDS	HOURS	DESCRIPTION
3	28	6:31-3:00	GRAVEL
		8:00	FILL
			LOAM
			DOZER
			LOADER
			TRUCKS
Gross			
Tare			
NET			

0452

Signed [Signature]



AND HEAVY EQUIPMENT  
75 Providence Street, Rehoboth, MA 02769  
Tel (508) 336-4272 • Fax (508) 336-4275

FOR Crowed

LOCATION Carron to Prov. Rt

DATE 11/11 20 16

TRUCK# 11 Cabott DRIVER Ozerk

LOADS	YARDS	HOURS	DESCRIPTION
3	28	6:30-7:00	GRAVEL
			FILL
			LOAM
			DOZER
			LOADER
			TRUCKS
Gross			
Tare			
NET			

0453

Signed STOKER



AND HEAVY EQUIPMENT  
75 Providence Street, Rehoboth, MA 02769  
Tel (508) 336-4272 • Fax (508) 336-4275

FOR Crowed

LOCATION Carron to Prov. Rt

DATE 11/11 20 16

TRUCK# 17 Cabott DRIVER Maly

LOADS	YARDS	HOURS	DESCRIPTION
2	28	6:30-7:00	GRAVEL
			FILL
			LOAM
			DOZER
			LOADER
			TRUCKS
Gross			
Tare			
NET			

0454

Signed STOKER

**47048 G. LOPES CONSTRUCTION, INC.**  
 490 Winthrop Street, Taunton, MA 02780  
 (508) 824-4834 • 1-800-562-2479 • Fax (508) 880-3115  
**TRUCK SLIP**

JOB # \_\_\_\_\_ DATE 11/15/10  
 SOLD TO: RCD  
 DELIVERED AT: \_\_\_\_\_ LOT # \_\_\_\_\_

PICK UP AT: Federal Pk  
21 Towler Road Fill

TRUCK NO.: TD TA TW DRIVER: \_\_\_\_\_  
 RENTAL:  TIME IN: \_\_\_\_\_ TIME OUT: \_\_\_\_\_  
 P. O. #: \_\_\_\_\_

Yds.	Material	# Lds.	Yds.	Material	# Lds.
	Sep. Sand			1/2" Loam	
	Screen Sand			1" Loam	
<u>21</u>	<u>Fill</u>			3" Loam	
	Common Fill				
	Structural Fill			Mulch / Compost	
				Clay	
	Bank Gravel				
	3" Screened Gravel			Other	
	1/2" Process Gravel				
	1/2" Blue Stone				
	Blue Stone Dust				

Received by X John Welch  
 By signing this ticket, I agree with the above quantity (yardage/tonnage). We assume responsibility for the material when delivery is made inside curbing.





AND HEAVY EQUIPMENT  
 75 Providence Street, Rehoboth, MA 02769  
 Tel (508) 336-4272 • Fax (508) 336-4275

FOR CRONIN

LOCATION CARVER - PROW

DATE 11-15 2010

TRUCK# <u>Almeida # 9</u>	DRIVER <u>STEVE</u>
------------------------------	------------------------

LOADS	YARDS	HOURS	DESCRIPTION
3	LOADS GRAVEL		GRAVEL
	78 YARDS		FILL
	CARVER TO		LOAM
	Prow		DOZER
7:00 AM			LOADER
3:00 PM	(8 TRUCKS)		TRUCKS
Gross			
Tare			
NET			

2556

Signed [Signature]



AND HEAVY EQUIPMENT  
75 Providence Street, Rehoboth, MA 02769  
Tel (508) 336-4272 • Fax (508) 336-4275

FOR CRONIN

LOCATION CARVER / PAOU

DATE 11-15 2010

TRUCK# <u>Almondia #7</u>	DRIVER <u>FRANK</u>
------------------------------	------------------------

LOADS	YARDS	HOURS	DESCRIPTION
3	LOADS	GRAVEL	GRAVEL
	78 YARDS		FILL
	CARVER TO		LOAM
	PAOU		DOZER
TODAY			LOADER
300 PM	(8 HRS)		TRUCKS
Gross			
Tare			
NET			

2555

Signed [Signature]



AND HEAVY EQUIPMENT  
75 Providence Street, Rehoboth, MA 02769  
Tel (508) 336-4272 • Fax (508) 336-4275

FOR CRONIN

LOCATION CARVER - PAOU

DATE 11-15 2010

TRUCK# <u>CARDIGIT #17</u>	DRIVER <u>Jimmy</u>
-------------------------------	------------------------

LOADS	YARDS	HOURS	DESCRIPTION
3	LOADS	GRAVEL	GRAVEL
	78 YARDS		FILL
	CARVER TO		LOAM
	PAOU		DOZER
700 AM			LOADER
300 PM	(8 HRS)		TRUCKS
Gross			
Tare			
NET			

2554

Signed [Signature]



AND HEAVY EQUIPMENT  
 75 Providence Street, Rehoboth, MA 02769  
 Tel (508) 336-4272 • Fax (508) 336-4275

FOR CRONIN  
 LOCATION CARVER / PROV  
 DATE 11-15 2010

TRUCK# CANDIGIT # 11 DRIVER Derarick

LOADS	YARDS	HOURS	DESCRIPTION
3	LOADS	GRAVEL	GRAVEL
	78 YARDS		FILL
	CARVER	TO	LOAM
	PROV		DOZER
7:00 AM			LOADER
3:00 PM	(8 HRS)		TRUCKS
Gross			
Tare			
NET			

2553 Signed



AND HEAVY EQUIPMENT  
 75 Providence Street, Rehoboth, MA 02769  
 Tel (508) 336-4272 • Fax (508) 336-4275

FOR CROWNIN  
 LOCATION CARVER TO PROV  
 DATE 11-15 2010

TRUCK# 5 DRIVER Pravdy

LOADS	YARDS	HOURS	DESCRIPTION
			GRAVEL
FROM	7:00		FILL
TO	3:30		LOAM
			DOZER
			LOADER
			TRUCKS
Gross			
Tare			
NET			

0567 Signed



AND HEAVY EQUIPMENT  
75 Providence Street, Rehoboth, MA 02769  
Tel (508) 336-4272 • Fax (508) 336-4275

FOR CROWN

LOCATION CARVER / PROU

DATE 11-15 2010

TRUCK# CANDIGIT # 3	DRIVER DENNIS
------------------------	------------------

LOADS	YARDS	HOURS	DESCRIPTION
3	LOADS	GRAVEL	GRAVEL
	78 YARDS		FILL
	CARVER TO		LOAM
	PROU		DOZER
700 AM			LOADER
300 PM	(8 HRS)		TRUCKS
Gross			
Tare			
NET			

2552

Signed 



AND HEAVY EQUIPMENT  
75 Providence Street, Rehoboth, MA 02769  
Tel (508) 336-4272 • Fax (508) 336-4275

FOR CROWN

LOCATION CARVER / PROU

DATE 11-15 2010

TRUCK# B+B # 13	DRIVER J Wells
--------------------	-------------------

LOADS	YARDS	HOURS	DESCRIPTION
3	LOADS	GRAVEL	GRAVEL
	78 YARDS		FILL
	CARVER TO		LOAM
	PROU		DOZER
700 AM			LOADER
300 PM	(8 HRS)		TRUCKS
Gross			
Tare			
NET			

2551

Signed 

47047

G. LOPES CONSTRUCTION, INC.

490 Winthrop Street, Taunton, MA 02780

(508) 824-4834 • 1-800-562-2479 • Fax (508) 880-3115

TRUCK SLIP

JOB # \_\_\_\_\_

DATE 11/12/10

SOLD TO: A C D

DELIVERED AT: \_\_\_\_\_ LOT # \_\_\_\_\_

PICK UP AT: Federal Pit

9 Loads structural sand fill

TRUCK NO.: \_\_\_\_\_ TD TA TW DRIVER: \_\_\_\_\_

RENTAL:  TIME IN: \_\_\_\_\_ TIME OUT: \_\_\_\_\_

P. O. #: \_\_\_\_\_

Yds.	Material	# Lds.	Yds.	Material	# Lds.
	Sep. Sand			1/2" Loam	
	Screen Sand			1" Loam	
				3" Loam	
	Common Fill				
	Structural Fill			Mulch / Compost	
				Clay	
	Bank Gravel				
	3" Screened Gravel			Other	
	1/2" Process Gravel				
	1/2" Blue Stone				
	Blue Stone Dust				

Received by X

*Jack Wells*

By signing this ticket, I agree with the above quantity (yardage/tonnage). We assume no responsibility for damage to property when delivery is made inside curbing.



AND HEAVY EQUIPMENT  
 75 Providence Street, Rehoboth, MA 02769  
 Tel (508) 336-4272 • Fax (508) 336-4275

FOR CRONIN

LOCATION CARVER - PROV.

DATE 11-12 20 10

TRUCK# <u>BFB #13</u>	DRIVER <u>J Wells</u>
--------------------------	--------------------------

LOADS	YARDS	HOURS	DESCRIPTION
<u>3</u>	<u>LOADS</u>	<u>GRAVEL</u>	<b>GRAVEL</b>
			<b>FILL</b>
			<b>LOAM</b>
	<u>CARVER</u>	<u>MA TO</u>	<b>DOZER</b>
	<u>PROV.</u>	<u>RI</u>	<b>LOADER</b>
<u>START</u>	<u>700 AM</u> <u>300 PM</u>		<b>TRUCKS</b>
<b>Gross</b>		<u>8 HRS</u>	
<b>Tare</b>			
<b>NET</b>			

2296

Signed



AND HEAVY EQUIPMENT  
75 Providence Street, Rehoboth, MA 02769  
Tel (508) 336-4272 • Fax (508) 336-4275



AND HEAVY EQUIPMENT  
75 Providence Street, Rehoboth, MA 02769  
Tel (508) 336-4272 • Fax (508) 336-4275

FOR CRONIN

LOCATION CARVER - PROU.

DATE 11-12 2010

TRUCK# <u>CANDIGIT # 11</u>	DRIVER <u>DERICK</u>
--------------------------------	-------------------------

LOADS	YARDS	HOURS	DESCRIPTION
	<u>LOADS</u>	<u>GRAVEL</u>	<u>GRAVEL</u>
			<u>FILL</u>
	<u>CARVER</u>	<u>MA TO</u>	<u>LOAM</u>
	<u>PROU</u>	<u>CA</u>	<u>DOZER</u>
			<u>LOADER</u>
<u>FRUIT</u> <u>GRAVEL</u>	<u>2000</u> <u>2000</u>	<u>8hrs</u>	<u>TRUCKS</u>
Gross			
Tare			
NET			

2298

Signed [Signature]

FOR CRONIN

LOCATION CARVER - PROU.

DATE 11-12 2010

TRUCK# <u>CANDIGIT # 3</u>	DRIVER <u>DENNIS</u>
-------------------------------	-------------------------

LOADS	YARDS	HOURS	DESCRIPTION
	<u>LOADS</u>	<u>GRAVEL</u>	<u>GRAVEL</u>
			<u>FILL</u>
			<u>LOAM</u>
	<u>CARVER</u>	<u>MA TO</u>	<u>DOZER</u>
	<u>PROU</u>	<u>8hrs</u>	<u>LOADER</u>
<u>FRUIT</u> <u>GRAVEL</u>	<u>200</u> <u>700 AM</u>	<u>8hrs</u>	<u>TRUCKS</u>
Gross			
Tare			
NET			

2297

Signed [Signature]

47046

G. LOPES CONSTRUCTION, INC.

490 Winthrop Street, Taunton, MA 02780

(508) 824-4834 • 1-800-562-2479 • Fax (508) 880-3115

TRUCK SLIP

JOB # \_\_\_\_\_

DATE 11/11/10

SOLD TO: RC D

DELIVERED AT: \_\_\_\_\_ LOT # \_\_\_\_\_

PICK UP AT: Federal Pit

Trailer loads BARK FILL

TRUCK NO.: \_\_\_\_\_ (TD) TA TW DRIVER: \_\_\_\_\_

RENTAL:  TIME IN: \_\_\_\_\_ TIME OUT: \_\_\_\_\_

P. O. #: \_\_\_\_\_

Yds.	Material	# Lds.	Yds.	Material	# Lds.
	Sep. Sand			3/4" Loam	
	Screen Sand			1" Loam	
	<u>Bank FILL</u>	<u>24 Loads</u>		3" Loam	
	Common Fill	<u>26 yds</u>		<u>A LOAD</u>	
	Structural Fill			Mulch / Compost	
	<u>8 Trucks 3 Loads</u>			Clay	
	Bank Gravel	<u>A PEACE</u>			
	3" Screened Gravel			Other	
	3/4" Process Gravel				
	3/4" Blue Stone				
	Blue Stone Dust				

Received by X

David

By signing this ticket, I agree with the above quantity (yardage/tonnage). We assume no responsibility for damage to property when delivery is made inside curbing.





AND HEAVY EQUIPMENT

75 Providence Street, Rehoboth, MA 02769  
Tel (508) 336-4272 • Fax (508) 336-4275

FOR CROWNIA

LOCATION CARVER Mas.

DATE 10/11 20 10

TRUCK#  
8#

DRIVER  
Mrs. Pazzetta

LOADS	YARDS	HOURS	DESCRIPTION
<u>1/11</u>	<u>200</u>		GRAVEL
<u>2/11</u>			FILL
			LOAM
			DOZER
			LOADER
			TRUCKS
Gross			<u>011.17.00</u> <u>014.2.00</u>
Tare			
NET			

0024

Signed [Signature]



AND HEAVY EQUIPMENT

75 Providence Street, Rehoboth, MA 02769  
Tel (508) 336-4272 • Fax (508) 336-4275

FOR CROWNIA

LOCATION CARVER / PROVIDENCE

DATE 11/11 20 10

TRUCK#  
6

DRIVER  
FRANK

LOADS	YARDS	HOURS	DESCRIPTION
<u>START @</u>	<u>7:00 AM</u>		GRAVEL
	<u>2:00</u>		FILL
			LOAM
			DOZER
			LOADER
			TRUCKS
Gross			
Tare			
NET			

1553

Signed [Signature]

**B.B. COLELLO, INC.**

75 Providence Street • Rehoboth, MA 02769

Tel (508) 336-4272 • Fax (508) 336-4275



AND HEAVY EQUIPMENT

75 Providence Street, Rehoboth, MA 02769

Tel (508) 336-4272 • Fax (508) 336-4275

FOR C. Cronin

LOCATION Carver to Pond

DATE 11-11 20 10

TRUCK# 44 DRIVER [Signature]

LOADS	YARDS	HOURS	DESCRIPTION
31dc			GRAVEL
	Start	700	FILL
	Finish	330	LOAM
	8 1/2 hrs		DOZER
			LOADER
			TRUCKS
Gross			
Tare			
Net			

0465

Signed [Signature]

FOR CRONIN

LOCATION Carver / Pond

DATE 11-11 20 10

TRUCK# BTB # 13 DRIVER J Wells

LOADS	YARDS	HOURS	DESCRIPTION
3	LOADS	GRAVEL	GRAVEL
	Carver to Pond		FILL
	78 YARDS		LOAM
			DOZER
Start	700		LOADER
Finish	300	8 hrs	TRUCKS
Gross			
Tare			
NET			

2295

Signed [Signature]



AND HEAVY EQUIPMENT

75 Providence Street, Rehoboth, MA 02769  
Tel (508) 336-4272 • Fax (508) 336-4275

FOR CROWNIA Trucking  
LOCATION Job Passagasett Rd Prov  
DATE 11/21 2010

TRUCK# 24 DRIVER DAVID

LOADS	YARDS	HOURS	DESCRIPTION
<u>3</u>	<u>26 yds A Load</u>		<u>GRAVEL</u>
<u>From</u>	<u>6 Lanes At Carver</u>		<u>FILL</u>
			<u>LOAM</u>
<u>7:00</u>	<u>START</u>		<u>DOZER</u>
<u>3:00</u>	<u>Finish</u>		<u>LOADER</u>
<u>8</u>	<u>Total Hours</u>		<u>TRUCKS</u>
Gross			
Tare			
NET			

2390

Signed [Signature]



AND HEAVY EQUIPMENT

75 Providence Street, Rehoboth, MA 02769  
Tel (508) 336-4272 • Fax (508) 336-4275

FOR CROWNIA Trucking / RCD  
LOCATION Passagasett Rd Providence From  
DATE 11/21 2010 G. Lopez in charge

TRUCK# 20 DRIVER Devin

LOADS	YARDS	HOURS	DESCRIPTION
<u>3</u>	<u>26 yd</u>	<u>Am pm 7:00-3:00</u>	<u>GRAVEL</u>
			<u>FILL</u>
			<u>LOAM</u>
			<u>DOZER</u>
			<u>LOADER</u>
			<u>TRUCKS</u>
Gross			
Tare			
NET			

1140

Signed [Signature]



AND HEAVY EQUIPMENT  
75 Providence Street, Rehoboth, MA 02769  
Tel (508) 336-4272 • Fax (508) 336-4275

FOR CROWNIN

LOCATION Carver to Prov

DATE 11-11 2010

TRUCK# 03 DRIVER NORRIS

LOADS	YARDS	HOURS	DESCRIPTION
3-loads			GRAVEL
			FILL
17-	315		LOAM
			DOZER
			LOADER
			TRUCKS
Gross			
Tare			
NET			

2512

Signed [Signature]



AND HEAVY EQUIPMENT  
75 Providence Street, Rehoboth, MA 02769  
Tel (508) 336-4272 • Fax (508) 336-4275

FOR CROWNIN

LOCATION CARVER to PROV

DATE 11-11 2010

TRUCK# 5 DRIVER RANDY

LOADS	YARDS	HOURS	DESCRIPTION
3-loads			GRAVEL
			FILL
17-	315		LOAM
			DOZER
			LOADER
			TRUCKS
Gross			
Tare			
NET			

0566

Signed [Signature]

**47042 G. LOPES CONSTRUCTION, INC.**  
 490 Winthrop Street, Taunton, MA 02780  
 (508) 824-4834 • 1-800-562-2479 • Fax (508) 880-3115  
**TRUCK SLIP**

JOB # \_\_\_\_\_ DATE 11/9/10

SOLD TO: R C D

DELIVERED AT: \_\_\_\_\_ LOT # \_\_\_\_\_

PICK UP AT: Federal Pit  
trailer loads fill

TRUCK NO.: \_\_\_\_\_ TD TA TW DRIVER: \_\_\_\_\_

RENTAL:  TIME IN: \_\_\_\_\_ TIME OUT: \_\_\_\_\_

P. O. #: \_\_\_\_\_

Yds.	Material	# Lds.	Yds.	Material	# Lds.
	Sep. Sand			1/2" Loam	
	Screen Sand			1" Loam	
				3" Loam	
	<u>Common Fill</u>				
	Structural Fill			Mulch / Compost	
				Clay	
	Bank Gravel				
	3" Screened Gravel			Other	
	1/2" Process Gravel				
	1/2" Blue Stone				
	Blue Stone Dust				

*12 lds*

Received by X [Signature]  
 By signing this ticket, I agree with the above quantity (yardage/tonnage). We assume no responsibility for damage to property when delivery is made inside curbing.



AND HEAVY EQUIPMENT

75 Providence Street, Rehoboth, MA 02769  
Tel (508) 336-4272 • Fax (508) 336-4275

FOR Crownie Trucking

LOCATION Job Pongusert Rd Prou Rt

DATE 11-9 2010

TRUCK#	DRIVER
24	David

LOADS	YARDS	HOURS	DESCRIPTION
3	26 yds Akond		GRAVEL
	From G Lopes Pit Carver		FILL
			LOAM
7:00	START		DOZER
3:30	FINISH		LOADER
8 1/2	TOTAL HOURS		TRUCKS
Gross			
Tare			
NET			

2389

Signed



AND HEAVY EQUIPMENT

75 Providence Street, Rehoboth, MA 02769  
Tel (508) 336-4272 • Fax (508) 336-4275

FOR CRONIN RC AND D

LOCATION CARVER / Prou

DATE 11-09 2010

TRUCK#	DRIVER
B+B # 13	Jwells

LOADS	YARDS	HOURS	DESCRIPTION
3	LOADS GRAVEL		GRAVEL
	78 YARDS		FILL
	CARVER MA		LOAM
	Prou Rt		DOZER
START	7:00 AM		LOADER
END	3:30 PM	8 1/2 hrs	TRUCKS
Gross			
Tare			
NET			

2294

Signed



AND HEAVY EQUIPMENT  
 75 Providence Street, Rehoboth, MA 02769  
 Tel (508) 336-4272 • Fax (508) 336-4275

FOR CROWN CONSTRUCTION (ROAD)  
 LOCATION CARVER TO PROV  
 DATE 11-9-2010

TRUCK# 5 DRIVER Bandy

LOADS	YARDS	HOURS	DESCRIPTION
3	FROM CARVER		GRAVEL
	TO PROV		FILL
			LOAM
			DOZER
From	7:00		LOADER
To	3:30		TRUCKS
Gross			
Tare			
NET			

2100 Signed [Signature]



AND HEAVY EQUIPMENT  
 75 Providence Street, Rehoboth, MA 02769  
 Tel (508) 336-4272 • Fax (508) 336-4275

FOR Crown  
 LOCATION Carver to Providence  
 DATE 11-9-2010

TRUCK# 44 DRIVER El

LOADS	YARDS	HOURS	DESCRIPTION
3 loads	Start 700		GRAVEL
	Finish 330		FILL
			LOAM
		8 1/2 hrs	DOZER
			LOADER
			TRUCKS
Gross			
Tare			
NET			

1031 Signed [Signature]

**Lincoln Lace & Braid**  
55 Ponagansett Ave. Providence, RI

**Gravel / Fill**

Load Date	No. of Trucks	G. Lopes Ticket No.	B&B Trucking Ticket No.	Truck No.	Load Volume (CY)	No. of Loads	Hours	Total (CY)
11/19/2010	1	80765	463	Candigit 17	28	3	8.5	84
11/19/2010	1	80765	462	Candigit 11	28	3	8.5	84
11/19/2010	1	80765	461	Candigit 3	28	3	8.5	84
<b>11/19/2010</b>	<b>6</b>					<b>18</b>	<b>49.5</b>	<b>504</b>
12/1/2010	1	62965	N/A	204	28	3	8	84
12/1/2010	1	73573	N/A	184	28	3	8	84
12/1/2010	1	79859	N/A	208	28	3	8	84
<b>12/1/2010</b>	<b>3</b>					<b>9</b>	<b>24</b>	<b>252</b>
12/2/2010	1	62789	N/A	190	28	3	8	84
12/2/2010	1	73574	N/A	184	28	3	8	84
12/2/2010	1	79031	N/A	202	28	3	8	84
12/2/2010	1	80382	N/A	188.149	28	3	8	84
<b>12/2/2010</b>	<b>4</b>					<b>12</b>	<b>32</b>	<b>336</b>
12/3/2010	1	62790	N/A	190	28	3	8	84
12/3/2010	1	64632	N/A	171	28	3	8	84
12/3/2010	1	79032	N/A	202	28	3	8	84
12/3/2010	1	73575	N/A	184	28	3	8	84
<b>12/3/2010</b>	<b>4</b>					<b>12</b>	<b>32</b>	<b>336</b>
12/6/2010	1	73576	N/A	184	28	2	5	56
<b>12/6/2010</b>	<b>1</b>					<b>2</b>	<b>5</b>	<b>56</b>
						<b>180</b>	<b>492</b>	<b>5040</b>



**Lincoln Lace & Braid**  
55 Ponagansett Ave. Providence, RI

**Gravel / Fill**

Load Date	No. of Trucks	G. Lopes Ticket No.	B&B Trucking Ticket No.	Truck No.	Load Volume (CY)	No. of Loads	Hours	Total (CY)
11/9/2010	1	47042	1031	44	28	3	8.5	84
11/9/2010	1	47042	2294	13	28	3	8.5	84
11/9/2010	1	47042	2100	5	28	3	8.5	84
11/9/2010	1	47042	2389	24	28	3	8.5	84
<b>11/9/2010</b>	<b>4</b>					<b>12</b>	<b>34</b>	<b>336</b>
11/11/2010	1	47046	2512	23	28	3	8.25	84
11/11/2010	1	47046	566	5	28	3	8.25	84
11/11/2010	1	47046	24	8	28	3	8	84
11/11/2010	1	47046	1553	6	28	3	8	84
11/11/2010	1	47046	465	44	28	3	8.5	84
11/11/2010	1	47046	2295	13	28	3	8	84
11/11/2010	1	47046	1140	20	28	3	8	84
11/11/2010	1	47046	2390	24	28	3	8	84
<b>11/11/2010</b>	<b>8</b>					<b>24</b>	<b>65</b>	<b>672</b>
11/12/2010	1	47047	2297	Candigit 3	28	3	8	84
11/12/2010	1	47047	2298	Candigit 11	28	3	8	84
11/12/2010	1	47047	2296	13	28	3	8	84
<b>11/12/2010</b>	<b>3</b>					<b>9</b>	<b>24</b>	<b>252</b>
11/15/2010	1	47048	2551	13	28	3	8	84
11/15/2010	1	47048	2552	Candigit 3	28	3	8	84
11/15/2010	1	47048	567	5	28	3	8.5	84
11/15/2010	1	47048	2553	Candigit 11	28	3	8	84
11/15/2010	1	47048	2554	Candigit 17	28	3	8	84
11/15/2010	1	47048	2555	Almeida 7	28	3	8	84
11/15/2010	1	47048	2556	Almeida 9	28	3	8	84
<b>11/15/2010</b>	<b>7</b>					<b>21</b>	<b>56.5</b>	<b>588</b>
11/16/2010	1		454	Candigit 17	28	2	6.5	56
11/16/2010	1		453	Candigit 11	28	3	8.5	84
11/16/2010	1		452	Candigit 3	28	3	8.5	84
<b>11/16/2010</b>	<b>3</b>					<b>8</b>	<b>23.5</b>	<b>224</b>
11/17/2010	1	344559	457	Candigit 17	28	3	8.5	84
11/17/2010	1	344559	455	Candigit 3	28	3	8.5	84
11/17/2010	1	344559	456	Candigit 11	28	3	8.5	84
11/17/2010	1	344559	25	8	28	2	4.5	56
11/17/2010	1	344559	466	44	28	2	5.5	56
11/17/2010	1	344559	569	5	28	3	8.5	84
11/17/2010	1	344559	1554	6	28	2	5	56
11/17/2010	1	344559	2391	24	28	3	8.5	84
11/17/2010	1	344559	2560	13	28	3	8.5	84
11/17/2010	1	344559	2561	Almeida 7	28	3	8.5	84
11/17/2010	1	344559	2562	Almeida 9	28	3	8.5	84
<b>11/17/2010</b>	<b>11</b>					<b>30</b>	<b>83</b>	<b>840</b>
11/18/2010	1	80760	2563	13	28	2	4	56
11/18/2010	1	80760	458	Candigit 3	28	3	8.5	84
11/18/2010	1	80760	459	Candigit 11	28	3	8.5	84
11/18/2010	1	80760	460	Candigit 17	28	3	8.5	84
11/18/2010	1	80760	570	5	28	3	8.5	84
11/18/2010	1	80760	2564	Almeida 7	28	3	8.5	84
11/18/2010	1	80760	2566	Almeida 9	28	3	8.5	84
11/18/2010	1	80760	2567	Almeida 4	28	3	8.5	84
<b>11/18/2010</b>	<b>8</b>					<b>23</b>	<b>63.5</b>	<b>644</b>
11/19/2010	1	80765	2569	Almeida 9	28	3	8	84
11/19/2010	1	80765	2570	Almeida 7	28	3	8	84
11/19/2010	1	80765	2392	24	28	3	8	84

Date: 12-7-10

Main Office  
125 Turnpike Street  
Canton, MA 02021

read custom soils

Sold to:

POWAGANSETT AVE.

a Division of **WILL SHAW/CANTON**

Address: PROVIDENCE, R.I.

City/State:

Job Name: LINCOLN LACE

1-888-475-5526

PO #

Qty	Description	Unit Price	Amount
25yds	Loam 1" SCR. LOAM		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		

Charge	COD	Picked Up	Delivered
Truck: J.K. ANBUS INC			Sub Total
Gross:			Tax
Tare:			Delivery
Net:			Total

38191

Received By: *[Signature]*

Date: 12-1-10

Main Office  
125 Turnpike Street  
Canton, MA 02021

read custom soils

Sold to:

POWAGANSETT AVE.

a Division of **WILL SHAW/CANTON**

Address: PROVIDENCE, R.I.

City/State:

Job Name: LINCOLN LACE

1-888-475-5526

PO #

Qty	Description	Unit Price	Amount
25yds	Loam 1" SCR. LOAM		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		

Charge	COD	Picked Up	Delivered
Truck: J.K. ANBUS INC			Sub Total
Gross:			Tax
Tare:			Delivery
Net:			Total

37771

Received By: *[Signature]*

Main Office  
125 Turnpike Street  
Canton, MA 02021

Date: 12-6-10

read custom soils

Sold to: **R.C.D.  
POMANSSETT AVE.  
PROVIDENCE R.I.**

a Division of **MILL SAND/CANTON**

1-888-475-5526

Job Name: **LINCOLN LACE**

PO. #

Qty	Description	Unit Price	Amount
25 yds	Loam 1" SCR LOAM		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		
Charge	COD	Picked Up	Delivered
Truck: <b>J K ANGUS INC.</b>			
Gross:	Sub Total		
Tare:	Tax		
Net:	Delivery		
	Total		

38192

Received By:

Main Office  
125 Turnpike Street  
Canton, MA 02021

Date: 12/07/10

read custom soils

Sold to: **R.C.D.  
POMANSSETT AVE.  
PROVIDENCE, R.I.**

a Division of **MILL SAND/CANTON**

1-888-475-5526

Job Name:

PO. #

Qty	Description	Unit Price	Amount
25 yd's	Loam 1" screened		
	Topdressing Sand		
	Bunker Sand		
	Topdressing Mix		
	Root Zone Mix		
	Infield Mix		
	Roof Garden Soil		
	Other		
Charge	COD	Picked Up	Delivered
Truck: <b>Blanton</b>			
Gross:	Sub Total		
Tare:	Tax		
Net:	Delivery		
	Total		

38213

Received By:

*Appendix E*

*Certificates of Analysis of Imported Soils*

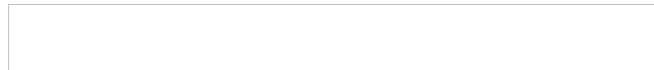


*CERTIFICATE OF ANALYSIS*

Rob Schuster  
RC & D  
17 Gordon Avenue, Suite 204  
Providence, RI 02905-1952

**RE: Lincoln Lace (1006)**  
**ESS Laboratory Work Order Number: 1012057**

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

Laurel Stoddard  
Laboratory Director

**Analytical Summary**

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

ESS Laboratory certifies that the test results meet the requirements of NELAC and A2LA, except where noted within this project narrative.



*CERTIFICATE OF ANALYSIS*

Client Name: RC & D  
Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1012057

**SAMPLE RECEIPT**

The following samples were received on December 03, 2010 for the analyses specified on the enclosed Chain of Custody Record.

**Client did not deliver samples in a cooler. VOCs were preserved in methanol by ESS Laboratory.**

<b>Lab Number</b>	<b>SampleName</b>	<b>Matrix</b>	<b>Analysis</b>
1012057-01	1006-GFGrab08	Soil	6010B, 7471A, 7841, 8100M, 8260B, 8270C

## CERTIFICATE OF ANALYSIS

Client Name: RC & D  
Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1012057

## PROJECT NARRATIVE

**8270C Semi-Volatile Organic Compounds**CL00623-MSD1 [Relative percent difference for duplicate is outside of criteria \(D+\).](#)

Pyridine (33%)

CTL0044-CCV1 [Calibration required quadratic regression \(Q\).](#)

2,4-Dinitrophenol (109% @ 70-130%), Hexachlorocyclopentadiene (97% @ 70-130%),

Pentachlorophenol (119% @ 80-120%)

**No other observations noted.****End of Project Narrative.**

## DATA USABILITY LINKS

[Definitions of Quality Control Parameters](#)[Semivolatile Organics Internal Standard Information](#)[Semivolatile Organics Surrogate Information](#)[Volatile Organics Internal Standard Information](#)[Volatile Organics Surrogate Information](#)[EPH and VPH Alkane Lists](#)



*CERTIFICATE OF ANALYSIS*

Client Name: RC & D  
Client Project ID: Lincoln Lace  
Client Sample ID: 1006-GFGrab08  
Date Sampled: 12/03/10 14:00  
Percent Solids: 95

ESS Laboratory Work Order: 1012057  
ESS Laboratory Sample ID: 1012057-01  
Sample Matrix: Soil  
Units: mg/kg dry

**3050B/6000/7000 Total Metals**

**RI - RES DEC**

<u>Analyte</u>	<u>Results (MRL)</u>	<u>Method</u>	<u>Limit</u>	<u>DF</u>	<u>Analyst</u>	<u>Analyzed</u>	<u>I/V</u>	<u>F/V</u>	<u>Batch</u>
Antimony	ND (4.8)	6010B	10	1	SVD	12/08/10 17:47	2.18	100	CL00601
Arsenic	ND (2.4)	6010B	7	1	SVD	12/08/10 17:47	2.18	100	CL00601
<b>Beryllium</b>	<b>0.15</b> (0.10)	6010B	0.4	1	SVD	12/08/10 17:47	2.18	100	CL00601
Cadmium	ND (0.49)	6010B	39	1	SVD	12/08/10 17:47	2.18	100	CL00601
<b>Chromium</b>	<b>2.5</b> (1.0)	6010B	1400	1	SVD	12/08/10 17:47	2.18	100	CL00601
Copper	ND (2.4)	6010B	3100	1	SVD	12/08/10 17:47	2.18	100	CL00601
Lead	ND (4.8)	6010B	150	1	SVD	12/08/10 17:47	2.18	100	CL00601
Mercury	ND (0.032)	7471A	23	1	JP	12/07/10 16:43	0.66	40	CL00602
Nickel	ND (2.4)	6010B	1000	1	SVD	12/08/10 17:47	2.18	100	CL00601
Selenium	ND (4.8)	6010B	390	1	SVD	12/08/10 17:47	2.18	100	CL00601
Silver	ND (0.49)	6010B	200	1	SVD	12/08/10 17:47	2.18	100	CL00601
Thallium	ND (1.20)	7841	5.5	5	SVD	12/10/10 17:15	2.18	100	CL00601
<b>Zinc</b>	<b>3.3</b> (2.4)	6010B	6000	1	SVD	12/08/10 17:47	2.18	100	CL00601





*CERTIFICATE OF ANALYSIS*

Client Name: RC & D  
Client Project ID: Lincoln Lace  
Client Sample ID: 1006-GFGrab08  
Date Sampled: 12/03/10 14:00  
Percent Solids: 95  
Initial Volume: 20.3  
Final Volume: 15  
Extraction Method: 5035

ESS Laboratory Work Order: 1012057  
ESS Laboratory Sample ID: 1012057-01  
Sample Matrix: Soil  
Units: mg/kg dry  
Analyst: MD

**5035/8260B Volatile Organic Compounds / Methanol**

**RI - RES DEC**

<u>Analyte</u>	<u>Results (MRL)</u>	<u>MDL</u>	<u>Limit</u>	<u>DF</u>	<u>Analyzed</u>	<u>Sequence</u>	<u>Batch</u>
1,1,1,2-Tetrachloroethane	ND (0.0830)	0.0072	2.2	1	12/06/10 22:33	CTL0041	CL00619
1,1,1-Trichloroethane	ND (0.0415)	0.0073	540	1	12/06/10 22:33	CTL0041	CL00619
1,1,2,2-Tetrachloroethane	ND (0.0415)	0.0113	1.3	1	12/06/10 22:33	CTL0041	CL00619
1,1,2-Trichloroethane	ND (0.0415)	0.0104	3.6	1	12/06/10 22:33	CTL0041	CL00619
1,1-Dichloroethane	ND (0.0415)	0.0066	920	1	12/06/10 22:33	CTL0041	CL00619
1,1-Dichloroethene	ND (0.0415)	0.0102	0.2	1	12/06/10 22:33	CTL0041	CL00619
1,1-Dichloropropene	ND (0.0415)	0.0064		1	12/06/10 22:33	CTL0041	CL00619
1,2,3-Trichlorobenzene	ND (0.0415)	0.0139		1	12/06/10 22:33	CTL0041	CL00619
1,2,3-Trichloropropane	ND (0.0415)	0.0103		1	12/06/10 22:33	CTL0041	CL00619
1,2,4-Trichlorobenzene	ND (0.0415)	0.0091	96	1	12/06/10 22:33	CTL0041	CL00619
1,2,4-Trimethylbenzene	ND (0.0415)	0.0080		1	12/06/10 22:33	CTL0041	CL00619
1,2-Dibromo-3-Chloropropane	ND (0.249)	0.0830	0.5	1	12/06/10 22:33	CTL0041	CL00619
1,2-Dibromoethane	ND (0.0415)	0.0105	0.01	1	12/06/10 22:33	CTL0041	CL00619
1,2-Dichlorobenzene	ND (0.0415)	0.0059	510	1	12/06/10 22:33	CTL0041	CL00619
1,2-Dichloroethane	ND (0.0415)	0.0111	0.9	1	12/06/10 22:33	CTL0041	CL00619
1,2-Dichloropropane	ND (0.0415)	0.0109	1.9	1	12/06/10 22:33	CTL0041	CL00619
1,3,5-Trimethylbenzene	ND (0.0415)	0.0073		1	12/06/10 22:33	CTL0041	CL00619
1,3-Dichlorobenzene	ND (0.0415)	0.0052	430	1	12/06/10 22:33	CTL0041	CL00619
1,3-Dichloropropane	ND (0.0415)	0.0093		1	12/06/10 22:33	CTL0041	CL00619
1,4-Dichlorobenzene	ND (0.0415)	0.0110	27	1	12/06/10 22:33	CTL0041	CL00619
1,4-Dioxane - Screen	ND (4.15)	1.39		1	12/06/10 22:33	CTL0041	CL00619
1-Chlorohexane	ND (0.0415)	0.0079		1	12/06/10 22:33	CTL0041	CL00619
2,2-Dichloropropane	ND (0.0830)	0.0142		1	12/06/10 22:33	CTL0041	CL00619
2-Butanone	ND (1.04)	0.240	10000	1	12/06/10 22:33	CTL0041	CL00619
2-Chlorotoluene	ND (0.0415)	0.0117		1	12/06/10 22:33	CTL0041	CL00619
2-Hexanone	ND (0.415)	0.0715		1	12/06/10 22:33	CTL0041	CL00619
4-Chlorotoluene	ND (0.0415)	0.0054		1	12/06/10 22:33	CTL0041	CL00619
4-Isopropyltoluene	ND (0.0415)	0.0074		1	12/06/10 22:33	CTL0041	CL00619
4-Methyl-2-Pentanone	ND (0.415)	0.0500	1200	1	12/06/10 22:33	CTL0041	CL00619
Acetone	ND (1.04)	0.307	7800	1	12/06/10 22:33	CTL0041	CL00619
Benzene	ND (0.0415)	0.0067	2.5	1	12/06/10 22:33	CTL0041	CL00619



*CERTIFICATE OF ANALYSIS*

Client Name: RC & D  
 Client Project ID: Lincoln Lace  
 Client Sample ID: 1006-GFGrab08  
 Date Sampled: 12/03/10 14:00  
 Percent Solids: 95  
 Initial Volume: 20.3  
 Final Volume: 15  
 Extraction Method: 5035

ESS Laboratory Work Order: 1012057  
 ESS Laboratory Sample ID: 1012057-01  
 Sample Matrix: Soil  
 Units: mg/kg dry  
 Analyst: MD

**5035/8260B Volatile Organic Compounds / Methanol**

<u>Analyte</u>	<u>Results (MRL)</u>	<u>MDL</u>	<u>RI - RES DEC</u>		<u>Analyzed</u>	<u>Sequence</u>	<u>Batch</u>
			<u>Limit</u>	<u>DF</u>			
Bromobenzene	ND (0.0415)	0.0114		1	12/06/10 22:33	CTL0041	CL00619
Bromochloromethane	ND (0.0415)	0.0135		1	12/06/10 22:33	CTL0041	CL00619
Bromodichloromethane	ND (0.0415)	0.0057	10	1	12/06/10 22:33	CTL0041	CL00619
Bromoform	ND (0.0415)	0.0120	81	1	12/06/10 22:33	CTL0041	CL00619
Bromomethane	ND (0.0830)	0.0277	0.8	1	12/06/10 22:33	CTL0041	CL00619
Carbon Disulfide	ND (0.0415)	0.0061		1	12/06/10 22:33	CTL0041	CL00619
Carbon Tetrachloride	ND (0.0415)	0.0072	1.5	1	12/06/10 22:33	CTL0041	CL00619
Chlorobenzene	ND (0.0415)	0.0066	210	1	12/06/10 22:33	CTL0041	CL00619
Chloroethane	ND (0.0830)	0.0277		1	12/06/10 22:33	CTL0041	CL00619
Chloroform	ND (0.0415)	0.0086	1.2	1	12/06/10 22:33	CTL0041	CL00619
Chloromethane	ND (0.0830)	0.0105		1	12/06/10 22:33	CTL0041	CL00619
cis-1,2-Dichloroethene	ND (0.0415)	0.0103	630	1	12/06/10 22:33	CTL0041	CL00619
cis-1,3-Dichloropropene	ND (0.0415)	0.0094		1	12/06/10 22:33	CTL0041	CL00619
Dibromochloromethane	ND (0.0415)	0.0105	7.6	1	12/06/10 22:33	CTL0041	CL00619
Dibromomethane	ND (0.0415)	0.0131		1	12/06/10 22:33	CTL0041	CL00619
Dichlorodifluoromethane	ND (0.0415)	0.0072		1	12/06/10 22:33	CTL0041	CL00619
Diethyl Ether	ND (0.0415)	0.0105		1	12/06/10 22:33	CTL0041	CL00619
Di-isopropyl ether	ND (0.0415)	0.0078		1	12/06/10 22:33	CTL0041	CL00619
Ethyl tertiary-butyl ether	ND (0.0415)	0.0105		1	12/06/10 22:33	CTL0041	CL00619
Ethylbenzene	ND (0.0415)	0.0054	71	1	12/06/10 22:33	CTL0041	CL00619
Hexachlorobutadiene	ND (0.0415)	0.0139	8.2	1	12/06/10 22:33	CTL0041	CL00619
Isopropylbenzene	ND (0.0415)	0.0073	27	1	12/06/10 22:33	CTL0041	CL00619
Methyl tert-Butyl Ether	ND (0.0415)	0.0066	390	1	12/06/10 22:33	CTL0041	CL00619
Methylene Chloride	ND (0.208)	0.0109	45	1	12/06/10 22:33	CTL0041	CL00619
Naphthalene	ND (0.0415)	0.0109	54	1	12/06/10 22:33	CTL0041	CL00619
n-Butylbenzene	ND (0.0415)	0.0102		1	12/06/10 22:33	CTL0041	CL00619
n-Propylbenzene	ND (0.0415)	0.0101		1	12/06/10 22:33	CTL0041	CL00619
sec-Butylbenzene	ND (0.0415)	0.0056		1	12/06/10 22:33	CTL0041	CL00619
Styrene	ND (0.0415)	0.0055	13	1	12/06/10 22:33	CTL0041	CL00619
tert-Butylbenzene	ND (0.0415)	0.0097		1	12/06/10 22:33	CTL0041	CL00619
Tertiary-amyl methyl ether	ND (0.0415)	0.0060		1	12/06/10 22:33	CTL0041	CL00619



*CERTIFICATE OF ANALYSIS*

Client Name: RC & D  
 Client Project ID: Lincoln Lace  
 Client Sample ID: 1006-GFGrab08  
 Date Sampled: 12/03/10 14:00  
 Percent Solids: 95  
 Initial Volume: 20.3  
 Final Volume: 15  
 Extraction Method: 5035

ESS Laboratory Work Order: 1012057  
 ESS Laboratory Sample ID: 1012057-01  
 Sample Matrix: Soil  
 Units: mg/kg dry  
 Analyst: MD

**5035/8260B Volatile Organic Compounds / Methanol**

**RI - RES DEC**

<u>Analyte</u>	<u>Results (MRL)</u>	<u>MDL</u>	<u>Limit</u>	<u>DF</u>	<u>Analyzed</u>	<u>Sequence</u>	<u>Batch</u>
Tetrachloroethene	ND (0.0415)	0.0139	12	1	12/06/10 22:33	CTL0041	CL00619
Tetrahydrofuran	ND (0.415)	0.107		1	12/06/10 22:33	CTL0041	CL00619
Toluene	ND (0.0415)	0.0105	190	1	12/06/10 22:33	CTL0041	CL00619
trans-1,2-Dichloroethene	ND (0.0415)	0.0136	1100	1	12/06/10 22:33	CTL0041	CL00619
trans-1,3-Dichloropropene	ND (0.0415)	0.0128		1	12/06/10 22:33	CTL0041	CL00619
Trichloroethene	ND (0.0415)	0.0086	13	1	12/06/10 22:33	CTL0041	CL00619
Trichlorofluoromethane	ND (0.0415)	0.0110		1	12/06/10 22:33	CTL0041	CL00619
Vinyl Acetate	ND (0.208)	0.0086		1	12/06/10 22:33	CTL0041	CL00619
Vinyl Chloride	ND (0.0415)	0.0137	0.02	1	12/06/10 22:33	CTL0041	CL00619
Xylene O	ND (0.0415)	0.0080	110	1	12/06/10 22:33	CTL0041	CL00619
Xylene P,M	ND (0.0830)	0.0161	110	1	12/06/10 22:33	CTL0041	CL00619
Xylenes (Total)	ND (0.125)		110	1	12/06/10 22:33		[CALC]

	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>
<i>Surrogate: 1,2-Dichloroethane-d4</i>	102 %		70-130
<i>Surrogate: 4-Bromofluorobenzene</i>	105 %		70-130
<i>Surrogate: Dibromofluoromethane</i>	111 %		70-130
<i>Surrogate: Toluene-d8</i>	110 %		70-130



*CERTIFICATE OF ANALYSIS*

Client Name: RC & D  
 Client Project ID: Lincoln Lace  
 Client Sample ID: 1006-GFGrab08  
 Date Sampled: 12/03/10 14:00  
 Percent Solids: 95  
 Initial Volume: 20.1  
 Final Volume: 1  
 Extraction Method: 3546

ESS Laboratory Work Order: 1012057  
 ESS Laboratory Sample ID: 1012057-01  
 Sample Matrix: Soil  
 Units: mg/kg dry  
 Analyst: SEP  
 Prepared: 12/8/10 18:00

**8100M Total Petroleum Hydrocarbons**

**RI - RES DEC**

<u>Analyte</u>	<u>Results (MRL)</u>	<u>Limit</u>	<u>DF</u>	<u>Analyzed</u>	<u>Sequence</u>	<u>Batch</u>
Total Petroleum Hydrocarbons	ND (39.3)	500	1	12/08/10 21:01	CTL0066	CL00819
	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>			
<i>Surrogate: O-Terphenyl</i>	<i>91 %</i>		<i>40-140</i>			

*CERTIFICATE OF ANALYSIS*

Client Name: RC & D  
 Client Project ID: Lincoln Lace  
 Client Sample ID: 1006-GFGrab08  
 Date Sampled: 12/03/10 14:00  
 Percent Solids: 95  
 Initial Volume: 14.5  
 Final Volume: 0.5  
 Extraction Method: 3546

ESS Laboratory Work Order: 1012057  
 ESS Laboratory Sample ID: 1012057-01  
 Sample Matrix: Soil  
 Units: mg/kg dry  
 Analyst: IBM  
 Prepared: 12/6/10 17:00

**8270C Semi-Volatile Organic Compounds**

**RI - RES DEC**

<u>Analyte</u>	<u>Results (MRL)</u>	<u>Limit</u>	<u>DF</u>	<u>Analyzed</u>	<u>Sequence</u>	<u>Batch</u>
1,1-Biphenyl	ND (0.363)	0.8	1	12/07/10 10:21	CTL0044	CL00623
1,2,4-Trichlorobenzene	ND (0.363)	96	1	12/07/10 10:21	CTL0044	CL00623
1,2-Dichlorobenzene	ND (0.363)	510	1	12/07/10 10:21	CTL0044	CL00623
1,3-Dichlorobenzene	ND (0.363)	430	1	12/07/10 10:21	CTL0044	CL00623
1,4-Dichlorobenzene	ND (0.363)	27	1	12/07/10 10:21	CTL0044	CL00623
2,3,4,6-Tetrachlorophenol	ND (1.82)		1	12/07/10 10:21	CTL0044	CL00623
2,4,5-Trichlorophenol	ND (0.363)	330	1	12/07/10 10:21	CTL0044	CL00623
2,4,6-Trichlorophenol	ND (0.363)	58	1	12/07/10 10:21	CTL0044	CL00623
2,4-Dichlorophenol	ND (0.363)	30	1	12/07/10 10:21	CTL0044	CL00623
2,4-Dimethylphenol	ND (0.363)	1400	1	12/07/10 10:21	CTL0044	CL00623
2,4-Dinitrophenol	ND (1.82)	160	1	12/07/10 10:21	CTL0044	CL00623
2,4-Dinitrotoluene	ND (0.363)	0.9	1	12/07/10 10:21	CTL0044	CL00623
2,6-Dinitrotoluene	ND (0.363)		1	12/07/10 10:21	CTL0044	CL00623
2-Chloronaphthalene	ND (0.363)		1	12/07/10 10:21	CTL0044	CL00623
2-Chlorophenol	ND (0.363)	50	1	12/07/10 10:21	CTL0044	CL00623
2-Methylnaphthalene	ND (0.363)	123	1	12/07/10 10:21	CTL0044	CL00623
2-Methylphenol	ND (0.363)		1	12/07/10 10:21	CTL0044	CL00623
2-Nitroaniline	ND (0.363)		1	12/07/10 10:21	CTL0044	CL00623
2-Nitrophenol	ND (0.363)		1	12/07/10 10:21	CTL0044	CL00623
3,3'-Dichlorobenzidine	ND (0.726)	1.4	1	12/07/10 10:21	CTL0044	CL00623
3+4-Methylphenol	ND (0.726)		1	12/07/10 10:21	CTL0044	CL00623
3-Nitroaniline	ND (0.363)		1	12/07/10 10:21	CTL0044	CL00623
4,6-Dinitro-2-Methylphenol	ND (1.82)		1	12/07/10 10:21	CTL0044	CL00623
4-Bromophenyl-phenylether	ND (0.363)		1	12/07/10 10:21	CTL0044	CL00623
4-Chloro-3-Methylphenol	ND (0.363)		1	12/07/10 10:21	CTL0044	CL00623
4-Chloroaniline	ND (0.726)	310	1	12/07/10 10:21	CTL0044	CL00623
4-Chloro-phenyl-phenyl ether	ND (0.363)		1	12/07/10 10:21	CTL0044	CL00623
4-Nitroaniline	ND (0.363)		1	12/07/10 10:21	CTL0044	CL00623
4-Nitrophenol	ND (1.82)		1	12/07/10 10:21	CTL0044	CL00623
Acenaphthene	ND (0.363)	43	1	12/07/10 10:21	CTL0044	CL00623
Acenaphthylene	ND (0.363)	23	1	12/07/10 10:21	CTL0044	CL00623

*CERTIFICATE OF ANALYSIS*

Client Name: RC & D  
 Client Project ID: Lincoln Lace  
 Client Sample ID: 1006-GFGrab08  
 Date Sampled: 12/03/10 14:00  
 Percent Solids: 95  
 Initial Volume: 14.5  
 Final Volume: 0.5  
 Extraction Method: 3546

ESS Laboratory Work Order: 1012057  
 ESS Laboratory Sample ID: 1012057-01  
 Sample Matrix: Soil  
 Units: mg/kg dry  
 Analyst: IBM  
 Prepared: 12/6/10 17:00

**8270C Semi-Volatile Organic Compounds**

**RI - RES DEC**

<u>Analyte</u>	<u>Results (MRL)</u>	<u>Limit</u>	<u>DF</u>	<u>Analyzed</u>	<u>Sequence</u>	<u>Batch</u>
Acetophenone	ND (0.726)		1	12/07/10 10:21	CTL0044	CL00623
Aniline	ND (0.726)		1	12/07/10 10:21	CTL0044	CL00623
Anthracene	ND (0.363)	35	1	12/07/10 10:21	CTL0044	CL00623
Azobenzene	ND (0.363)		1	12/07/10 10:21	CTL0044	CL00623
Benzo(a)anthracene	ND (0.363)	0.9	1	12/07/10 10:21	CTL0044	CL00623
Benzo(a)pyrene	ND (0.182)	0.4	1	12/07/10 10:21	CTL0044	CL00623
Benzo(b)fluoranthene	ND (0.363)	0.9	1	12/07/10 10:21	CTL0044	CL00623
Benzo(g,h,i)perylene	ND (0.363)	0.8	1	12/07/10 10:21	CTL0044	CL00623
Benzo(k)fluoranthene	ND (0.363)	0.9	1	12/07/10 10:21	CTL0044	CL00623
Benzoic Acid	ND (1.82)		1	12/07/10 10:21	CTL0044	CL00623
Benzyl Alcohol	ND (0.363)		1	12/07/10 10:21	CTL0044	CL00623
bis(2-Chloroethoxy)methane	ND (0.363)		1	12/07/10 10:21	CTL0044	CL00623
bis(2-Chloroethyl)ether	ND (0.363)	0.6	1	12/07/10 10:21	CTL0044	CL00623
bis(2-chloroisopropyl)Ether	ND (0.363)	9.1	1	12/07/10 10:21	CTL0044	CL00623
bis(2-Ethylhexyl)phthalate	ND (0.363)	46	1	12/07/10 10:21	CTL0044	CL00623
Butylbenzylphthalate	ND (0.363)		1	12/07/10 10:21	CTL0044	CL00623
Carbazole	ND (0.363)		1	12/07/10 10:21	CTL0044	CL00623
Chrysene	ND (0.182)	0.4	1	12/07/10 10:21	CTL0044	CL00623
Dibenzo(a,h)Anthracene	ND (0.182)	0.4	1	12/07/10 10:21	CTL0044	CL00623
Dibenzofuran	ND (0.363)		1	12/07/10 10:21	CTL0044	CL00623
Diethylphthalate	ND (0.363)	340	1	12/07/10 10:21	CTL0044	CL00623
Dimethylphthalate	ND (0.363)	1900	1	12/07/10 10:21	CTL0044	CL00623
Di-n-butylphthalate	ND (0.363)		1	12/07/10 10:21	CTL0044	CL00623
Di-n-octylphthalate	ND (0.363)		1	12/07/10 10:21	CTL0044	CL00623
Fluoranthene	ND (0.363)	20	1	12/07/10 10:21	CTL0044	CL00623
Fluorene	ND (0.363)	28	1	12/07/10 10:21	CTL0044	CL00623
Hexachlorobenzene	ND (0.182)	0.4	1	12/07/10 10:21	CTL0044	CL00623
Hexachlorobutadiene	ND (0.363)	8.2	1	12/07/10 10:21	CTL0044	CL00623
Hexachlorocyclopentadiene	ND (1.82)		1	12/07/10 10:21	CTL0044	CL00623
Hexachloroethane	ND (0.363)	46	1	12/07/10 10:21	CTL0044	CL00623
Indeno(1,2,3-cd)Pyrene	ND (0.363)	0.9	1	12/07/10 10:21	CTL0044	CL00623



*CERTIFICATE OF ANALYSIS*

Client Name: RC & D  
 Client Project ID: Lincoln Lace  
 Client Sample ID: 1006-GFGrab08  
 Date Sampled: 12/03/10 14:00  
 Percent Solids: 95  
 Initial Volume: 14.5  
 Final Volume: 0.5  
 Extraction Method: 3546

ESS Laboratory Work Order: 1012057  
 ESS Laboratory Sample ID: 1012057-01  
 Sample Matrix: Soil  
 Units: mg/kg dry  
 Analyst: IBM  
 Prepared: 12/6/10 17:00

**8270C Semi-Volatile Organic Compounds**

**RI - RES DEC**

<u>Analyte</u>	<u>Results (MRL)</u>	<u>Limit</u>	<u>DF</u>	<u>Analyzed</u>	<u>Sequence</u>	<u>Batch</u>
Isophorone	ND (0.363)		1	12/07/10 10:21	CTL0044	CL00623
Naphthalene	ND (0.363)	54	1	12/07/10 10:21	CTL0044	CL00623
Nitrobenzene	ND (0.363)		1	12/07/10 10:21	CTL0044	CL00623
N-Nitrosodimethylamine	ND (0.363)		1	12/07/10 10:21	CTL0044	CL00623
N-Nitroso-Di-n-Propylamine	ND (0.363)		1	12/07/10 10:21	CTL0044	CL00623
N-nitrosodiphenylamine	ND (0.363)		1	12/07/10 10:21	CTL0044	CL00623
Pentachlorophenol	ND (1.82)	5.3	1	12/07/10 10:21	CTL0044	CL00623
Phenanthrene	ND (0.363)	40	1	12/07/10 10:21	CTL0044	CL00623
Phenol	ND (0.363)	6000	1	12/07/10 10:21	CTL0044	CL00623
Pyrene	ND (0.363)	13	1	12/07/10 10:21	CTL0044	CL00623
Pyridine	ND (1.82)		1	12/07/10 10:21	CTL0044	CL00623

	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	68 %		30-130
<i>Surrogate: 2,4,6-Tribromophenol</i>	86 %		30-130
<i>Surrogate: 2-Chlorophenol-d4</i>	70 %		30-130
<i>Surrogate: 2-Fluorobiphenyl</i>	68 %		30-130
<i>Surrogate: 2-Fluorophenol</i>	72 %		30-130
<i>Surrogate: Nitrobenzene-d5</i>	72 %		30-130
<i>Surrogate: Phenol-d6</i>	77 %		30-130
<i>Surrogate: p-Terphenyl-d14</i>	96 %		30-130



*CERTIFICATE OF ANALYSIS*

Client Name: RC & D  
 Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1012057

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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3050B/6000/7000 Total Metals

**Batch CL00601 - 3050B**

<b>Blank</b>										
Antimony	ND	5.0	mg/kg wet							
Arsenic	ND	2.5	mg/kg wet							
Beryllium	ND	0.10	mg/kg wet							
Cadmium	ND	0.50	mg/kg wet							
Chromium	ND	1.0	mg/kg wet							
Copper	ND	2.5	mg/kg wet							
Lead	ND	5.0	mg/kg wet							
Nickel	ND	2.5	mg/kg wet							
Selenium	ND	5.0	mg/kg wet							
Silver	ND	0.50	mg/kg wet							
Thallium	ND	0.25	mg/kg wet							
Zinc	ND	2.5	mg/kg wet							

<b>LCS</b>										
Antimony	98.8	17.6	mg/kg wet	121.0		82	80-120			
Arsenic	94.3	8.8	mg/kg wet	109.0		86	80-120			
Beryllium	80.0	0.37	mg/kg wet	92.10		87	80-120			
Cadmium	103	1.76	mg/kg wet	110.0		93	80-120			
Chromium	83.7	3.5	mg/kg wet	93.40		90	80-120			
Copper	69.2	8.8	mg/kg wet	74.70		93	80-120			
Lead	149	17.6	mg/kg wet	152.0		98	80-120			
Nickel	104	8.8	mg/kg wet	109.0		96	80-120			
Selenium	187	17.6	mg/kg wet	207.0		90	80-120			
Silver	45.4	1.76	mg/kg wet	51.90		88	80-120			
Thallium	165	43.4	mg/kg wet	171.0		96	80-120			
Zinc	257	8.8	mg/kg wet	299.0		86	80-120			

<b>LCS Dup</b>										
Antimony	118	18.2	mg/kg wet	121.0		98	80-120	18	20	
Arsenic	95.9	9.1	mg/kg wet	109.0		88	80-120	2	20	
Beryllium	79.4	0.38	mg/kg wet	92.10		86	80-120	0.8	20	
Cadmium	100	1.83	mg/kg wet	110.0		91	80-120	2	20	
Chromium	85.1	3.6	mg/kg wet	93.40		91	80-120	2	20	
Copper	68.9	9.1	mg/kg wet	74.70		92	80-120	0.5	20	
Lead	148	18.2	mg/kg wet	152.0		98	80-120	0.4	20	
Nickel	104	9.1	mg/kg wet	109.0		95	80-120	0.7	20	
Selenium	188	18.2	mg/kg wet	207.0		91	80-120	0.9	20	
Silver	46.5	1.83	mg/kg wet	51.90		90	80-120	2	20	
Thallium	160	45.0	mg/kg wet	171.0		93	80-120	3	20	
Zinc	253	9.1	mg/kg wet	299.0		85	80-120	2	20	

**Batch CL00602 - 7471A**

<b>Blank</b>										
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CERTIFICATE OF ANALYSIS

Client Name: RC & D  
Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1012057

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
<b>3050B/6000/7000 Total Metals</b>										
<b>Batch CL00602 - 7471A</b>										
Mercury	ND	0.033	mg/kg wet							
<b>LCS</b>										
Mercury	17.5	1.62	mg/kg wet	16.30		107	80-120			
<b>LCS Dup</b>										
Mercury	18.4	1.62	mg/kg wet	16.30		113	80-120	5	20	
<b>Duplicate Source: 1012057-01</b>										
Mercury	ND	0.030	mg/kg dry		ND				35	
<b>Matrix Spike Source: 1012057-01</b>										
Mercury	0.185	0.033	mg/kg dry	0.1974	ND	94	75-125			
<b>Matrix Spike Dup Source: 1012057-01</b>										
Mercury	0.205	0.034	mg/kg dry	0.2071	ND	99	75-125	10	35	

**5035/8260B Volatile Organic Compounds / Methanol**

<b>Batch CL00619 - 5035</b>										
<b>Blank</b>										
1,1,1,2-Tetrachloroethane	ND	0.100	mg/kg wet							
1,1,1-Trichloroethane	ND	0.0500	mg/kg wet							
1,1,2,2-Tetrachloroethane	ND	0.0500	mg/kg wet							
1,1,2-Trichloroethane	ND	0.0500	mg/kg wet							
1,1-Dichloroethane	ND	0.0500	mg/kg wet							
1,1-Dichloroethene	ND	0.0500	mg/kg wet							
1,1-Dichloropropene	ND	0.0500	mg/kg wet							
1,2,3-Trichlorobenzene	ND	0.0500	mg/kg wet							
1,2,3-Trichloropropane	ND	0.0500	mg/kg wet							
1,2,4-Trichlorobenzene	ND	0.0500	mg/kg wet							
1,2,4-Trimethylbenzene	ND	0.0500	mg/kg wet							
1,2-Dibromo-3-Chloropropane	ND	0.300	mg/kg wet							
1,2-Dibromoethane	ND	0.0500	mg/kg wet							
1,2-Dichlorobenzene	ND	0.0500	mg/kg wet							
1,2-Dichloroethane	ND	0.0500	mg/kg wet							
1,2-Dichloropropane	ND	0.0500	mg/kg wet							
1,3,5-Trimethylbenzene	ND	0.0500	mg/kg wet							
1,3-Dichlorobenzene	ND	0.0500	mg/kg wet							
1,3-Dichloropropane	ND	0.0500	mg/kg wet							
1,4-Dichlorobenzene	ND	0.0500	mg/kg wet							
1,4-Dioxane - Screen	ND	5.00	mg/kg wet							
1-Chlorohexane	ND	0.0500	mg/kg wet							
2,2-Dichloropropane	ND	0.100	mg/kg wet							
2-Butanone	ND	1.25	mg/kg wet							
2-Chlorotoluene	ND	0.0500	mg/kg wet							
2-Hexanone	ND	0.500	mg/kg wet							
4-Chlorotoluene	ND	0.0500	mg/kg wet							
4-Isopropyltoluene	ND	0.0500	mg/kg wet							
4-Methyl-2-Pentanone	ND	0.500	mg/kg wet							



CERTIFICATE OF ANALYSIS

Client Name: RC & D  
Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1012057

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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5035/8260B Volatile Organic Compounds / Methanol

**Batch CL00619 - 5035**

Acetone	ND	1.25	mg/kg wet							
Benzene	ND	0.0500	mg/kg wet							
Bromobenzene	ND	0.0500	mg/kg wet							
Bromochloromethane	ND	0.0500	mg/kg wet							
Bromodichloromethane	ND	0.0500	mg/kg wet							
Bromoform	ND	0.0500	mg/kg wet							
Bromomethane	ND	0.100	mg/kg wet							
Carbon Disulfide	ND	0.0500	mg/kg wet							
Carbon Tetrachloride	ND	0.0500	mg/kg wet							
Chlorobenzene	ND	0.0500	mg/kg wet							
Chloroethane	ND	0.100	mg/kg wet							
Chloroform	ND	0.0500	mg/kg wet							
Chloromethane	ND	0.100	mg/kg wet							
cis-1,2-Dichloroethene	ND	0.0500	mg/kg wet							
cis-1,3-Dichloropropene	ND	0.0500	mg/kg wet							
Dibromochloromethane	ND	0.0500	mg/kg wet							
Dibromomethane	ND	0.0500	mg/kg wet							
Dichlorodifluoromethane	ND	0.0500	mg/kg wet							
Diethyl Ether	ND	0.0500	mg/kg wet							
Di-isopropyl ether	ND	0.0500	mg/kg wet							
Ethyl tertiary-butyl ether	ND	0.0500	mg/kg wet							
Ethylbenzene	ND	0.0500	mg/kg wet							
Hexachlorobutadiene	ND	0.0500	mg/kg wet							
Isopropylbenzene	ND	0.0500	mg/kg wet							
Methyl tert-Butyl Ether	ND	0.0500	mg/kg wet							
Methylene Chloride	ND	0.250	mg/kg wet							
Naphthalene	ND	0.0500	mg/kg wet							
n-Butylbenzene	ND	0.0500	mg/kg wet							
n-Propylbenzene	ND	0.0500	mg/kg wet							
sec-Butylbenzene	ND	0.0500	mg/kg wet							
Styrene	ND	0.0500	mg/kg wet							
tert-Butylbenzene	ND	0.0500	mg/kg wet							
Tertiary-amyl methyl ether	ND	0.0500	mg/kg wet							
Tetrachloroethene	ND	0.0500	mg/kg wet							
Tetrahydrofuran	ND	0.500	mg/kg wet							
Toluene	ND	0.0500	mg/kg wet							
trans-1,2-Dichloroethene	ND	0.0500	mg/kg wet							
trans-1,3-Dichloropropene	ND	0.0500	mg/kg wet							
Trichloroethene	ND	0.0500	mg/kg wet							
Vinyl Acetate	ND	0.250	mg/kg wet							
Vinyl Chloride	ND	0.0500	mg/kg wet							
Xylene O	ND	0.0500	mg/kg wet							
Xylene P,M	ND	0.100	mg/kg wet							
Surrogate: 1,2-Dichloroethane-d4	2.20		mg/kg wet	2.500		88	70-130			
Surrogate: 4-Bromofluorobenzene	2.25		mg/kg wet	2.500		90	70-130			

CERTIFICATE OF ANALYSIS

Client Name: RC & D  
Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1012057

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
<b>5035/8260B Volatile Organic Compounds / Methanol</b>										
<b>Batch CL00619 - 5035</b>										
<i>Surrogate: Dibromofluoromethane</i>	2.27		mg/kg wet	2.500		91	70-130			
<i>Surrogate: Toluene-d8</i>	2.32		mg/kg wet	2.500		93	70-130			
<b>LCS</b>										
1,1,1,2-Tetrachloroethane	2.43	0.100	mg/kg wet	2.500		97	70-130			
1,1,1-Trichloroethane	2.41	0.0500	mg/kg wet	2.500		96	70-130			
1,1,2,2-Tetrachloroethane	2.45	0.0500	mg/kg wet	2.500		98	70-130			
1,1,2-Trichloroethane	2.24	0.0500	mg/kg wet	2.500		90	70-130			
1,1-Dichloroethane	2.37	0.0500	mg/kg wet	2.500		95	70-130			
1,1-Dichloroethene	2.66	0.0500	mg/kg wet	2.500		106	70-130			
1,1-Dichloropropene	2.63	0.0500	mg/kg wet	2.500		105	70-130			
1,2,3-Trichlorobenzene	2.28	0.0500	mg/kg wet	2.500		91	70-130			
1,2,3-Trichloropropane	2.60	0.0500	mg/kg wet	2.500		104	70-130			
1,2,4-Trichlorobenzene	2.44	0.0500	mg/kg wet	2.500		97	70-130			
1,2,4-Trimethylbenzene	2.47	0.0500	mg/kg wet	2.500		99	70-130			
1,2-Dibromo-3-Chloropropane	2.68	0.300	mg/kg wet	2.500		107	70-130			
1,2-Dibromoethane	2.47	0.0500	mg/kg wet	2.500		99	70-130			
1,2-Dichlorobenzene	2.42	0.0500	mg/kg wet	2.500		97	70-130			
1,2-Dichloroethane	2.43	0.0500	mg/kg wet	2.500		97	70-130			
1,2-Dichloropropane	2.62	0.0500	mg/kg wet	2.500		105	70-130			
1,3,5-Trimethylbenzene	2.50	0.0500	mg/kg wet	2.500		100	70-130			
1,3-Dichlorobenzene	2.42	0.0500	mg/kg wet	2.500		97	70-130			
1,3-Dichloropropane	2.49	0.0500	mg/kg wet	2.500		99	70-130			
1,4-Dichlorobenzene	2.40	0.0500	mg/kg wet	2.500		96	70-130			
1,4-Dioxane - Screen	58.2	5.00	mg/kg wet	50.00		116	44-241			
1-Chlorohexane	2.55	0.0500	mg/kg wet	2.500		102	70-130			
2,2-Dichloropropane	2.55	0.100	mg/kg wet	2.500		102	70-130			
2-Butanone	12.3	1.25	mg/kg wet	12.50		98	70-130			
2-Chlorotoluene	2.31	0.0500	mg/kg wet	2.500		92	70-130			
2-Hexanone	13.2	0.500	mg/kg wet	12.50		106	70-130			
4-Chlorotoluene	2.38	0.0500	mg/kg wet	2.500		95	70-130			
4-Isopropyltoluene	2.29	0.0500	mg/kg wet	2.500		92	70-130			
4-Methyl-2-Pentanone	13.9	0.500	mg/kg wet	12.50		111	70-130			
Acetone	9.52	1.25	mg/kg wet	12.50		76	70-130			
Benzene	2.51	0.0500	mg/kg wet	2.500		100	70-130			
Bromobenzene	2.42	0.0500	mg/kg wet	2.500		97	70-130			
Bromochloromethane	2.58	0.0500	mg/kg wet	2.500		103	70-130			
Bromodichloromethane	2.43	0.0500	mg/kg wet	2.500		97	70-130			
Bromoform	2.56	0.0500	mg/kg wet	2.500		102	70-130			
Bromomethane	3.05	0.100	mg/kg wet	2.500		122	70-130			
Carbon Disulfide	2.18	0.0500	mg/kg wet	2.500		87	70-130			
Carbon Tetrachloride	2.59	0.0500	mg/kg wet	2.500		103	70-130			
Chlorobenzene	2.42	0.0500	mg/kg wet	2.500		97	70-130			
Chloroethane	3.00	0.100	mg/kg wet	2.500		120	70-130			
Chloroform	2.37	0.0500	mg/kg wet	2.500		95	70-130			

CERTIFICATE OF ANALYSIS

Client Name: RC & D  
 Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1012057

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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5035/8260B Volatile Organic Compounds / Methanol

**Batch CL00619 - 5035**

Chloromethane	2.40	0.100	mg/kg wet	2.500		96	70-130			
cis-1,2-Dichloroethene	2.67	0.0500	mg/kg wet	2.500		107	70-130			
cis-1,3-Dichloropropene	2.51	0.0500	mg/kg wet	2.500		100	70-130			
Dibromochloromethane	2.56	0.0500	mg/kg wet	2.500		102	70-130			
Dibromomethane	2.37	0.0500	mg/kg wet	2.500		95	70-130			
Dichlorodifluoromethane	2.72	0.0500	mg/kg wet	2.500		109	70-130			
Diethyl Ether	2.41	0.0500	mg/kg wet	2.500		96	70-130			
Di-isopropyl ether	2.61	0.0500	mg/kg wet	2.500		104	70-130			
Ethyl tertiary-butyl ether	2.49	0.0500	mg/kg wet	2.500		100	70-130			
Ethylbenzene	2.52	0.0500	mg/kg wet	2.500		101	70-130			
Hexachlorobutadiene	2.51	0.0500	mg/kg wet	2.500		100	70-130			
Isopropylbenzene	2.04	0.0500	mg/kg wet	2.500		82	70-130			
Methyl tert-Butyl Ether	2.53	0.0500	mg/kg wet	2.500		101	70-130			
Methylene Chloride	2.69	0.250	mg/kg wet	2.500		108	70-130			
Naphthalene	2.26	0.0500	mg/kg wet	2.500		90	70-130			
n-Butylbenzene	2.62	0.0500	mg/kg wet	2.500		105	70-130			
n-Propylbenzene	2.56	0.0500	mg/kg wet	2.500		102	70-130			
sec-Butylbenzene	2.50	0.0500	mg/kg wet	2.500		100	70-130			
Styrene	2.46	0.0500	mg/kg wet	2.500		99	70-130			
tert-Butylbenzene	2.39	0.0500	mg/kg wet	2.500		96	70-130			
Tertiary-amyl methyl ether	2.57	0.0500	mg/kg wet	2.500		103	70-130			
Tetrachloroethene	2.37	0.0500	mg/kg wet	2.500		95	70-130			
Tetrahydrofuran	2.45	0.500	mg/kg wet	2.500		98	70-130			
Toluene	2.48	0.0500	mg/kg wet	2.500		99	70-130			
trans-1,2-Dichloroethene	2.33	0.0500	mg/kg wet	2.500		93	70-130			
trans-1,3-Dichloropropene	2.34	0.0500	mg/kg wet	2.500		94	70-130			
Trichloroethene	2.54	0.0500	mg/kg wet	2.500		102	70-130			
Vinyl Acetate	2.86	0.250	mg/kg wet	2.500		114	70-130			
Vinyl Chloride	2.82	0.0500	mg/kg wet	2.500		113	70-130			
Xylene O	2.43	0.0500	mg/kg wet	2.500		97	70-130			
Xylene P,M	5.03	0.100	mg/kg wet	5.000		101	70-130			
Surrogate: 1,2-Dichloroethane-d4	2.30		mg/kg wet	2.500		92	70-130			
Surrogate: 4-Bromofluorobenzene	2.33		mg/kg wet	2.500		93	70-130			
Surrogate: Dibromofluoromethane	2.31		mg/kg wet	2.500		92	70-130			
Surrogate: Toluene-d8	2.42		mg/kg wet	2.500		97	70-130			

**LCS Dup**

1,1,1,2-Tetrachloroethane	2.45	0.100	mg/kg wet	2.500		98	70-130	0.7	25	
1,1,1-Trichloroethane	2.42	0.0500	mg/kg wet	2.500		97	70-130	0.5	25	
1,1,2,2-Tetrachloroethane	2.53	0.0500	mg/kg wet	2.500		101	70-130	4	25	
1,1,2-Trichloroethane	2.28	0.0500	mg/kg wet	2.500		91	70-130	2	25	
1,1-Dichloroethane	2.36	0.0500	mg/kg wet	2.500		95	70-130	0.4	25	
1,1-Dichloroethene	2.76	0.0500	mg/kg wet	2.500		110	70-130	4	25	
1,1-Dichloropropene	2.68	0.0500	mg/kg wet	2.500		107	70-130	2	25	
1,2,3-Trichlorobenzene	2.42	0.0500	mg/kg wet	2.500		97	70-130	6	25	
1,2,3-Trichloropropane	2.72	0.0500	mg/kg wet	2.500		109	70-130	5	25	

CERTIFICATE OF ANALYSIS

Client Name: RC & D  
 Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1012057

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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5035/8260B Volatile Organic Compounds / Methanol

**Batch CL00619 - 5035**

1,2,4-Trichlorobenzene	2.54	0.0500	mg/kg wet	2.500		102	70-130	4	25	
1,2,4-Trimethylbenzene	2.51	0.0500	mg/kg wet	2.500		100	70-130	2	25	
1,2-Dibromo-3-Chloropropane	2.83	0.300	mg/kg wet	2.500		113	70-130	5	25	
1,2-Dibromoethane	2.49	0.0500	mg/kg wet	2.500		100	70-130	1	25	
1,2-Dichlorobenzene	2.49	0.0500	mg/kg wet	2.500		100	70-130	3	25	
1,2-Dichloroethane	2.46	0.0500	mg/kg wet	2.500		99	70-130	1	25	
1,2-Dichloropropane	2.58	0.0500	mg/kg wet	2.500		103	70-130	1	25	
1,3,5-Trimethylbenzene	2.52	0.0500	mg/kg wet	2.500		101	70-130	1	25	
1,3-Dichlorobenzene	2.49	0.0500	mg/kg wet	2.500		99	70-130	2	25	
1,3-Dichloropropane	2.52	0.0500	mg/kg wet	2.500		101	70-130	1	25	
1,4-Dichlorobenzene	2.40	0.0500	mg/kg wet	2.500		96	70-130	0.1	25	
1,4-Dioxane - Screen	61.7	5.00	mg/kg wet	50.00		123	44-241	6	200	
1-Chlorohexane	2.52	0.0500	mg/kg wet	2.500		101	70-130	1	25	
2,2-Dichloropropane	2.48	0.100	mg/kg wet	2.500		99	70-130	3	25	
2-Butanone	13.0	1.25	mg/kg wet	12.50		104	70-130	6	25	
2-Chlorotoluene	2.48	0.0500	mg/kg wet	2.500		99	70-130	7	25	
2-Hexanone	14.0	0.500	mg/kg wet	12.50		112	70-130	5	25	
4-Chlorotoluene	2.42	0.0500	mg/kg wet	2.500		97	70-130	2	25	
4-Isopropyltoluene	2.33	0.0500	mg/kg wet	2.500		93	70-130	2	25	
4-Methyl-2-Pentanone	14.4	0.500	mg/kg wet	12.50		115	70-130	4	25	
Acetone	12.1	1.25	mg/kg wet	12.50		97	70-130	24	25	
Benzene	2.49	0.0500	mg/kg wet	2.500		100	70-130	0.8	25	
Bromobenzene	2.48	0.0500	mg/kg wet	2.500		99	70-130	2	25	
Bromochloromethane	2.57	0.0500	mg/kg wet	2.500		103	70-130	0.2	25	
Bromodichloromethane	2.44	0.0500	mg/kg wet	2.500		98	70-130	0.5	25	
Bromoform	2.66	0.0500	mg/kg wet	2.500		106	70-130	4	25	
Bromomethane	2.87	0.100	mg/kg wet	2.500		115	70-130	6	25	
Carbon Disulfide	2.72	0.0500	mg/kg wet	2.500		109	70-130	22	25	
Carbon Tetrachloride	2.54	0.0500	mg/kg wet	2.500		102	70-130	2	25	
Chlorobenzene	2.46	0.0500	mg/kg wet	2.500		99	70-130	2	25	
Chloroethane	2.89	0.100	mg/kg wet	2.500		116	70-130	4	25	
Chloroform	2.37	0.0500	mg/kg wet	2.500		95	70-130	0.3	25	
Chloromethane	2.44	0.100	mg/kg wet	2.500		98	70-130	2	25	
cis-1,2-Dichloroethene	2.64	0.0500	mg/kg wet	2.500		106	70-130	1	25	
cis-1,3-Dichloropropene	2.58	0.0500	mg/kg wet	2.500		103	70-130	3	25	
Dibromochloromethane	2.56	0.0500	mg/kg wet	2.500		102	70-130	0.08	25	
Dibromomethane	2.39	0.0500	mg/kg wet	2.500		96	70-130	1	25	
Dichlorodifluoromethane	2.77	0.0500	mg/kg wet	2.500		111	70-130	2	25	
Diethyl Ether	2.50	0.0500	mg/kg wet	2.500		100	70-130	4	25	
Di-isopropyl ether	2.61	0.0500	mg/kg wet	2.500		105	70-130	0.3	25	
Ethyl tertiary-butyl ether	2.54	0.0500	mg/kg wet	2.500		102	70-130	2	25	
Ethylbenzene	2.54	0.0500	mg/kg wet	2.500		102	70-130	0.6	25	
Hexachlorobutadiene	2.64	0.0500	mg/kg wet	2.500		106	70-130	5	25	
Isopropylbenzene	2.06	0.0500	mg/kg wet	2.500		82	70-130	0.7	25	
Methyl tert-Butyl Ether	2.61	0.0500	mg/kg wet	2.500		105	70-130	3	25	

CERTIFICATE OF ANALYSIS

Client Name: RC & D  
 Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1012057

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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5035/8260B Volatile Organic Compounds / Methanol

**Batch CL00619 - 5035**

Methylene Chloride	2.68	0.250	mg/kg wet	2.500		107	70-130	0.7	25	
Naphthalene	2.51	0.0500	mg/kg wet	2.500		100	70-130	11	25	
n-Butylbenzene	2.72	0.0500	mg/kg wet	2.500		109	70-130	4	25	
n-Propylbenzene	2.49	0.0500	mg/kg wet	2.500		100	70-130	3	25	
sec-Butylbenzene	2.54	0.0500	mg/kg wet	2.500		102	70-130	2	25	
Styrene	2.49	0.0500	mg/kg wet	2.500		100	70-130	1	25	
tert-Butylbenzene	2.42	0.0500	mg/kg wet	2.500		97	70-130	1	25	
Tertiary-amyl methyl ether	2.60	0.0500	mg/kg wet	2.500		104	70-130	1	25	
Tetrachloroethene	2.38	0.0500	mg/kg wet	2.500		95	70-130	0.5	25	
Tetrahydrofuran	2.47	0.500	mg/kg wet	2.500		99	70-130	0.7	25	
Toluene	2.49	0.0500	mg/kg wet	2.500		100	70-130	0.2	25	
trans-1,2-Dichloroethene	2.33	0.0500	mg/kg wet	2.500		93	70-130	0.09	25	
trans-1,3-Dichloropropene	2.39	0.0500	mg/kg wet	2.500		95	70-130	2	25	
Trichloroethene	2.55	0.0500	mg/kg wet	2.500		102	70-130	0.6	25	
Vinyl Acetate	2.85	0.250	mg/kg wet	2.500		114	70-130	0.2	25	
Vinyl Chloride	2.84	0.0500	mg/kg wet	2.500		113	70-130	0.5	25	
Xylene O	2.45	0.0500	mg/kg wet	2.500		98	70-130	1	25	
Xylene P,M	4.99	0.100	mg/kg wet	5.000		100	70-130	0.8	25	
Surrogate: 1,2-Dichloroethane-d4	2.33		mg/kg wet	2.500		93	70-130			
Surrogate: 4-Bromofluorobenzene	2.34		mg/kg wet	2.500		94	70-130			
Surrogate: Dibromofluoromethane	2.28		mg/kg wet	2.500		91	70-130			
Surrogate: Toluene-d8	2.42		mg/kg wet	2.500		97	70-130			

**Matrix Spike Source: 1012057-01**

1,1,1,2-Tetrachloroethane	1.89	0.0778	mg/kg dry	1.945	ND	97	70-130			
1,1,1-Trichloroethane	1.99	0.0389	mg/kg dry	1.945	ND	102	70-130			
1,1,2,2-Tetrachloroethane	2.05	0.0389	mg/kg dry	1.945	ND	106	70-130			
1,1,2-Trichloroethane	1.88	0.0389	mg/kg dry	1.945	ND	96	70-130			
1,1-Dichloroethane	1.99	0.0389	mg/kg dry	1.945	ND	102	70-130			
1,1-Dichloroethene	2.33	0.0389	mg/kg dry	1.945	ND	120	70-130			
1,1-Dichloropropene	2.26	0.0389	mg/kg dry	1.945	ND	116	70-130			
1,2,3-Trichlorobenzene	1.67	0.0389	mg/kg dry	1.945	ND	86	70-130			
1,2,3-Trichloropropane	2.11	0.0389	mg/kg dry	1.945	ND	108	70-130			
1,2,4-Trichlorobenzene	1.80	0.0389	mg/kg dry	1.945	ND	93	70-130			
1,2,4-Trimethylbenzene	2.02	0.0389	mg/kg dry	1.945	ND	104	70-130			
1,2-Dibromo-3-Chloropropane	2.03	0.233	mg/kg dry	1.945	ND	105	70-130			
1,2-Dibromoethane	1.97	0.0389	mg/kg dry	1.945	ND	101	70-130			
1,2-Dichlorobenzene	1.93	0.0389	mg/kg dry	1.945	ND	99	70-130			
1,2-Dichloroethane	1.93	0.0389	mg/kg dry	1.945	ND	99	70-130			
1,2-Dichloropropane	2.21	0.0389	mg/kg dry	1.945	ND	114	70-130			
1,3,5-Trimethylbenzene	2.05	0.0389	mg/kg dry	1.945	ND	105	70-130			
1,3-Dichlorobenzene	1.94	0.0389	mg/kg dry	1.945	ND	100	70-130			
1,3-Dichloropropane	2.01	0.0389	mg/kg dry	1.945	ND	103	70-130			
1,4-Dichlorobenzene	1.90	0.0389	mg/kg dry	1.945	ND	98	70-130			
1,4-Dioxane - Screen	37.1	3.89	mg/kg dry	38.89	ND	95	44-241			
1-Chlorohexane	2.11	0.0389	mg/kg dry	1.945	ND	109	70-130			



CERTIFICATE OF ANALYSIS

Client Name: RC & D  
Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1012057

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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5035/8260B Volatile Organic Compounds / Methanol

**Batch CL00619 - 5035**

2,2-Dichloropropane	1.78	0.0778	mg/kg dry	1.945	ND	91	70-130			
2-Butanone	10.3	0.973	mg/kg dry	9.723	ND	106	70-130			
2-Chlorotoluene	2.15	0.0389	mg/kg dry	1.945	ND	110	70-130			
2-Hexanone	10.6	0.389	mg/kg dry	9.723	ND	109	70-130			
4-Chlorotoluene	1.93	0.0389	mg/kg dry	1.945	ND	99	70-130			
4-Isopropyltoluene	1.88	0.0389	mg/kg dry	1.945	ND	97	70-130			
4-Methyl-2-Pentanone	11.8	0.389	mg/kg dry	9.723	ND	121	70-130			
Acetone	7.73	0.973	mg/kg dry	9.723	ND	80	70-130			
Benzene	2.14	0.0389	mg/kg dry	1.945	ND	110	70-130			
Bromobenzene	1.97	0.0389	mg/kg dry	1.945	ND	102	70-130			
Bromochloromethane	2.19	0.0389	mg/kg dry	1.945	ND	112	70-130			
Bromodichloromethane	1.94	0.0389	mg/kg dry	1.945	ND	100	70-130			
Bromoform	1.97	0.0389	mg/kg dry	1.945	ND	101	70-130			
Bromomethane	1.96	0.0778	mg/kg dry	1.945	ND	101	70-130			
Carbon Disulfide	2.12	0.0389	mg/kg dry	1.945	ND	109	70-130			
Carbon Tetrachloride	1.98	0.0389	mg/kg dry	1.945	ND	102	70-130			
Chlorobenzene	1.97	0.0389	mg/kg dry	1.945	ND	102	70-130			
Chloroethane	2.36	0.0778	mg/kg dry	1.945	ND	121	70-130			
Chloroform	1.94	0.0389	mg/kg dry	1.945	ND	100	70-130			
Chloromethane	2.13	0.0778	mg/kg dry	1.945	ND	109	70-130			
cis-1,2-Dichloroethene	2.21	0.0389	mg/kg dry	1.945	ND	113	70-130			
cis-1,3-Dichloropropene	2.07	0.0389	mg/kg dry	1.945	ND	107	70-130			
Dibromochloromethane	1.95	0.0389	mg/kg dry	1.945	ND	101	70-130			
Dibromomethane	1.93	0.0389	mg/kg dry	1.945	ND	99	70-130			
Dichlorodifluoromethane	2.32	0.0389	mg/kg dry	1.945	ND	119	70-130			
Diethyl Ether	2.06	0.0389	mg/kg dry	1.945	ND	106	70-130			
Di-isopropyl ether	2.22	0.0389	mg/kg dry	1.945	ND	114	70-130			
Ethyl tertiary-butyl ether	2.09	0.0389	mg/kg dry	1.945	ND	107	70-130			
Ethylbenzene	2.04	0.0389	mg/kg dry	1.945	ND	105	70-130			
Hexachlorobutadiene	1.77	0.0389	mg/kg dry	1.945	ND	91	70-130			
Isopropylbenzene	1.73	0.0389	mg/kg dry	1.945	ND	89	70-130			
Methyl tert-Butyl Ether	2.09	0.0389	mg/kg dry	1.945	ND	107	70-130			
Methylene Chloride	2.29	0.195	mg/kg dry	1.945	ND	118	70-130			
Naphthalene	1.55	0.0389	mg/kg dry	1.945	ND	80	70-130			
n-Butylbenzene	2.09	0.0389	mg/kg dry	1.945	ND	108	70-130			
n-Propylbenzene	1.96	0.0389	mg/kg dry	1.945	ND	101	70-130			
sec-Butylbenzene	2.07	0.0389	mg/kg dry	1.945	ND	107	70-130			
Styrene	1.98	0.0389	mg/kg dry	1.945	ND	102	70-130			
tert-Butylbenzene	1.94	0.0389	mg/kg dry	1.945	ND	100	70-130			
Tertiary-amyl methyl ether	2.12	0.0389	mg/kg dry	1.945	ND	109	70-130			
Tetrachloroethene	1.93	0.0389	mg/kg dry	1.945	ND	99	70-130			
Tetrahydrofuran	2.15	0.389	mg/kg dry	1.945	ND	111	70-130			
Toluene	2.09	0.0389	mg/kg dry	1.945	ND	107	70-130			
trans-1,2-Dichloroethene	1.97	0.0389	mg/kg dry	1.945	ND	101	70-130			
trans-1,3-Dichloropropene	1.87	0.0389	mg/kg dry	1.945	ND	96	70-130			



CERTIFICATE OF ANALYSIS

Client Name: RC & D  
Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1012057

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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5035/8260B Volatile Organic Compounds / Methanol

**Batch CL00619 - 5035**

Trichloroethene	2.13	0.0389	mg/kg dry	1.945	ND	110	70-130			
Vinyl Acetate	2.29	0.195	mg/kg dry	1.945	ND	118	70-130			
Vinyl Chloride	2.50	0.0389	mg/kg dry	1.945	ND	129	70-130			
Xylene O	1.98	0.0389	mg/kg dry	1.945	ND	102	70-130			
Xylene P,M	4.04	0.0778	mg/kg dry	3.889	ND	104	70-130			
Surrogate: 1,2-Dichloroethane-d4	1.98		mg/kg dry	1.945		102	70-130			
Surrogate: 4-Bromofluorobenzene	2.03		mg/kg dry	1.945		105	70-130			
Surrogate: Dibromofluoromethane	2.06		mg/kg dry	1.945		106	70-130			
Surrogate: Toluene-d8	2.15		mg/kg dry	1.945		111	70-130			

**Matrix Spike Dup Source: 1012057-01**

1,1,1,2-Tetrachloroethane	1.84	0.0778	mg/kg dry	1.945	ND	95	70-130	2	30	
1,1,1-Trichloroethane	1.94	0.0389	mg/kg dry	1.945	ND	100	70-130	3	30	
1,1,2,2-Tetrachloroethane	2.00	0.0389	mg/kg dry	1.945	ND	103	70-130	2	30	
1,1,2-Trichloroethane	1.85	0.0389	mg/kg dry	1.945	ND	95	70-130	2	30	
1,1-Dichloroethane	1.96	0.0389	mg/kg dry	1.945	ND	101	70-130	1	30	
1,1-Dichloroethene	2.24	0.0389	mg/kg dry	1.945	ND	115	70-130	4	30	
1,1-Dichloropropene	2.09	0.0389	mg/kg dry	1.945	ND	108	70-130	8	30	
1,2,3-Trichlorobenzene	1.77	0.0389	mg/kg dry	1.945	ND	91	70-130	6	30	
1,2,3-Trichloropropane	2.12	0.0389	mg/kg dry	1.945	ND	109	70-130	0.4	30	
1,2,4-Trichlorobenzene	1.90	0.0389	mg/kg dry	1.945	ND	98	70-130	5	30	
1,2,4-Trimethylbenzene	1.97	0.0389	mg/kg dry	1.945	ND	101	70-130	3	30	
1,2-Dibromo-3-Chloropropane	2.03	0.233	mg/kg dry	1.945	ND	104	70-130	0.3	30	
1,2-Dibromoethane	1.90	0.0389	mg/kg dry	1.945	ND	98	70-130	3	30	
1,2-Dichlorobenzene	1.89	0.0389	mg/kg dry	1.945	ND	97	70-130	2	30	
1,2-Dichloroethane	1.90	0.0389	mg/kg dry	1.945	ND	98	70-130	2	30	
1,2-Dichloropropane	2.12	0.0389	mg/kg dry	1.945	ND	109	70-130	4	30	
1,3,5-Trimethylbenzene	1.98	0.0389	mg/kg dry	1.945	ND	102	70-130	4	30	
1,3-Dichlorobenzene	1.87	0.0389	mg/kg dry	1.945	ND	96	70-130	4	30	
1,3-Dichloropropane	1.95	0.0389	mg/kg dry	1.945	ND	100	70-130	3	30	
1,4-Dichlorobenzene	1.84	0.0389	mg/kg dry	1.945	ND	95	70-130	3	30	
1,4-Dioxane - Screen	44.9	3.89	mg/kg dry	38.89	ND	115	44-241	19	200	
1-Chlorohexane	1.96	0.0389	mg/kg dry	1.945	ND	101	70-130	7	30	
2,2-Dichloropropane	1.69	0.0778	mg/kg dry	1.945	ND	87	70-130	5	30	
2-Butanone	10.1	0.973	mg/kg dry	9.723	ND	103	70-130	2	30	
2-Chlorotoluene	1.88	0.0389	mg/kg dry	1.945	ND	97	70-130	13	30	
2-Hexanone	10.4	0.389	mg/kg dry	9.723	ND	107	70-130	2	30	
4-Chlorotoluene	1.87	0.0389	mg/kg dry	1.945	ND	96	70-130	3	30	
4-Isopropyltoluene	1.83	0.0389	mg/kg dry	1.945	ND	94	70-130	3	30	
4-Methyl-2-Pentanone	11.5	0.389	mg/kg dry	9.723	ND	119	70-130	2	30	
Acetone	7.71	0.973	mg/kg dry	9.723	ND	79	70-130	0.2	30	
Benzene	2.07	0.0389	mg/kg dry	1.945	ND	106	70-130	3	30	
Bromobenzene	1.90	0.0389	mg/kg dry	1.945	ND	98	70-130	4	30	
Bromochloromethane	2.12	0.0389	mg/kg dry	1.945	ND	109	70-130	3	30	
Bromodichloromethane	1.91	0.0389	mg/kg dry	1.945	ND	98	70-130	2	30	
Bromoform	1.91	0.0389	mg/kg dry	1.945	ND	98	70-130	3	30	



CERTIFICATE OF ANALYSIS

Client Name: RC & D  
 Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1012057

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
<b>5035/8260B Volatile Organic Compounds / Methanol</b>										
<b>Batch CL00619 - 5035</b>										
Bromomethane	2.06	0.0778	mg/kg dry	1.945	ND	106	70-130	5	30	
Carbon Disulfide	2.13	0.0389	mg/kg dry	1.945	ND	109	70-130	0.4	30	
Carbon Tetrachloride	1.97	0.0389	mg/kg dry	1.945	ND	101	70-130	0.4	30	
Chlorobenzene	1.89	0.0389	mg/kg dry	1.945	ND	97	70-130	4	30	
Chloroethane	2.15	0.0778	mg/kg dry	1.945	ND	111	70-130	9	30	
Chloroform	1.89	0.0389	mg/kg dry	1.945	ND	97	70-130	2	30	
Chloromethane	2.09	0.0778	mg/kg dry	1.945	ND	107	70-130	2	30	
cis-1,2-Dichloroethene	2.17	0.0389	mg/kg dry	1.945	ND	111	70-130	2	30	
cis-1,3-Dichloropropene	2.03	0.0389	mg/kg dry	1.945	ND	105	70-130	2	30	
Dibromochloromethane	1.90	0.0389	mg/kg dry	1.945	ND	97	70-130	3	30	
Dibromomethane	1.88	0.0389	mg/kg dry	1.945	ND	97	70-130	3	30	
Dichlorodifluoromethane	2.23	0.0389	mg/kg dry	1.945	ND	115	70-130	4	30	
Diethyl Ether	2.04	0.0389	mg/kg dry	1.945	ND	105	70-130	1	30	
Di-isopropyl ether	2.16	0.0389	mg/kg dry	1.945	ND	111	70-130	3	30	
Ethyl tertiary-butyl ether	2.03	0.0389	mg/kg dry	1.945	ND	104	70-130	3	30	
Ethylbenzene	1.97	0.0389	mg/kg dry	1.945	ND	101	70-130	3	30	
Hexachlorobutadiene	1.87	0.0389	mg/kg dry	1.945	ND	96	70-130	5	30	
Isopropylbenzene	1.66	0.0389	mg/kg dry	1.945	ND	85	70-130	4	30	
Methyl tert-Butyl Ether	2.04	0.0389	mg/kg dry	1.945	ND	105	70-130	2	30	
Methylene Chloride	2.22	0.195	mg/kg dry	1.945	ND	114	70-130	3	30	
Naphthalene	1.77	0.0389	mg/kg dry	1.945	ND	91	70-130	13	30	
n-Butylbenzene	2.11	0.0389	mg/kg dry	1.945	ND	108	70-130	0.7	30	
n-Propylbenzene	2.04	0.0389	mg/kg dry	1.945	ND	105	70-130	4	30	
sec-Butylbenzene	2.03	0.0389	mg/kg dry	1.945	ND	105	70-130	2	30	
Styrene	1.95	0.0389	mg/kg dry	1.945	ND	100	70-130	2	30	
tert-Butylbenzene	1.90	0.0389	mg/kg dry	1.945	ND	98	70-130	2	30	
Tertiary-amyl methyl ether	2.08	0.0389	mg/kg dry	1.945	ND	107	70-130	2	30	
Tetrachloroethene	1.82	0.0389	mg/kg dry	1.945	ND	94	70-130	6	30	
Tetrahydrofuran	2.14	0.389	mg/kg dry	1.945	ND	110	70-130	0.4	30	
Toluene	2.02	0.0389	mg/kg dry	1.945	ND	104	70-130	3	30	
trans-1,2-Dichloroethene	1.91	0.0389	mg/kg dry	1.945	ND	98	70-130	3	30	
trans-1,3-Dichloropropene	1.81	0.0389	mg/kg dry	1.945	ND	93	70-130	3	30	
Trichloroethene	2.08	0.0389	mg/kg dry	1.945	ND	107	70-130	3	30	
Vinyl Acetate	2.25	0.195	mg/kg dry	1.945	ND	116	70-130	2	30	
Vinyl Chloride	2.40	0.0389	mg/kg dry	1.945	ND	123	70-130	4	30	
Xylene O	1.91	0.0389	mg/kg dry	1.945	ND	98	70-130	4	30	
Xylene P,M	3.86	0.0778	mg/kg dry	3.889	ND	99	70-130	4	30	
Surrogate: 1,2-Dichloroethane-d4	1.94		mg/kg dry	1.945		100	70-130			
Surrogate: 4-Bromofluorobenzene	1.98		mg/kg dry	1.945		102	70-130			
Surrogate: Dibromofluoromethane	2.01		mg/kg dry	1.945		103	70-130			
Surrogate: Toluene-d8	2.08		mg/kg dry	1.945		107	70-130			
<b>8100M Total Petroleum Hydrocarbons</b>										
<b>Batch CL00819 - 3546</b>										
<b>Blank</b>										



CERTIFICATE OF ANALYSIS

Client Name: RC & D  
Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1012057

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
<b>8100M Total Petroleum Hydrocarbons</b>										
<b>Batch CL00819 - 3546</b>										
Decane (C10)	ND	0.2	mg/kg wet							
Docosane (C22)	ND	0.2	mg/kg wet							
Dodecane (C12)	ND	0.2	mg/kg wet							
Eicosane (C20)	ND	0.2	mg/kg wet							
Hexacosane (C26)	ND	0.2	mg/kg wet							
Hexadecane (C16)	ND	0.2	mg/kg wet							
Nonadecane (C19)	ND	0.2	mg/kg wet							
Nonane (C9)	ND	0.2	mg/kg wet							
Octacosane (C28)	ND	0.2	mg/kg wet							
Octadecane (C18)	ND	0.2	mg/kg wet							
Tetracosane (C24)	ND	0.2	mg/kg wet							
Tetradecane (C14)	ND	0.2	mg/kg wet							
Total Petroleum Hydrocarbons	ND	37.5	mg/kg wet							
Triacontane (C30)	ND	0.2	mg/kg wet							
<i>Surrogate: O-Terphenyl</i>	<i>5.06</i>		mg/kg wet	<i>5.000</i>		<i>101</i>	<i>40-140</i>			
<b>LCS</b>										
Decane (C10)	1.9	0.2	mg/kg wet	2.500		77	40-140			
Docosane (C22)	2.2	0.2	mg/kg wet	2.500		90	40-140			
Dodecane (C12)	2.2	0.2	mg/kg wet	2.500		87	40-140			
Eicosane (C20)	2.3	0.2	mg/kg wet	2.500		94	40-140			
Hexacosane (C26)	2.4	0.2	mg/kg wet	2.500		94	40-140			
Hexadecane (C16)	2.3	0.2	mg/kg wet	2.500		92	40-140			
Nonadecane (C19)	2.4	0.2	mg/kg wet	2.500		96	40-140			
Nonane (C9)	1.6	0.2	mg/kg wet	2.500		64	30-140			
Octacosane (C28)	2.4	0.2	mg/kg wet	2.500		95	40-140			
Octadecane (C18)	2.3	0.2	mg/kg wet	2.500		92	40-140			
Tetracosane (C24)	2.4	0.2	mg/kg wet	2.500		95	40-140			
Tetradecane (C14)	2.2	0.2	mg/kg wet	2.500		87	40-140			
Total Petroleum Hydrocarbons	30.0	37.5	mg/kg wet	35.00		86	40-140			
Triacontane (C30)	2.4	0.2	mg/kg wet	2.500		97	40-140			
<i>Surrogate: O-Terphenyl</i>	<i>4.68</i>		mg/kg wet	<i>5.000</i>		<i>94</i>	<i>40-140</i>			
<b>LCS Dup</b>										
Decane (C10)	2.0	0.2	mg/kg wet	2.500		81	40-140	5	50	
Docosane (C22)	2.2	0.2	mg/kg wet	2.500		89	40-140	0.2	50	
Dodecane (C12)	2.3	0.2	mg/kg wet	2.500		90	40-140	4	50	
Eicosane (C20)	2.3	0.2	mg/kg wet	2.500		93	40-140	0.8	50	
Hexacosane (C26)	2.3	0.2	mg/kg wet	2.500		93	40-140	0.6	50	
Hexadecane (C16)	2.3	0.2	mg/kg wet	2.500		93	40-140	1	50	
Nonadecane (C19)	2.4	0.2	mg/kg wet	2.500		96	40-140	0.3	50	
Nonane (C9)	1.6	0.2	mg/kg wet	2.500		65	30-140	1	50	
Octacosane (C28)	2.4	0.2	mg/kg wet	2.500		94	40-140	0.7	50	
Octadecane (C18)	2.3	0.2	mg/kg wet	2.500		92	40-140	0.4	50	
Tetracosane (C24)	2.4	0.2	mg/kg wet	2.500		94	40-140	0.2	50	

CERTIFICATE OF ANALYSIS

Client Name: RC & D  
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ESS Laboratory Work Order: 1012057

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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8100M Total Petroleum Hydrocarbons

**Batch CL00819 - 3546**

Tetradecane (C14)	2.3	0.2	mg/kg wet	2.500		91	40-140	4	50	
Total Petroleum Hydrocarbons	30.2	37.5	mg/kg wet	35.00		86	40-140	0.8	50	
Triacotane (C30)	2.4	0.2	mg/kg wet	2.500		96	40-140	0.8	50	

Surrogate: O-Terphenyl 4.71 mg/kg wet 5.000 94 40-140

8270C Semi-Volatile Organic Compounds

**Batch CL00623 - 3546**

**Blank**

1,1-Biphenyl	ND	0.333	mg/kg wet							
1,2,4-Trichlorobenzene	ND	0.333	mg/kg wet							
1,2-Dichlorobenzene	ND	0.333	mg/kg wet							
1,3-Dichlorobenzene	ND	0.333	mg/kg wet							
1,4-Dichlorobenzene	ND	0.333	mg/kg wet							
2,3,4,6-Tetrachlorophenol	ND	1.67	mg/kg wet							
2,4,5-Trichlorophenol	ND	0.333	mg/kg wet							
2,4,6-Trichlorophenol	ND	0.333	mg/kg wet							
2,4-Dichlorophenol	ND	0.333	mg/kg wet							
2,4-Dimethylphenol	ND	0.333	mg/kg wet							
2,4-Dinitrophenol	ND	1.67	mg/kg wet							
2,4-Dinitrotoluene	ND	0.333	mg/kg wet							
2,6-Dinitrotoluene	ND	0.333	mg/kg wet							
2-Chloronaphthalene	ND	0.333	mg/kg wet							
2-Chlorophenol	ND	0.333	mg/kg wet							
2-Methylnaphthalene	ND	0.333	mg/kg wet							
2-Methylphenol	ND	0.333	mg/kg wet							
2-Nitroaniline	ND	0.333	mg/kg wet							
2-Nitrophenol	ND	0.333	mg/kg wet							
3,3'-Dichlorobenzidine	ND	0.667	mg/kg wet							
3+4-Methylphenol	ND	0.667	mg/kg wet							
3-Nitroaniline	ND	0.333	mg/kg wet							
4,6-Dinitro-2-Methylphenol	ND	1.67	mg/kg wet							
4-Bromophenyl-phenylether	ND	0.333	mg/kg wet							
4-Chloro-3-Methylphenol	ND	0.333	mg/kg wet							
4-Chloroaniline	ND	0.667	mg/kg wet							
4-Chloro-phenyl-phenyl ether	ND	0.333	mg/kg wet							
4-Nitroaniline	ND	0.333	mg/kg wet							
4-Nitrophenol	ND	1.67	mg/kg wet							
Acenaphthene	ND	0.333	mg/kg wet							
Acenaphthylene	ND	0.333	mg/kg wet							
Acetophenone	ND	0.667	mg/kg wet							
Aniline	ND	0.667	mg/kg wet							
Anthracene	ND	0.333	mg/kg wet							
Azobenzene	ND	0.333	mg/kg wet							
Benzo(a)anthracene	ND	0.333	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: RC & D  
 Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1012057

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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8270C Semi-Volatile Organic Compounds

**Batch CL00623 - 3546**

Benzo(a)pyrene	ND	0.167	mg/kg wet							
Benzo(b)fluoranthene	ND	0.333	mg/kg wet							
Benzo(g,h,i)perylene	ND	0.333	mg/kg wet							
Benzo(k)fluoranthene	ND	0.333	mg/kg wet							
Benzoic Acid	ND	1.67	mg/kg wet							
Benzyl Alcohol	ND	0.333	mg/kg wet							
bis(2-Chloroethoxy)methane	ND	0.333	mg/kg wet							
bis(2-Chloroethyl)ether	ND	0.333	mg/kg wet							
bis(2-chloroisopropyl)Ether	ND	0.333	mg/kg wet							
bis(2-Ethylhexyl)phthalate	ND	0.333	mg/kg wet							
Butylbenzylphthalate	ND	0.333	mg/kg wet							
Carbazole	ND	0.333	mg/kg wet							
Chrysene	ND	0.167	mg/kg wet							
Dibenzo(a,h)Anthracene	ND	0.167	mg/kg wet							
Dibenzofuran	ND	0.333	mg/kg wet							
Diethylphthalate	ND	0.333	mg/kg wet							
Dimethylphthalate	ND	0.333	mg/kg wet							
Di-n-butylphthalate	ND	0.333	mg/kg wet							
Di-n-octylphthalate	ND	0.333	mg/kg wet							
Fluoranthene	ND	0.333	mg/kg wet							
Fluorene	ND	0.333	mg/kg wet							
Hexachlorobenzene	ND	0.167	mg/kg wet							
Hexachlorobutadiene	ND	0.333	mg/kg wet							
Hexachlorocyclopentadiene	ND	1.67	mg/kg wet							
Hexachloroethane	ND	0.333	mg/kg wet							
Indeno(1,2,3-cd)Pyrene	ND	0.333	mg/kg wet							
Isophorone	ND	0.333	mg/kg wet							
Naphthalene	ND	0.333	mg/kg wet							
Nitrobenzene	ND	0.333	mg/kg wet							
N-Nitrosodimethylamine	ND	0.333	mg/kg wet							
N-Nitroso-Di-n-Propylamine	ND	0.333	mg/kg wet							
N-nitrosodiphenylamine	ND	0.333	mg/kg wet							
Pentachlorophenol	ND	1.67	mg/kg wet							
Phenanthrene	ND	0.333	mg/kg wet							
Phenol	ND	0.333	mg/kg wet							
Pyrene	ND	0.333	mg/kg wet							
Pyridine	ND	1.67	mg/kg wet							
Surrogate: 1,2-Dichlorobenzene-d4	2.81		mg/kg wet	3.333		84	30-130			
Surrogate: 2,4,6-Tribromophenol	4.71		mg/kg wet	5.000		94	30-130			
Surrogate: 2-Chlorophenol-d4	4.22		mg/kg wet	5.000		84	30-130			
Surrogate: 2-Fluorobiphenyl	2.75		mg/kg wet	3.333		82	30-130			
Surrogate: 2-Fluorophenol	4.22		mg/kg wet	5.000		84	30-130			
Surrogate: Nitrobenzene-d5	2.93		mg/kg wet	3.333		88	30-130			
Surrogate: Phenol-d6	4.49		mg/kg wet	5.000		90	30-130			
Surrogate: p-Terphenyl-d14	3.35		mg/kg wet	3.333		100	30-130			

CERTIFICATE OF ANALYSIS

Client Name: RC & D  
 Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1012057

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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8270C Semi-Volatile Organic Compounds

Batch CL00623 - 3546

LCS

1,1-Biphenyl	2.95	0.333	mg/kg wet	3.333		89	40-140			
1,2,4-Trichlorobenzene	2.83	0.333	mg/kg wet	3.333		85	40-140			
1,2-Dichlorobenzene	2.90	0.333	mg/kg wet	3.333		87	40-140			
1,3-Dichlorobenzene	2.86	0.333	mg/kg wet	3.333		86	40-140			
1,4-Dichlorobenzene	2.88	0.333	mg/kg wet	3.333		86	40-140			
2,3,4,6-Tetrachlorophenol	3.00	1.67	mg/kg wet	3.333		90	30-130			
2,4,5-Trichlorophenol	2.99	0.333	mg/kg wet	3.333		90	30-130			
2,4,6-Trichlorophenol	3.25	0.333	mg/kg wet	3.333		98	30-130			
2,4-Dichlorophenol	3.19	0.333	mg/kg wet	3.333		96	30-130			
2,4-Dimethylphenol	2.95	0.333	mg/kg wet	3.333		89	30-130			
2,4-Dinitrophenol	2.82	1.67	mg/kg wet	3.333		85	30-130			
2,4-Dinitrotoluene	3.02	0.333	mg/kg wet	3.333		90	40-140			
2,6-Dinitrotoluene	3.12	0.333	mg/kg wet	3.333		94	40-140			
2-Chloronaphthalene	2.90	0.333	mg/kg wet	3.333		87	40-140			
2-Chlorophenol	2.95	0.333	mg/kg wet	3.333		89	30-130			
2-Methylnaphthalene	3.07	0.333	mg/kg wet	3.333		92	40-140			
2-Methylphenol	2.87	0.333	mg/kg wet	3.333		86	30-130			
2-Nitroaniline	3.25	0.333	mg/kg wet	3.333		98	40-140			
2-Nitrophenol	3.10	0.333	mg/kg wet	3.333		93	30-130			
3,3'-Dichlorobenzidine	2.16	0.667	mg/kg wet	3.333		65	40-140			
3+4-Methylphenol	6.13	0.667	mg/kg wet	6.667		92	30-130			
3-Nitroaniline	2.35	0.333	mg/kg wet	3.333		71	40-140			
4,6-Dinitro-2-Methylphenol	3.19	1.67	mg/kg wet	3.333		96	30-130			
4-Bromophenyl-phenylether	3.24	0.333	mg/kg wet	3.333		97	40-140			
4-Chloro-3-Methylphenol	3.20	0.333	mg/kg wet	3.333		96	30-130			
4-Chloroaniline	1.87	0.667	mg/kg wet	3.333		56	40-140			
4-Chloro-phenyl-phenyl ether	2.99	0.333	mg/kg wet	3.333		90	40-140			
4-Nitroaniline	3.23	0.333	mg/kg wet	3.333		97	40-140			
4-Nitrophenol	2.78	1.67	mg/kg wet	3.333		83	30-130			
Acenaphthene	3.16	0.333	mg/kg wet	3.333		95	40-140			
Acenaphthylene	2.99	0.333	mg/kg wet	3.333		90	40-140			
Acetophenone	3.01	0.667	mg/kg wet	3.333		90	40-140			
Aniline	2.20	0.667	mg/kg wet	3.333		66	40-140			
Anthracene	3.32	0.333	mg/kg wet	3.333		100	40-140			
Azobenzene	2.85	0.333	mg/kg wet	3.333		86	40-140			
Benzo(a)anthracene	3.23	0.333	mg/kg wet	3.333		97	40-140			
Benzo(a)pyrene	3.31	0.167	mg/kg wet	3.333		99	40-140			
Benzo(b)fluoranthene	3.64	0.333	mg/kg wet	3.333		109	40-140			
Benzo(g,h,i)perylene	3.40	0.333	mg/kg wet	3.333		102	40-140			
Benzo(k)fluoranthene	3.16	0.333	mg/kg wet	3.333		95	40-140			
Benzoic Acid	2.85	1.67	mg/kg wet	3.333		85	40-140			
Benzyl Alcohol	2.81	0.333	mg/kg wet	3.333		84	40-140			
bis(2-Chloroethoxy)methane	2.79	0.333	mg/kg wet	3.333		84	40-140			
bis(2-Chloroethyl)ether	3.78	0.333	mg/kg wet	3.333		114	40-140			



CERTIFICATE OF ANALYSIS

Client Name: RC & D  
Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1012057

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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8270C Semi-Volatile Organic Compounds

**Batch CL00623 - 3546**

bis(2-chloroisopropyl)Ether	3.04	0.333	mg/kg wet	3.333		91	40-140			
bis(2-Ethylhexyl)phthalate	3.12	0.333	mg/kg wet	3.333		94	40-140			
Butylbenzylphthalate	3.12	0.333	mg/kg wet	3.333		94	40-140			
Carbazole	3.03	0.333	mg/kg wet	3.333		91	40-140			
Chrysene	3.34	0.167	mg/kg wet	3.333		100	40-140			
Dibenzo(a,h)Anthracene	3.41	0.167	mg/kg wet	3.333		102	40-140			
Dibenzofuran	2.96	0.333	mg/kg wet	3.333		89	40-140			
Diethylphthalate	2.98	0.333	mg/kg wet	3.333		89	40-140			
Dimethylphthalate	3.05	0.333	mg/kg wet	3.333		91	40-140			
Di-n-butylphthalate	2.94	0.333	mg/kg wet	3.333		88	40-140			
Di-n-octylphthalate	3.27	0.333	mg/kg wet	3.333		98	40-140			
Fluoranthene	3.09	0.333	mg/kg wet	3.333		93	40-140			
Fluorene	3.28	0.333	mg/kg wet	3.333		98	40-140			
Hexachlorobenzene	3.29	0.167	mg/kg wet	3.333		99	40-140			
Hexachlorobutadiene	2.95	0.333	mg/kg wet	3.333		88	40-140			
Hexachlorocyclopentadiene	2.43	1.67	mg/kg wet	3.333		73	40-140			
Hexachloroethane	2.56	0.333	mg/kg wet	3.333		77	40-140			
Indeno(1,2,3-cd)Pyrene	3.51	0.333	mg/kg wet	3.333		105	40-140			
Isophorone	2.34	0.333	mg/kg wet	3.333		70	40-140			
Naphthalene	2.92	0.333	mg/kg wet	3.333		88	40-140			
Nitrobenzene	2.85	0.333	mg/kg wet	3.333		85	40-140			
N-Nitrosodimethylamine	3.03	0.333	mg/kg wet	3.333		91	40-140			
N-Nitroso-Di-n-Propylamine	2.86	0.333	mg/kg wet	3.333		86	40-140			
N-nitrosodiphenylamine	3.32	0.333	mg/kg wet	3.333		100	40-140			
Pentachlorophenol	3.39	1.67	mg/kg wet	3.333		102	30-130			
Phenanthrene	3.12	0.333	mg/kg wet	3.333		94	40-140			
Phenol	2.64	0.333	mg/kg wet	3.333		79	30-130			
Pyrene	3.30	0.333	mg/kg wet	3.333		99	40-140			
Pyridine	2.40	1.67	mg/kg wet	3.333		72	40-140			
Surrogate: 1,2-Dichlorobenzene-d4	2.90		mg/kg wet	3.333		87	30-130			
Surrogate: 2,4,6-Tribromophenol	5.28		mg/kg wet	5.000		106	30-130			
Surrogate: 2-Chlorophenol-d4	4.39		mg/kg wet	5.000		88	30-130			
Surrogate: 2-Fluorobiphenyl	2.91		mg/kg wet	3.333		87	30-130			
Surrogate: 2-Fluorophenol	4.27		mg/kg wet	5.000		85	30-130			
Surrogate: Nitrobenzene-d5	2.93		mg/kg wet	3.333		88	30-130			
Surrogate: Phenol-d6	4.67		mg/kg wet	5.000		93	30-130			
Surrogate: p-Terphenyl-d14	3.12		mg/kg wet	3.333		94	30-130			

**LCS Dup**

1,1-Biphenyl	2.90	0.333	mg/kg wet	3.333		87	40-140	2	30	
1,2,4-Trichlorobenzene	2.81	0.333	mg/kg wet	3.333		84	40-140	0.8	30	
1,2-Dichlorobenzene	2.95	0.333	mg/kg wet	3.333		89	40-140	2	30	
1,3-Dichlorobenzene	2.88	0.333	mg/kg wet	3.333		86	40-140	0.8	30	
1,4-Dichlorobenzene	2.83	0.333	mg/kg wet	3.333		85	40-140	2	30	
2,3,4,6-Tetrachlorophenol	3.09	1.67	mg/kg wet	3.333		93	30-130	3	30	
2,4,5-Trichlorophenol	3.09	0.333	mg/kg wet	3.333		93	30-130	3	30	



CERTIFICATE OF ANALYSIS

Client Name: RC & D  
Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1012057

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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8270C Semi-Volatile Organic Compounds

**Batch CL00623 - 3546**

2,4,6-Trichlorophenol	3.18	0.333	mg/kg wet	3.333		96	30-130	2	30	
2,4-Dichlorophenol	3.23	0.333	mg/kg wet	3.333		97	30-130	1	30	
2,4-Dimethylphenol	3.04	0.333	mg/kg wet	3.333		91	30-130	3	30	
2,4-Dinitrophenol	2.86	1.67	mg/kg wet	3.333		86	30-130	1	30	
2,4-Dinitrotoluene	3.15	0.333	mg/kg wet	3.333		95	40-140	4	30	
2,6-Dinitrotoluene	3.22	0.333	mg/kg wet	3.333		97	40-140	3	30	
2-Chloronaphthalene	2.84	0.333	mg/kg wet	3.333		85	40-140	2	30	
2-Chlorophenol	3.04	0.333	mg/kg wet	3.333		91	30-130	3	30	
2-Methylnaphthalene	3.12	0.333	mg/kg wet	3.333		94	40-140	2	30	
2-Methylphenol	3.02	0.333	mg/kg wet	3.333		91	30-130	5	30	
2-Nitroaniline	3.40	0.333	mg/kg wet	3.333		102	40-140	4	30	
2-Nitrophenol	3.13	0.333	mg/kg wet	3.333		94	30-130	0.8	30	
3,3'-Dichlorobenzidine	2.11	0.667	mg/kg wet	3.333		63	40-140	3	30	
3+4-Methylphenol	6.16	0.667	mg/kg wet	6.667		92	30-130	0.5	30	
3-Nitroaniline	2.52	0.333	mg/kg wet	3.333		76	40-140	7	30	
4,6-Dinitro-2-Methylphenol	3.15	1.67	mg/kg wet	3.333		94	30-130	1	30	
4-Bromophenyl-phenylether	2.97	0.333	mg/kg wet	3.333		89	40-140	9	30	
4-Chloro-3-Methylphenol	3.33	0.333	mg/kg wet	3.333		100	30-130	4	30	
4-Chloroaniline	1.98	0.667	mg/kg wet	3.333		59	40-140	6	30	
4-Chloro-phenyl-phenyl ether	2.97	0.333	mg/kg wet	3.333		89	40-140	0.5	30	
4-Nitroaniline	2.97	0.333	mg/kg wet	3.333		89	40-140	8	30	
4-Nitrophenol	2.68	1.67	mg/kg wet	3.333		80	30-130	4	30	
Acenaphthene	3.15	0.333	mg/kg wet	3.333		95	40-140	0.4	30	
Acenaphthylene	2.99	0.333	mg/kg wet	3.333		90	40-140	0.2	30	
Acetophenone	3.30	0.667	mg/kg wet	3.333		99	40-140	9	30	
Aniline	2.28	0.667	mg/kg wet	3.333		68	40-140	4	30	
Anthracene	3.34	0.333	mg/kg wet	3.333		100	40-140	0.5	30	
Azobenzene	2.80	0.333	mg/kg wet	3.333		84	40-140	2	30	
Benzo(a)anthracene	3.26	0.333	mg/kg wet	3.333		98	40-140	0.6	30	
Benzo(a)pyrene	3.30	0.167	mg/kg wet	3.333		99	40-140	0.4	30	
Benzo(b)fluoranthene	3.29	0.333	mg/kg wet	3.333		99	40-140	10	30	
Benzo(g,h,i)perylene	3.23	0.333	mg/kg wet	3.333		97	40-140	5	30	
Benzo(k)fluoranthene	3.54	0.333	mg/kg wet	3.333		106	40-140	11	30	
Benzoic Acid	2.73	1.67	mg/kg wet	3.333		82	40-140	4	30	
Benzyl Alcohol	2.89	0.333	mg/kg wet	3.333		87	40-140	3	30	
bis(2-Chloroethoxy)methane	2.76	0.333	mg/kg wet	3.333		83	40-140	1	30	
bis(2-Chloroethyl)ether	3.51	0.333	mg/kg wet	3.333		105	40-140	8	30	
bis(2-chloroisopropyl)Ether	3.04	0.333	mg/kg wet	3.333		91	40-140	0.2	30	
bis(2-Ethylhexyl)phthalate	3.12	0.333	mg/kg wet	3.333		94	40-140	0.07	30	
Butylbenzylphthalate	3.08	0.333	mg/kg wet	3.333		92	40-140	1	30	
Carbazole	3.04	0.333	mg/kg wet	3.333		91	40-140	0.2	30	
Chrysene	3.32	0.167	mg/kg wet	3.333		100	40-140	0.5	30	
Dibenzo(a,h)Anthracene	3.24	0.167	mg/kg wet	3.333		97	40-140	5	30	
Dibenzofuran	3.03	0.333	mg/kg wet	3.333		91	40-140	2	30	
Diethylphthalate	3.04	0.333	mg/kg wet	3.333		91	40-140	2	30	

CERTIFICATE OF ANALYSIS

Client Name: RC & D  
Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1012057

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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8270C Semi-Volatile Organic Compounds

**Batch CL00623 - 3546**

Dimethylphthalate	3.08	0.333	mg/kg wet	3.333		93	40-140	1	30	
Di-n-butylphthalate	2.89	0.333	mg/kg wet	3.333		87	40-140	2	30	
Di-n-octylphthalate	3.19	0.333	mg/kg wet	3.333		96	40-140	2	30	
Fluoranthene	3.13	0.333	mg/kg wet	3.333		94	40-140	1	30	
Fluorene	3.34	0.333	mg/kg wet	3.333		100	40-140	2	30	
Hexachlorobenzene	3.24	0.167	mg/kg wet	3.333		97	40-140	2	30	
Hexachlorobutadiene	2.85	0.333	mg/kg wet	3.333		86	40-140	3	30	
Hexachlorocyclopentadiene	2.32	1.67	mg/kg wet	3.333		70	40-140	4	30	
Hexachloroethane	2.70	0.333	mg/kg wet	3.333		81	40-140	5	30	
Indeno(1,2,3-cd)Pyrene	3.31	0.333	mg/kg wet	3.333		99	40-140	6	30	
Isophorone	2.38	0.333	mg/kg wet	3.333		72	40-140	2	30	
Naphthalene	2.96	0.333	mg/kg wet	3.333		89	40-140	1	30	
Nitrobenzene	2.92	0.333	mg/kg wet	3.333		88	40-140	3	30	
N-Nitrosodimethylamine	3.08	0.333	mg/kg wet	3.333		92	40-140	2	30	
N-Nitroso-Di-n-Propylamine	3.03	0.333	mg/kg wet	3.333		91	40-140	6	30	
N-nitrosodiphenylamine	3.20	0.333	mg/kg wet	3.333		96	40-140	4	30	
Pentachlorophenol	3.28	1.67	mg/kg wet	3.333		99	30-130	3	30	
Phenanthrene	3.06	0.333	mg/kg wet	3.333		92	40-140	2	30	
Phenol	3.16	0.333	mg/kg wet	3.333		95	30-130	18	30	
Pyrene	3.26	0.333	mg/kg wet	3.333		98	40-140	1	30	
Pyridine	2.69	1.67	mg/kg wet	3.333		81	40-140	11	30	
Surrogate: 1,2-Dichlorobenzene-d4	2.87		mg/kg wet	3.333		86	30-130			
Surrogate: 2,4,6-Tribromophenol	5.02		mg/kg wet	5.000		100	30-130			
Surrogate: 2-Chlorophenol-d4	4.46		mg/kg wet	5.000		89	30-130			
Surrogate: 2-Fluorobiphenyl	2.83		mg/kg wet	3.333		85	30-130			
Surrogate: 2-Fluorophenol	4.14		mg/kg wet	5.000		83	30-130			
Surrogate: Nitrobenzene-d5	2.88		mg/kg wet	3.333		86	30-130			
Surrogate: Phenol-d6	4.90		mg/kg wet	5.000		98	30-130			
Surrogate: p-Terphenyl-d14	3.04		mg/kg wet	3.333		91	30-130			

**Matrix Spike Source: 1012057-01**

1,1-Biphenyl	2.47	0.358	mg/kg dry	3.580	ND	69	40-140			
1,2,4-Trichlorobenzene	2.23	0.358	mg/kg dry	3.580	ND	62	40-140			
1,2-Dichlorobenzene	2.13	0.358	mg/kg dry	3.580	ND	59	40-140			
1,3-Dichlorobenzene	2.07	0.358	mg/kg dry	3.580	ND	58	40-140			
1,4-Dichlorobenzene	2.04	0.358	mg/kg dry	3.580	ND	57	40-140			
2,3,4,6-Tetrachlorophenol	2.86	1.79	mg/kg dry	3.580	ND	80	30-130			
2,4,5-Trichlorophenol	2.73	0.358	mg/kg dry	3.580	ND	76	30-130			
2,4,6-Trichlorophenol	2.82	0.358	mg/kg dry	3.580	ND	79	30-130			
2,4-Dichlorophenol	2.61	0.358	mg/kg dry	3.580	ND	73	30-130			
2,4-Dimethylphenol	2.49	0.358	mg/kg dry	3.580	ND	69	30-130			
2,4-Dinitrophenol	2.31	1.79	mg/kg dry	3.580	ND	65	30-130			
2,4-Dinitrotoluene	3.04	0.358	mg/kg dry	3.580	ND	85	40-140			
2,6-Dinitrotoluene	2.94	0.358	mg/kg dry	3.580	ND	82	40-140			
2-Chloronaphthalene	2.35	0.358	mg/kg dry	3.580	ND	66	40-140			
2-Chlorophenol	2.31	0.358	mg/kg dry	3.580	ND	65	30-130			



CERTIFICATE OF ANALYSIS

Client Name: RC & D  
 Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1012057

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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8270C Semi-Volatile Organic Compounds

**Batch CL00623 - 3546**

2-Methylnaphthalene	2.53	0.358	mg/kg dry	3.580	ND	71	40-140			
2-Methylphenol	2.36	0.358	mg/kg dry	3.580	ND	66	30-130			
2-Nitroaniline	3.11	0.358	mg/kg dry	3.580	ND	87	40-140			
2-Nitrophenol	2.51	0.358	mg/kg dry	3.580	ND	70	30-130			
3,3'-Dichlorobenzidine	2.92	0.716	mg/kg dry	3.580	ND	82	40-140			
3+4-Methylphenol	5.50	0.716	mg/kg dry	7.161	ND	77	30-130			
3-Nitroaniline	2.58	0.358	mg/kg dry	3.580	ND	72	40-140			
4,6-Dinitro-2-Methylphenol	3.23	1.79	mg/kg dry	3.580	ND	90	30-130			
4-Bromophenyl-phenylether	3.15	0.358	mg/kg dry	3.580	ND	88	40-140			
4-Chloro-3-Methylphenol	2.95	0.358	mg/kg dry	3.580	ND	82	30-130			
4-Chloroaniline	2.14	0.716	mg/kg dry	3.580	ND	60	40-140			
4-Chloro-phenyl-phenyl ether	2.64	0.358	mg/kg dry	3.580	ND	74	40-140			
4-Nitroaniline	3.33	0.358	mg/kg dry	3.580	ND	93	40-140			
4-Nitrophenol	2.77	1.79	mg/kg dry	3.580	ND	77	30-130			
Acenaphthene	2.76	0.358	mg/kg dry	3.580	ND	77	40-140			
Acenaphthylene	2.63	0.358	mg/kg dry	3.580	ND	73	40-140			
Acetophenone	2.55	0.716	mg/kg dry	3.580	ND	71	40-140			
Aniline	2.10	0.716	mg/kg dry	3.580	ND	59	40-140			
Anthracene	3.44	0.358	mg/kg dry	3.580	ND	96	40-140			
Azobenzene	2.81	0.358	mg/kg dry	3.580	ND	78	40-140			
Benzo(a)anthracene	3.39	0.358	mg/kg dry	3.580	ND	95	40-140			
Benzo(a)pyrene	3.48	0.179	mg/kg dry	3.580	ND	97	40-140			
Benzo(b)fluoranthene	3.65	0.358	mg/kg dry	3.580	ND	102	40-140			
Benzo(g,h,i)perylene	3.46	0.358	mg/kg dry	3.580	ND	97	40-140			
Benzo(k)fluoranthene	3.52	0.358	mg/kg dry	3.580	ND	98	40-140			
Benzoic Acid	1.42	1.79	mg/kg dry	3.580	ND	40	40-140			
Benzyl Alcohol	2.45	0.358	mg/kg dry	3.580	ND	68	40-140			
bis(2-Chloroethoxy)methane	2.47	0.358	mg/kg dry	3.580	ND	69	40-140			
bis(2-Chloroethyl)ether	3.02	0.358	mg/kg dry	3.580	ND	84	40-140			
bis(2-chloroisopropyl)Ether	2.26	0.358	mg/kg dry	3.580	ND	63	40-140			
bis(2-Ethylhexyl)phthalate	3.34	0.358	mg/kg dry	3.580	ND	93	40-140			
Butylbenzylphthalate	3.29	0.358	mg/kg dry	3.580	ND	92	40-140			
Carbazole	3.20	0.358	mg/kg dry	3.580	ND	89	40-140			
Chrysene	3.55	0.179	mg/kg dry	3.580	ND	99	40-140			
Dibenzo(a,h)Anthracene	3.41	0.179	mg/kg dry	3.580	ND	95	40-140			
Dibenzofuran	2.65	0.358	mg/kg dry	3.580	ND	74	40-140			
Diethylphthalate	2.84	0.358	mg/kg dry	3.580	ND	79	40-140			
Dimethylphthalate	2.83	0.358	mg/kg dry	3.580	ND	79	40-140			
Di-n-butylphthalate	3.15	0.358	mg/kg dry	3.580	ND	88	40-140			
Di-n-octylphthalate	3.44	0.358	mg/kg dry	3.580	ND	96	40-140			
Fluoranthene	3.28	0.358	mg/kg dry	3.580	ND	92	40-140			
Fluorene	2.98	0.358	mg/kg dry	3.580	ND	83	40-140			
Hexachlorobenzene	3.32	0.179	mg/kg dry	3.580	ND	93	40-140			
Hexachlorobutadiene	2.20	0.358	mg/kg dry	3.580	ND	61	40-140			
Hexachlorocyclopentadiene	1.82	1.79	mg/kg dry	3.580	ND	51	40-140			



CERTIFICATE OF ANALYSIS

Client Name: RC & D  
Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1012057

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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8270C Semi-Volatile Organic Compounds

**Batch CL00623 - 3546**

Hexachloroethane	2.00	0.358	mg/kg dry	3.580	ND	56	40-140			
Indeno(1,2,3-cd)Pyrene	3.58	0.358	mg/kg dry	3.580	ND	100	40-140			
Isophorone	2.00	0.358	mg/kg dry	3.580	ND	56	40-140			
Naphthalene	2.40	0.358	mg/kg dry	3.580	ND	67	40-140			
Nitrobenzene	2.28	0.358	mg/kg dry	3.580	ND	64	40-140			
N-Nitrosodimethylamine	2.19	0.358	mg/kg dry	3.580	ND	61	40-140			
N-Nitroso-Di-n-Propylamine	2.39	0.358	mg/kg dry	3.580	ND	67	40-140			
N-nitrosodiphenylamine	3.25	0.358	mg/kg dry	3.580	ND	91	40-140			
Pentachlorophenol	3.44	1.79	mg/kg dry	3.580	ND	96	30-130			
Phenanthrene	3.20	0.358	mg/kg dry	3.580	ND	89	40-140			
Phenol	2.38	0.358	mg/kg dry	3.580	ND	67	30-130			
Pyrene	3.45	0.358	mg/kg dry	3.580	ND	96	40-140			
Pyridine	1.53	1.79	mg/kg dry	3.580	ND	43	40-140			
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	2.10		mg/kg dry	3.580		59	30-130			
<i>Surrogate: 2,4,6-Tribromophenol</i>	5.18		mg/kg dry	5.371		96	30-130			
<i>Surrogate: 2-Chlorophenol-d4</i>	3.46		mg/kg dry	5.371		64	30-130			
<i>Surrogate: 2-Fluorobiphenyl</i>	2.40		mg/kg dry	3.580		67	30-130			
<i>Surrogate: 2-Fluorophenol</i>	3.20		mg/kg dry	5.371		60	30-130			
<i>Surrogate: Nitrobenzene-d5</i>	2.33		mg/kg dry	3.580		65	30-130			
<i>Surrogate: Phenol-d6</i>	3.78		mg/kg dry	5.371		70	30-130			
<i>Surrogate: p-Terphenyl-d14</i>	3.28		mg/kg dry	3.580		92	30-130			

**Matrix Spike Dup Source: 1012057-01**

1,1-Biphenyl	2.58	0.360	mg/kg dry	3.605	ND	71	40-140	4	30	
1,2,4-Trichlorobenzene	2.50	0.360	mg/kg dry	3.605	ND	69	40-140	11	30	
1,2-Dichlorobenzene	2.56	0.360	mg/kg dry	3.605	ND	71	40-140	19	30	
1,3-Dichlorobenzene	2.56	0.360	mg/kg dry	3.605	ND	71	40-140	21	30	
1,4-Dichlorobenzene	2.55	0.360	mg/kg dry	3.605	ND	71	40-140	22	30	
2,3,4,6-Tetrachlorophenol	2.94	1.81	mg/kg dry	3.605	ND	81	30-130	3	30	
2,4,5-Trichlorophenol	2.76	0.360	mg/kg dry	3.605	ND	77	30-130	0.8	30	
2,4,6-Trichlorophenol	2.87	0.360	mg/kg dry	3.605	ND	80	30-130	2	30	
2,4-Dichlorophenol	2.70	0.360	mg/kg dry	3.605	ND	75	30-130	3	30	
2,4-Dimethylphenol	2.59	0.360	mg/kg dry	3.605	ND	72	30-130	4	30	
2,4-Dinitrophenol	2.37	1.81	mg/kg dry	3.605	ND	66	30-130	3	30	
2,4-Dinitrotoluene	3.18	0.360	mg/kg dry	3.605	ND	88	40-140	5	30	
2,6-Dinitrotoluene	3.00	0.360	mg/kg dry	3.605	ND	83	40-140	2	30	
2-Chloronaphthalene	2.45	0.360	mg/kg dry	3.605	ND	68	40-140	4	30	
2-Chlorophenol	2.61	0.360	mg/kg dry	3.605	ND	72	30-130	12	30	
2-Methylnaphthalene	2.68	0.360	mg/kg dry	3.605	ND	74	40-140	6	30	
2-Methylphenol	2.57	0.360	mg/kg dry	3.605	ND	71	30-130	9	30	
2-Nitroaniline	3.19	0.360	mg/kg dry	3.605	ND	88	40-140	2	30	
2-Nitrophenol	2.69	0.360	mg/kg dry	3.605	ND	75	30-130	7	30	
3,3'-Dichlorobenzidine	2.65	0.721	mg/kg dry	3.605	ND	74	40-140	10	30	
3+4-Methylphenol	5.65	0.721	mg/kg dry	7.210	ND	78	30-130	3	30	
3-Nitroaniline	2.69	0.360	mg/kg dry	3.605	ND	75	40-140	4	30	
4,6-Dinitro-2-Methylphenol	3.09	1.81	mg/kg dry	3.605	ND	86	30-130	4	30	

CERTIFICATE OF ANALYSIS

Client Name: RC & D  
 Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1012057

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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8270C Semi-Volatile Organic Compounds

**Batch CL00623 - 3546**

4-Bromophenyl-phenylether	2.91	0.360	mg/kg dry	3.605	ND	81	40-140	8	30	
4-Chloro-3-Methylphenol	3.01	0.360	mg/kg dry	3.605	ND	83	30-130	2	30	
4-Chloroaniline	2.06	0.721	mg/kg dry	3.605	ND	57	40-140	4	30	
4-Chloro-phenyl-phenyl ether	2.67	0.360	mg/kg dry	3.605	ND	74	40-140	1	30	
4-Nitroaniline	3.32	0.360	mg/kg dry	3.605	ND	92	40-140	0.3	30	
4-Nitrophenol	2.83	1.81	mg/kg dry	3.605	ND	78	30-130	2	30	
Acenaphthene	2.87	0.360	mg/kg dry	3.605	ND	80	40-140	4	30	
Acenaphthylene	2.70	0.360	mg/kg dry	3.605	ND	75	40-140	3	30	
Acetophenone	2.90	0.721	mg/kg dry	3.605	ND	80	40-140	13	30	
Aniline	2.37	0.721	mg/kg dry	3.605	ND	66	40-140	12	30	
Anthracene	3.38	0.360	mg/kg dry	3.605	ND	94	40-140	2	30	
Azobenzene	2.78	0.360	mg/kg dry	3.605	ND	77	40-140	1	30	
Benzo(a)anthracene	3.31	0.360	mg/kg dry	3.605	ND	92	40-140	2	30	
Benzo(a)pyrene	3.41	0.181	mg/kg dry	3.605	ND	95	40-140	2	30	
Benzo(b)fluoranthene	3.21	0.360	mg/kg dry	3.605	ND	89	40-140	13	30	
Benzo(g,h,i)perylene	3.30	0.360	mg/kg dry	3.605	ND	91	40-140	5	30	
Benzo(k)fluoranthene	3.74	0.360	mg/kg dry	3.605	ND	104	40-140	6	30	
Benzoic Acid	1.54	1.81	mg/kg dry	3.605	ND	43	40-140	8	30	
Benzyl Alcohol	2.70	0.360	mg/kg dry	3.605	ND	75	40-140	10	30	
bis(2-Chloroethoxy)methane	2.61	0.360	mg/kg dry	3.605	ND	72	40-140	6	30	
bis(2-Chloroethyl)ether	2.98	0.360	mg/kg dry	3.605	ND	83	40-140	1	30	
bis(2-chloroisopropyl)Ether	2.61	0.360	mg/kg dry	3.605	ND	72	40-140	15	30	
bis(2-Ethylhexyl)phthalate	3.14	0.360	mg/kg dry	3.605	ND	87	40-140	6	30	
Butylbenzylphthalate	3.15	0.360	mg/kg dry	3.605	ND	87	40-140	4	30	
Carbazole	3.13	0.360	mg/kg dry	3.605	ND	87	40-140	2	30	
Chrysene	3.44	0.181	mg/kg dry	3.605	ND	95	40-140	3	30	
Dibenzo(a,h)Anthracene	3.38	0.181	mg/kg dry	3.605	ND	94	40-140	0.7	30	
Dibenzofuran	2.73	0.360	mg/kg dry	3.605	ND	76	40-140	3	30	
Diethylphthalate	2.93	0.360	mg/kg dry	3.605	ND	81	40-140	3	30	
Dimethylphthalate	2.91	0.360	mg/kg dry	3.605	ND	81	40-140	3	30	
Di-n-butylphthalate	2.96	0.360	mg/kg dry	3.605	ND	82	40-140	6	30	
Di-n-octylphthalate	3.24	0.360	mg/kg dry	3.605	ND	90	40-140	6	30	
Fluoranthene	3.16	0.360	mg/kg dry	3.605	ND	88	40-140	4	30	
Fluorene	3.09	0.360	mg/kg dry	3.605	ND	86	40-140	4	30	
Hexachlorobenzene	3.16	0.181	mg/kg dry	3.605	ND	88	40-140	5	30	
Hexachlorobutadiene	2.48	0.360	mg/kg dry	3.605	ND	69	40-140	12	30	
Hexachlorocyclopentadiene	1.96	1.81	mg/kg dry	3.605	ND	54	40-140	7	30	
Hexachloroethane	2.44	0.360	mg/kg dry	3.605	ND	68	40-140	20	30	
Indeno(1,2,3-cd)Pyrene	3.40	0.360	mg/kg dry	3.605	ND	94	40-140	5	30	
Isophorone	2.02	0.360	mg/kg dry	3.605	ND	56	40-140	1	30	
Naphthalene	2.59	0.360	mg/kg dry	3.605	ND	72	40-140	8	30	
Nitrobenzene	2.56	0.360	mg/kg dry	3.605	ND	71	40-140	12	30	
N-Nitrosodimethylamine	2.84	0.360	mg/kg dry	3.605	ND	79	40-140	26	30	
N-Nitroso-Di-n-Propylamine	2.67	0.360	mg/kg dry	3.605	ND	74	40-140	11	30	
N-nitrosodiphenylamine	3.19	0.360	mg/kg dry	3.605	ND	88	40-140	2	30	



CERTIFICATE OF ANALYSIS

Client Name: RC & D  
 Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1012057

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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8270C Semi-Volatile Organic Compounds

**Batch CL00623 - 3546**

Pentachlorophenol	3.32	1.81	mg/kg dry	3.605	ND	92	30-130	4	30	
Phenanthrene	3.18	0.360	mg/kg dry	3.605	ND	88	40-140	0.4	30	
Phenol	2.64	0.360	mg/kg dry	3.605	ND	73	30-130	10	30	
Pyrene	3.35	0.360	mg/kg dry	3.605	ND	93	40-140	3	30	
Pyridine	2.14	1.81	mg/kg dry	3.605	ND	59	40-140	33	30	D+
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	<i>2.51</i>		mg/kg dry	<i>3.605</i>		<i>70</i>	<i>30-130</i>			
<i>Surrogate: 2,4,6-Tribromophenol</i>	<i>4.96</i>		mg/kg dry	<i>5.407</i>		<i>92</i>	<i>30-130</i>			
<i>Surrogate: 2-Chlorophenol-d4</i>	<i>3.90</i>		mg/kg dry	<i>5.407</i>		<i>72</i>	<i>30-130</i>			
<i>Surrogate: 2-Fluorobiphenyl</i>	<i>2.48</i>		mg/kg dry	<i>3.605</i>		<i>69</i>	<i>30-130</i>			
<i>Surrogate: 2-Fluorophenol</i>	<i>3.73</i>		mg/kg dry	<i>5.407</i>		<i>69</i>	<i>30-130</i>			
<i>Surrogate: Nitrobenzene-d5</i>	<i>2.53</i>		mg/kg dry	<i>3.605</i>		<i>70</i>	<i>30-130</i>			
<i>Surrogate: Phenol-d6</i>	<i>4.17</i>		mg/kg dry	<i>5.407</i>		<i>77</i>	<i>30-130</i>			
<i>Surrogate: p-Terphenyl-d14</i>	<i>3.09</i>		mg/kg dry	<i>3.605</i>		<i>86</i>	<i>30-130</i>			



*CERTIFICATE OF ANALYSIS*

Client Name: RC & D  
Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1012057

**Notes and Definitions**

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



*CERTIFICATE OF ANALYSIS*

Client Name: RC & D  
Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1012057

**ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS**

**ENVIRONMENTAL**

Department of Defense (DoD) Environmental Laboratory Accreditation Program (ELAP)

A2LA Accredited: Testing Cert# 2864.01  
<http://www.a2la.org/scopepdf/2864-01.pdf>

Rhode Island Potable and Non Potable Water: LAI00179  
<http://www.health.ri.gov/labs/waterlabs-instate.php>

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750  
[http://www.ct.gov/dph/lib/dph/environmental\\_health/environmental\\_laboratories/pdf/out\\_state.pdf](http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/out_state.pdf)

Maine Potable and Non Potable Water: RI0002  
[http://www.maine.gov/dep/blwq/topic/vessel/lab\\_list.pdf](http://www.maine.gov/dep/blwq/topic/vessel/lab_list.pdf)

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

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424  
<http://www4.egov.nh.gov/des/nhelap/namesearch.asp>

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

United States Department of Agriculture Soil Permit: S-54210

Maryland Potable Water: 301  
[http://www.mde.state.md.us/assets/document/WSP\\_labs-2009apr20.pdf](http://www.mde.state.md.us/assets/document/WSP_labs-2009apr20.pdf)

South Carolina Volatile Organic Compounds in Potable Water: 78003

New Jersey Potable (VOA) and Non Potable Water (RCRA), Solids and Hazardous Waste: RI002  
<http://www.nj.gov/dep/oqa/certlabs.htm>

Pennsylvania Potable and Non Potable Water, Solid and Hazardous Waste: 68-01752  
[http://files.dep.state.pa.us/RegionalResources/Labs/LabsPortalFiles/2009-0911\\_accruited\\_laboratories.pdf](http://files.dep.state.pa.us/RegionalResources/Labs/LabsPortalFiles/2009-0911_accruited_laboratories.pdf)

**CHEMISTRY**

A2LA Accredited: Testing Cert # 2864.01  
Lead in Paint, Phthalates, Lead in Children's Metals Products (Including Jewelry)  
<http://www.A2LA.org/dirsearchnew/newsearch.cfm>

CPSC ID# 1141  
Lead Paint, Lead in Children's Metals Jewelry  
<http://www.cpsc.gov/cgi-bin/labapplist.aspx>

**Sample and Cooler Receipt Checklist**

Client: RC and D  
Client Project ID: \_\_\_\_\_  
Shipped/Delivered Via: ESS Courier

ESS Project ID: 10120057  
Date Project Due: 12/8/10  
Days For Project: 3 Day

**Items to be checked upon receipt:**

- |  |                               |   |   |
|--|-------------------------------|---|---|
| 1. Air Bill Manifest Present?          | <input type="checkbox"/> * No | 10. Are the samples properly preserved?   | <input type="checkbox"/> Yes                              |
| Air No.:                               |                               | 11. Proper sample containers used?        | <input type="checkbox"/> Yes                              |
| 2. Were Custody Seals Present?         | <input type="checkbox"/> No   | 12. Any air bubbles in the VOA vials?     | <input type="checkbox"/> N/A                              |
| 3. Were Custody Seals Intact?          | <input type="checkbox"/> N/A  | 13. Holding times exceeded?               | <input type="checkbox"/> No                               |
| 4. Is Radiation count < 100 CPM?       | <input type="checkbox"/> Yes  | 14. Sufficient sample volumes?            | <input type="checkbox"/> Yes                              |
| 5. Is a cooler present?                | <input type="checkbox"/> * No | 15. Any Subcontracting needed?            | <input type="checkbox"/> No                               |
| Cooler Temp: <b>NA</b>                 |                               | 16. Are ESS labels on correct containers? | <input type="checkbox"/> Yes/ <input type="checkbox"/> No |
| Iced With: <b>None</b>                 |                               | 17. Were samples received intact?         | <input type="checkbox"/> Yes/ <input type="checkbox"/> No |
| 6. Was COC included with samples?      | <input type="checkbox"/> Yes  | ESS Sample IDs: _____                     |   |
| 7. Was COC signed and dated by client? | <input type="checkbox"/> Yes  | Sub Lab: _____                            |   |
| 8. Does the COC match the sample       | <input type="checkbox"/> Yes  | Analysis: _____                           |   |
| 9. Is COC complete and correct?        | <input type="checkbox"/> Yes  | TAT: _____                                |   |

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

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Who was called?: \_\_\_\_\_ By whom? \_\_\_\_\_

Sample Number	Properly Preserved	Container Type	# of Containers	Preservative
1	Yes	40 ml - VOA	1	MeOH
1	Yes	Plastic Bag	1	NP

Completed By: *MJK* Date/Time: 12/3/10  
Reviewed By: \_\_\_\_\_ Date/Time: 12/3/10

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

# CHAIN OF CUSTODY

Page 1 of 1

ESS LAB PROJECT ID: 10120056

Reporting Limits: RIDE MAFDEC

Electronic Deliverable: Yes  No

Format: Excel  Access  PDF  Other

Turn Time: 3 DAY  
 If faster than 5 days, prior approval by laboratory is required # \_\_\_\_\_

State where samples were collected from:  
 MA  RI  NH  NJ  NY  ME  Other \_\_\_\_\_

Is this project for any of the following:  
 USACE  Navy  Other

Co. Name	Project #	Project Name (20 Char. or less)	Type of Containers	Number of Containers	Type of Containers	Write Required Analysis	
RC+D	1006	LINCOLN LACE					
Contact Person	Address						
Rob Schuster	17 Gordon Ave, Suite 204						
City	State	Zip					
Providence	RI	02905					
Telephone #	Fax #	Email Address					
401-270-4983	401-270-5486	mblack@radial.com					
ESS LAB Sample #	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Pes Code
1	12/3/10	14:00				1006-GFGRAB08	
<del>2</del>	<del>12/3/10</del>	<del>14:00</del>				<del>1006-GFGRAB09</del>	
						cancel per client	
						EO 12/3/10	

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: Yes  No  NA:  [ ] Pickup

Seals Intact: Yes  No  NA:  [ ] Technicians

Cooler Temp: \_\_\_\_\_

Preservation Code: 1- NP, 2- HCl, 3- H<sub>2</sub>SO<sub>4</sub>, 4- HNO<sub>3</sub>, 5- NaOH, 6- MeOH, 7- Asorbic Acid, 8- ZnAct, 9- \_\_\_\_\_

Sampled by: M. Black

Comments: To BE Preserved by Essc their office in glassware

Relinquished by: (Signature) <i>Michael Black</i>	Date/Time 12/3/10 14:30	Received by: (Signature) <i>Michael Korman</i>	Date/Time 12/3/10 16:00
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time

\*By circling MA-MCP, client acknowledges samples were collected

Please fax all changes to Chain of Custody in writing.

1 (White) Lab Copy 2 (Yellow) Client Receipt  
 10/26/04 A





EA Engineering, Science, and Technology, Inc.  
 2374 Post Road, Suite 102  
 Warwick, Rhode Island 02886  
 Telephone: (401) 736-3440  
 FAX: (401) 736-3423

**LINCOLN LACE AND BRAID REMEDIATION PROJECT**

**EA Project No. 61891.05**

**PROVIDENCE, RHODE ISLAND**

**CONSTRUCTION SUBMITTAL APPROVAL**

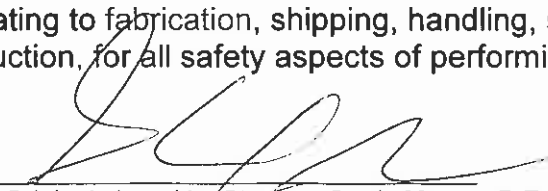
**Submittal: 1006-18**

**Description: Gravel and Topsoil Testing Results**

**Specification Section: 31 00 00**

<b>APPROVED AS NOTED</b>	<b>[ ]</b>
<b>APPROVED</b>	<b>[X]</b>
<b>REVISE AND RESUBMIT</b>	<b>[ ]</b>
<b>NOT APPROVED</b>	<b>[ ]</b>

Engineer's review and approval of this submittal are expressly limited as provided in the Contract Documents and are only to determine compliance with information given in Contract Documents and conformance with design concept of completed Project as a functioning whole. CONTRACTOR is, and ENGINEER is NOT, responsible for all matters relating to fabrication, shipping, handling, storage, assembly, and installation and construction, for all safety aspects of performing the Work, and for coordinating the Work.

Engineer:   
 Original signed by Stephen Curtis Mason, P.E.

Date: *12/20/10*

The attached submittal is recommended for approval.

**TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE**

**DATE:**  
December 16, 2010

**TRANSMITTAL NO:**  
1006-18

*(Read instructions on reverse side prior to filling in this form)*

**SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS (This section will be initiated by the Contractor)**

**TO:**  
EA Engineering, Science, and Technology, Inc.  
2350 Post Road  
Warwick, RI 02886

**FROM:**  
RC&D, Inc.  
17 Gordon Avenue, Suite 204  
Providence, RI 02905

**CONTRACT NO:**  
531451

**CHECK ONE:**  
 THIS IS A NEW TRANSMITTAL  
 THIS IS A RESUBMITTAL OF TRANSMITTAL \_\_\_\_\_

**SPECIFICATION SECTION NO:** (Cover only one section with each transmittal)

**PROJECT TITLE AND LOCATION:**

Lincoln Lane & Braint Site Remediation Project  
Providence, RI

**31 00 00**

ITEM NO.	DESCRIPTION OF ITEM SUBMITTED (Type, size, model number, etc.)	MEG. OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction No. 8)	NO. OF COPIES	CONTRACT REFERENCE		FOR CONTRACTOR USE CODE	VARIATION (See instruction No. 6)	FOR CE USE CODE
				SPEC. PARA. NO.	DRAWING SHEET NO.			
1	Analytical for Gravel Fill and Topsoil					A		

**REMARKS**  
See the attached analytical results for gravel fill and topsoil. Reference the previous submittal #1006-14 for analytical results where RC&D had been approved to haul up to 4,000 CY gravel fill and 2,000 CY topsoil.

For the Gravel Fill, two samples were run: 1006-GFGrb08 for TPH, VOC, SVOC, and PP13, and 1006-Lopes-09 for just arsenic. RC&D should now be approved to haul up to 5,000 CY gravel fill.

For the Topsoil, one sample was run: 1006-ReadTS-05 for TPH, VOC, SVOC, and PP13. RC&D should now be approved to haul up to 2,500 CY topsoil.

I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as otherwise noted.

  
Michael Black

NAME AND SIGNATURE OF CONTRACTOR

**SECTION II - APPROVAL ACTION**

ENCLOSURES RETURNED (List by Item No.)	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE
--	--	------





**ESS Laboratory**

*Division of Thielsch Engineering, Inc.*

**BAL Laboratory**

*The Microbiology Division  
of Thielsch Engineering, Inc.*



*CERTIFICATE OF ANALYSIS*

Rob Schuster  
RC & D  
17 Gordon Avenue, Suite 204  
Providence, RI 02905-1952

**RE: Lincoln Lace (1006)**  
**ESS Laboratory Work Order Number: 1012057**

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



Digitally signed by Laurel Stoddard  
Date: 2010.12.13 12:53:04 -05'00'

Laurel Stoddard  
Laboratory Director

**Analytical Summary**

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

ESS Laboratory certifies that the test results meet the requirements of NELAC and A2LA, except where noted within this project narrative.



**ESS Laboratory**

*Division of Thielsch Engineering, Inc.*

**BAL Laboratory**

*The Microbiology Division  
of Thielsch Engineering, Inc.*



*CERTIFICATE OF ANALYSIS*

Client Name: RC & D  
Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1012057

**SAMPLE RECEIPT**

The following samples were received on December 03, 2010 for the analyses specified on the enclosed Chain of Custody Record.

**Client did not deliver samples in a cooler. VOCs were preserved in methanol by ESS Laboratory.**

Lab Number	SampleName	Matrix	Analysis
1012057-01	1006-GFGrab08	Soil	6010B, 7471A, 7841, 8100M, 8260B, 8270C



*CERTIFICATE OF ANALYSIS*

Client Name: RC & D  
Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1012057

**PROJECT NARRATIVE**

**8270C Semi-Volatile Organic Compounds**

CL00623-MSD1 Relative percent difference for duplicate is outside of criteria (D+).

Pyridine (33%)

CTL0044-CCV1 Calibration required quadratic regression (Q).

2,4-Dinitrophenol (109% @ 70-130%), Hexachlorocyclopentadiene (97% @ 70-130%),  
Pentachlorophenol (119% @ 80-120%)

**No other observations noted.**

**End of Project Narrative.**

**DATA USABILITY LINKS**

[Definitions of Quality Control Parameters](#)

[Semivolatile Organics Internal Standard Information](#)

[Semivolatile Organics Surrogate Information](#)

[Volatile Organics Internal Standard Information](#)

[Volatile Organics Surrogate Information](#)

[EPH and VPH Alkane Lists](#)



*CERTIFICATE OF ANALYSIS*

Client Name: RC & D  
Client Project ID: Lincoln Lace  
Client Sample ID: 1006-GFGrab08  
Date Sampled: 12/03/10 14:00  
Percent Solids: 95

ESS Laboratory Work Order: 1012057  
ESS Laboratory Sample ID: 1012057-01  
Sample Matrix: Soil  
Units: mg/kg dry

**3050B/6000/7000 Total Metals**

**RI - RES DEC**

<u>Analyte</u>	<u>Results (MRL)</u>	<u>Method</u>	<u>Limit</u>	<u>DF</u>	<u>Analyst</u>	<u>Analyzed</u>	<u>I/V</u>	<u>F/V</u>	<u>Batch</u>
Antimony	ND (4.8)	6010B	10	1	SVD	12/08/10 17:47	2.18	100	CL00601
Arsenic	ND (2.4)	6010B	7	1	SVD	12/08/10 17:47	2.18	100	CL00601
Beryllium	0.15 (0.10)	6010B	0.4	1	SVD	12/08/10 17:47	2.18	100	CL00601
Cadmium	ND (0.49)	6010B	39	1	SVD	12/08/10 17:47	2.18	100	CL00601
Chromium	2.5 (1.0)	6010B	1400	1	SVD	12/08/10 17:47	2.18	100	CL00601
Copper	ND (2.4)	6010B	3100	1	SVD	12/08/10 17:47	2.18	100	CL00601
Lead	ND (4.8)	6010B	150	1	SVD	12/08/10 17:47	2.18	100	CL00601
Mercury	ND (0.032)	7471A	23	1	JP	12/07/10 16:43	0.66	40	CL00602
Nickel	ND (2.4)	6010B	1000	1	SVD	12/08/10 17:47	2.18	100	CL00601
Selenium	ND (4.8)	6010B	390	1	SVD	12/08/10 17:47	2.18	100	CL00601
Silver	ND (0.49)	6010B	200	1	SVD	12/08/10 17:47	2.18	100	CL00601
Thallium	ND (1.20)	7841	5.5	5	SVD	12/10/10 17:15	2.18	100	CL00601
Zinc	3.3 (2.4)	6010B	6000	1	SVD	12/08/10 17:47	2.18	100	CL00601



# ESS Laboratory

Division of Thielsch Engineering, Inc.

# BAL Laboratory

The Microbiology Division  
of Thielsch Engineering, Inc.



## CERTIFICATE OF ANALYSIS

Client Name: RC & D  
 Client Project ID: Lincoln Lace  
 Client Sample ID: 1006-GFGrab08  
 Date Sampled: 12/03/10 14:00  
 Percent Solids: 95  
 Initial Volume: 20.3  
 Final Volume: 15  
 Extraction Method: 5035

ESS Laboratory Work Order: 1012057  
 ESS Laboratory Sample ID: 1012057-01  
 Sample Matrix: Soil  
 Units: mg/kg dry  
 Analyst: MD

### 5035/8260B Volatile Organic Compounds / Methanol

Analyte	Results (MRL)	MDL	RI - RES DEC		Analyzed	Sequence	Batch
			Limit	DF			
1,1,1,2-Tetrachloroethane	ND (0.0830)	0.0072	2.2	1	12/06/10 22:33	CTL0041	CL00619
1,1,1-Trichloroethane	ND (0.0415)	0.0073	540	1	12/06/10 22:33	CTL0041	CL00619
1,1,2,2-Tetrachloroethane	ND (0.0415)	0.0113	1.3	1	12/06/10 22:33	CTL0041	CL00619
1,1,2-Trichloroethane	ND (0.0415)	0.0104	3.6	1	12/06/10 22:33	CTL0041	CL00619
1,1-Dichloroethane	ND (0.0415)	0.0066	920	1	12/06/10 22:33	CTL0041	CL00619
1,1-Dichloroethene	ND (0.0415)	0.0102	0.2	1	12/06/10 22:33	CTL0041	CL00619
1,1-Dichloropropene	ND (0.0415)	0.0064		1	12/06/10 22:33	CTL0041	CL00619
1,2,3-Trichlorobenzene	ND (0.0415)	0.0139		1	12/06/10 22:33	CTL0041	CL00619
1,2,3-Trichloropropane	ND (0.0415)	0.0103		1	12/06/10 22:33	CTL0041	CL00619
1,2,4-Trichlorobenzene	ND (0.0415)	0.0091	96	1	12/06/10 22:33	CTL0041	CL00619
1,2,4-Trimethylbenzene	ND (0.0415)	0.0080		1	12/06/10 22:33	CTL0041	CL00619
1,2-Dibromo-3-Chloropropane	ND (0.249)	0.0830	0.5	1	12/06/10 22:33	CTL0041	CL00619
1,2-Dibromoethane	ND (0.0415)	0.0105	0.01	1	12/06/10 22:33	CTL0041	CL00619
1,2-Dichlorobenzene	ND (0.0415)	0.0059	510	1	12/06/10 22:33	CTL0041	CL00619
1,2-Dichloroethane	ND (0.0415)	0.0111	0.9	1	12/06/10 22:33	CTL0041	CL00619
1,2-Dichloropropane	ND (0.0415)	0.0109	1.9	1	12/06/10 22:33	CTL0041	CL00619
1,3,5-Trimethylbenzene	ND (0.0415)	0.0073		1	12/06/10 22:33	CTL0041	CL00619
1,3-Dichlorobenzene	ND (0.0415)	0.0052	430	1	12/06/10 22:33	CTL0041	CL00619
1,3-Dichloropropane	ND (0.0415)	0.0093		1	12/06/10 22:33	CTL0041	CL00619
1,4-Dichlorobenzene	ND (0.0415)	0.0110	27	1	12/06/10 22:33	CTL0041	CL00619
1,4-Dioxane - Screen	ND (4.15)	1.39		1	12/06/10 22:33	CTL0041	CL00619
1-Chlorohexane	ND (0.0415)	0.0079		1	12/06/10 22:33	CTL0041	CL00619
2,2-Dichloropropane	ND (0.0830)	0.0142		1	12/06/10 22:33	CTL0041	CL00619
2-Butanone	ND (1.04)	0.240	10000	1	12/06/10 22:33	CTL0041	CL00619
2-Chlorotoluene	ND (0.0415)	0.0117		1	12/06/10 22:33	CTL0041	CL00619
2-Hexanone	ND (0.415)	0.0715		1	12/06/10 22:33	CTL0041	CL00619
4-Chlorotoluene	ND (0.0415)	0.0054		1	12/06/10 22:33	CTL0041	CL00619
4-Isopropyltoluene	ND (0.0415)	0.0074		1	12/06/10 22:33	CTL0041	CL00619
4-Methyl-2-Pentanone	ND (0.415)	0.0500	1200	1	12/06/10 22:33	CTL0041	CL00619
Acetone	ND (1.04)	0.307	7800	1	12/06/10 22:33	CTL0041	CL00619
Benzene	ND (0.0415)	0.0067	2.5	1	12/06/10 22:33	CTL0041	CL00619





# ESS Laboratory

Division of Thielsch Engineering, Inc.

# BAL Laboratory

The Microbiology Division  
of Thielsch Engineering, Inc.



## CERTIFICATE OF ANALYSIS

Client Name: RC & D  
 Client Project ID: Lincoln Lace  
 Client Sample ID: 1006-GFGrab08  
 Date Sampled: 12/03/10 14:00  
 Percent Solids: 95  
 Initial Volume: 20.3  
 Final Volume: 15  
 Extraction Method: 5035

ESS Laboratory Work Order: 1012057  
 ESS Laboratory Sample ID: 1012057-01  
 Sample Matrix: Soil  
 Units: mg/kg dry  
 Analyst: MD

### 5035/8260B Volatile Organic Compounds / Methanol

Analyte	Results (MRL)	MDL	RI - RES DEC		Analyzed	Sequence	Batch
			Limit	DF			
Bromobenzene	ND (0.0415)	0.0114		1	12/06/10 22:33	CTL0041	CL00619
Bromochloromethane	ND (0.0415)	0.0135		1	12/06/10 22:33	CTL0041	CL00619
Bromodichloromethane	ND (0.0415)	0.0057	10	1	12/06/10 22:33	CTL0041	CL00619
Bromoform	ND (0.0415)	0.0120	81	1	12/06/10 22:33	CTL0041	CL00619
Bromomethane	ND (0.0830)	0.0277	0.8	1	12/06/10 22:33	CTL0041	CL00619
Carbon Disulfide	ND (0.0415)	0.0061		1	12/06/10 22:33	CTL0041	CL00619
Carbon Tetrachloride	ND (0.0415)	0.0072	1.5	1	12/06/10 22:33	CTL0041	CL00619
Chlorobenzene	ND (0.0415)	0.0066	210	1	12/06/10 22:33	CTL0041	CL00619
Chloroethane	ND (0.0830)	0.0277		1	12/06/10 22:33	CTL0041	CL00619
Chloroform	ND (0.0415)	0.0086	1.2	1	12/06/10 22:33	CTL0041	CL00619
Chloromethane	ND (0.0830)	0.0105		1	12/06/10 22:33	CTL0041	CL00619
cis-1,2-Dichloroethene	ND (0.0415)	0.0103	630	1	12/06/10 22:33	CTL0041	CL00619
cis-1,3-Dichloropropene	ND (0.0415)	0.0094		1	12/06/10 22:33	CTL0041	CL00619
Dibromochloromethane	ND (0.0415)	0.0105	7.6	1	12/06/10 22:33	CTL0041	CL00619
Dibromomethane	ND (0.0415)	0.0131		1	12/06/10 22:33	CTL0041	CL00619
Dichlorodifluoromethane	ND (0.0415)	0.0072		1	12/06/10 22:33	CTL0041	CL00619
Diethyl Ether	ND (0.0415)	0.0105		1	12/06/10 22:33	CTL0041	CL00619
Di-isopropyl ether	ND (0.0415)	0.0078		1	12/06/10 22:33	CTL0041	CL00619
Ethyl tertiary-butyl ether	ND (0.0415)	0.0105		1	12/06/10 22:33	CTL0041	CL00619
Ethylbenzene	ND (0.0415)	0.0054	71	1	12/06/10 22:33	CTL0041	CL00619
Hexachlorobutadiene	ND (0.0415)	0.0139	8.2	1	12/06/10 22:33	CTL0041	CL00619
Isopropylbenzene	ND (0.0415)	0.0073	27	1	12/06/10 22:33	CTL0041	CL00619
Methyl tert-Butyl Ether	ND (0.0415)	0.0066	390	1	12/06/10 22:33	CTL0041	CL00619
Methylene Chloride	ND (0.208)	0.0109	45	1	12/06/10 22:33	CTL0041	CL00619
Naphthalene	ND (0.0415)	0.0109	54	1	12/06/10 22:33	CTL0041	CL00619
n-Butylbenzene	ND (0.0415)	0.0102		1	12/06/10 22:33	CTL0041	CL00619
n-Propylbenzene	ND (0.0415)	0.0101		1	12/06/10 22:33	CTL0041	CL00619
sec-Butylbenzene	ND (0.0415)	0.0056		1	12/06/10 22:33	CTL0041	CL00619
Styrene	ND (0.0415)	0.0055	13	1	12/06/10 22:33	CTL0041	CL00619
tert-Butylbenzene	ND (0.0415)	0.0097		1	12/06/10 22:33	CTL0041	CL00619
Tertiary-amyl methyl ether	ND (0.0415)	0.0060		1	12/06/10 22:33	CTL0041	CL00619



**CERTIFICATE OF ANALYSIS**

Client Name: RC & D  
 Client Project ID: Lincoln Lace  
 Client Sample ID: 1006-GFGrab08  
 Date Sampled: 12/03/10 14:00  
 Percent Solids: 95  
 Initial Volume: 20.3  
 Final Volume: 15  
 Extraction Method: 5035

ESS Laboratory Work Order: 1012057  
 ESS Laboratory Sample ID: 1012057-01  
 Sample Matrix: Soil  
 Units: mg/kg dry  
 Analyst: MD

**5035/8260B Volatile Organic Compounds / Methanol**

<u>Analyte</u>	<u>Results (MRL)</u>	<u>MDL</u>	<u>RI - RES DEC</u>		<u>Analyzed</u>	<u>Sequence</u>	<u>Batch</u>
			<u>Limit</u>	<u>DF</u>			
Tetrachloroethene	ND (0.0415)	0.0139	12	1	12/06/10 22:33	CTL0041	CL00619
Tetrahydrofuran	ND (0.415)	0.107		1	12/06/10 22:33	CTL0041	CL00619
Toluene	ND (0.0415)	0.0105	190	1	12/06/10 22:33	CTL0041	CL00619
trans-1,2-Dichloroethene	ND (0.0415)	0.0136	1100	1	12/06/10 22:33	CTL0041	CL00619
trans-1,3-Dichloropropene	ND (0.0415)	0.0128		1	12/06/10 22:33	CTL0041	CL00619
Trichloroethene	ND (0.0415)	0.0086	13	1	12/06/10 22:33	CTL0041	CL00619
Trichlorofluoromethane	ND (0.0415)	0.0110		1	12/06/10 22:33	CTL0041	CL00619
Vinyl Acetate	ND (0.208)	0.0086		1	12/06/10 22:33	CTL0041	CL00619
Vinyl Chloride	ND (0.0415)	0.0137	0.02	1	12/06/10 22:33	CTL0041	CL00619
Xylene O	ND (0.0415)	0.0080	110	1	12/06/10 22:33	CTL0041	CL00619
Xylene P,M	ND (0.0830)	0.0161	110	1	12/06/10 22:33	CTL0041	CL00619
Xylenes (Total)	ND (0.125)		110	1	12/06/10 22:33		[CALC]

	<u>%Recovery</u>	<u>Qualifier</u>	<u>Limits</u>
Surrogate: 1,2-Dichloroethane-d4	102 %		70-130
Surrogate: 4-Bromofluorobenzene	105 %		70-130
Surrogate: Dibromofluoromethane	111 %		70-130
Surrogate: Toluene-d8	110 %		70-130



# ESS Laboratory

Division of Thielsch Engineering, Inc.

# BAL Laboratory

The Microbiology Division  
of Thielsch Engineering, Inc.



## CERTIFICATE OF ANALYSIS

Client Name: RC & D  
 Client Project ID: Lincoln Lace  
 Client Sample ID: 1006-GFGrab08  
 Date Sampled: 12/03/10 14:00  
 Percent Solids: 95  
 Initial Volume: 20.1  
 Final Volume: 1  
 Extraction Method: 3546

ESS Laboratory Work Order: 1012057  
 ESS Laboratory Sample ID: 1012057-01  
 Sample Matrix: Soil  
 Units: mg/kg dry  
 Analyst: SEP  
 Prepared: 12/8/10 18:00

### 8100M Total Petroleum Hydrocarbons

<u>Analyte</u>	<u>Results (MRL)</u>	<u>RI - RES DEC</u>		<u>Analyzed</u>	<u>Sequence</u>	<u>Batch</u>
		<u>Limit</u>	<u>DF</u>			
Total Petroleum Hydrocarbons	ND (39.3)	500	1	12/08/10 21:01	CTL0066	CL00819
		<i>%Recovery</i>	<i>Qualifier</i>			
<i>Surrogate: O-Terphenyl</i>		91 %				
			<i>Limits</i>			
			40-140			



*CERTIFICATE OF ANALYSIS*

Client Name: RC & D  
 Client Project ID: Lincoln Lace  
 Client Sample ID: 1006-GFGGrab08  
 Date Sampled: 12/03/10 14:00  
 Percent Solids: 95  
 Initial Volume: 14.5  
 Final Volume: 0.5  
 Extraction Method: 3546

ESS Laboratory Work Order: 1012057  
 ESS Laboratory Sample ID: 1012057-01  
 Sample Matrix: Soil  
 Units: mg/kg dry  
 Analyst: IBM  
 Prepared: 12/6/10 17:00

**8270C Semi-Volatile Organic Compounds**

**RI - RES DEC**

<u>Analyte</u>	<u>Results (MRL)</u>	<u>Limit</u>	<u>DF</u>	<u>Analyzed</u>	<u>Sequence</u>	<u>Batch</u>
1,1-Biphenyl	ND (0.363)	0.8	1	12/07/10 10:21	CTL0044	CL00623
1,2,4-Trichlorobenzene	ND (0.363)	96	1	12/07/10 10:21	CTL0044	CL00623
1,2-Dichlorobenzene	ND (0.363)	510	1	12/07/10 10:21	CTL0044	CL00623
1,3-Dichlorobenzene	ND (0.363)	430	1	12/07/10 10:21	CTL0044	CL00623
1,4-Dichlorobenzene	ND (0.363)	27	1	12/07/10 10:21	CTL0044	CL00623
2,3,4,6-Tetrachlorophenol	ND (1.82)		1	12/07/10 10:21	CTL0044	CL00623
2,4,5-Trichlorophenol	ND (0.363)	330	1	12/07/10 10:21	CTL0044	CL00623
2,4,6-Trichlorophenol	ND (0.363)	58	1	12/07/10 10:21	CTL0044	CL00623
2,4-Dichlorophenol	ND (0.363)	30	1	12/07/10 10:21	CTL0044	CL00623
2,4-Dimethylphenol	ND (0.363)	1400	1	12/07/10 10:21	CTL0044	CL00623
2,4-Dinitrophenol	ND (1.82)	160	1	12/07/10 10:21	CTL0044	CL00623
2,4-Dinitrotoluene	ND (0.363)	0.9	1	12/07/10 10:21	CTL0044	CL00623
2,6-Dinitrotoluene	ND (0.363)		1	12/07/10 10:21	CTL0044	CL00623
2-Chloronaphthalene	ND (0.363)		1	12/07/10 10:21	CTL0044	CL00623
2-Chlorophenol	ND (0.363)	50	1	12/07/10 10:21	CTL0044	CL00623
2-Methylnaphthalene	ND (0.363)	123	1	12/07/10 10:21	CTL0044	CL00623
2-Methylphenol	ND (0.363)		1	12/07/10 10:21	CTL0044	CL00623
2-Nitroaniline	ND (0.363)		1	12/07/10 10:21	CTL0044	CL00623
2-Nitrophenol	ND (0.363)		1	12/07/10 10:21	CTL0044	CL00623
3,3'-Dichlorobenzidine	ND (0.726)	1.4	1	12/07/10 10:21	CTL0044	CL00623
3+4-Methylphenol	ND (0.726)		1	12/07/10 10:21	CTL0044	CL00623
3-Nitroaniline	ND (0.363)		1	12/07/10 10:21	CTL0044	CL00623
4,6-Dinitro-2-Methylphenol	ND (1.82)		1	12/07/10 10:21	CTL0044	CL00623
4-Bromophenyl-phenylether	ND (0.363)		1	12/07/10 10:21	CTL0044	CL00623
4-Chloro-3-Methylphenol	ND (0.363)		1	12/07/10 10:21	CTL0044	CL00623
4-Chloroaniline	ND (0.726)	310	1	12/07/10 10:21	CTL0044	CL00623
4-Chloro-phenyl-phenyl ether	ND (0.363)		1	12/07/10 10:21	CTL0044	CL00623
4-Nitroaniline	ND (0.363)		1	12/07/10 10:21	CTL0044	CL00623
4-Nitrophenol	ND (1.82)		1	12/07/10 10:21	CTL0044	CL00623
Acenaphthene	ND (0.363)	43	1	12/07/10 10:21	CTL0044	CL00623
Acenaphthylene	ND (0.363)	23	1	12/07/10 10:21	CTL0044	CL00623



# ESS Laboratory

Division of Thielsch Engineering, Inc.

# BAL Laboratory

The Microbiology Division  
of Thielsch Engineering, Inc.



## CERTIFICATE OF ANALYSIS

Client Name: RC & D  
 Client Project ID: Lincoln Lace  
 Client Sample ID: 1006-GFGrab08  
 Date Sampled: 12/03/10 14:00  
 Percent Solids: 95  
 Initial Volume: 14.5  
 Final Volume: 0.5  
 Extraction Method: 3546

ESS Laboratory Work Order: 1012057  
 ESS Laboratory Sample ID: 1012057-01  
 Sample Matrix: Soil  
 Units: mg/kg dry  
 Analyst: IBM  
 Prepared: 12/6/10 17:00

### 8270C Semi-Volatile Organic Compounds

Analyte	Results (MRL)	RI - RES DEC		Analyzed	Sequence	Batch
		Limit	DF			
Acetophenone	ND (0.726)		1	12/07/10 10:21	CTL0044	CL00623
Aniline	ND (0.726)		1	12/07/10 10:21	CTL0044	CL00623
Anthracene	ND (0.363)	35	1	12/07/10 10:21	CTL0044	CL00623
Azobenzene	ND (0.363)		1	12/07/10 10:21	CTL0044	CL00623
Benzo(a)anthracene	ND (0.363)	0.9	1	12/07/10 10:21	CTL0044	CL00623
Benzo(a)pyrene	ND (0.182)	0.4	1	12/07/10 10:21	CTL0044	CL00623
Benzo(b)fluoranthene	ND (0.363)	0.9	1	12/07/10 10:21	CTL0044	CL00623
Benzo(g,h,i)perylene	ND (0.363)	0.8	1	12/07/10 10:21	CTL0044	CL00623
Benzo(k)fluoranthene	ND (0.363)	0.9	1	12/07/10 10:21	CTL0044	CL00623
Benzoic Acid	ND (1.82)		1	12/07/10 10:21	CTL0044	CL00623
Benzyl Alcohol	ND (0.363)		1	12/07/10 10:21	CTL0044	CL00623
bis(2-Chloroethoxy)methane	ND (0.363)		1	12/07/10 10:21	CTL0044	CL00623
bis(2-Chloroethyl)ether	ND (0.363)	0.6	1	12/07/10 10:21	CTL0044	CL00623
bis(2-chloroisopropyl)Ether	ND (0.363)	9.1	1	12/07/10 10:21	CTL0044	CL00623
bis(2-Ethylhexyl)phthalate	ND (0.363)	46	1	12/07/10 10:21	CTL0044	CL00623
Butylbenzylphthalate	ND (0.363)		1	12/07/10 10:21	CTL0044	CL00623
Carbazole	ND (0.363)		1	12/07/10 10:21	CTL0044	CL00623
Chrysene	ND (0.182)	0.4	1	12/07/10 10:21	CTL0044	CL00623
Dibenzo(a,h)Anthracene	ND (0.182)	0.4	1	12/07/10 10:21	CTL0044	CL00623
Dibenzofuran	ND (0.363)		1	12/07/10 10:21	CTL0044	CL00623
Diethylphthalate	ND (0.363)	340	1	12/07/10 10:21	CTL0044	CL00623
Dimethylphthalate	ND (0.363)	1900	1	12/07/10 10:21	CTL0044	CL00623
Di-n-butylphthalate	ND (0.363)		1	12/07/10 10:21	CTL0044	CL00623
Di-n-octylphthalate	ND (0.363)		1	12/07/10 10:21	CTL0044	CL00623
Fluoranthene	ND (0.363)	20	1	12/07/10 10:21	CTL0044	CL00623
Fluorene	ND (0.363)	28	1	12/07/10 10:21	CTL0044	CL00623
Hexachlorobenzene	ND (0.182)	0.4	1	12/07/10 10:21	CTL0044	CL00623
Hexachlorobutadiene	ND (0.363)	8.2	1	12/07/10 10:21	CTL0044	CL00623
Hexachlorocyclopentadiene	ND (1.82)		1	12/07/10 10:21	CTL0044	CL00623
Hexachloroethane	ND (0.363)	46	1	12/07/10 10:21	CTL0044	CL00623
Indeno(1,2,3-cd)Pyrene	ND (0.363)	0.9	1	12/07/10 10:21	CTL0044	CL00623



# ESS Laboratory

Division of Thielsch Engineering, Inc.

# BAL Laboratory

The Microbiology Division  
of Thielsch Engineering, Inc.



## CERTIFICATE OF ANALYSIS

Client Name: RC & D  
 Client Project ID: Lincoln Lace  
 Client Sample ID: 1006-GFGGrab08  
 Date Sampled: 12/03/10 14:00  
 Percent Solids: 95  
 Initial Volume: 14.5  
 Final Volume: 0.5  
 Extraction Method: 3546

ESS Laboratory Work Order: 1012057  
 ESS Laboratory Sample ID: 1012057-01  
 Sample Matrix: Soil  
 Units: mg/kg dry  
 Analyst: IBM  
 Prepared: 12/6/10 17:00

### 8270C Semi-Volatile Organic Compounds

Analyte	Results (MRL)	RI - RES DEC		Analyzed	Sequence	Batch
		Limit	DF			
Isophorone	ND (0.363)		1	12/07/10 10:21	CTL0044	CL00623
Naphthalene	ND (0.363)	54	1	12/07/10 10:21	CTL0044	CL00623
Nitrobenzene	ND (0.363)		1	12/07/10 10:21	CTL0044	CL00623
N-Nitrosodimethylamine	ND (0.363)		1	12/07/10 10:21	CTL0044	CL00623
N-Nitroso-Di-n-Propylamine	ND (0.363)		1	12/07/10 10:21	CTL0044	CL00623
N-nitrosodiphenylamine	ND (0.363)		1	12/07/10 10:21	CTL0044	CL00623
Pentachlorophenol	ND (1.82)	5.3	1	12/07/10 10:21	CTL0044	CL00623
Phenanthrene	ND (0.363)	40	1	12/07/10 10:21	CTL0044	CL00623
Phenol	ND (0.363)	6000	1	12/07/10 10:21	CTL0044	CL00623
Pyrene	ND (0.363)	13	1	12/07/10 10:21	CTL0044	CL00623
Pyridine	ND (1.82)		1	12/07/10 10:21	CTL0044	CL00623

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichlorobenzene-d4	68 %		30-130
Surrogate: 2,4,6-Tribromophenol	86 %		30-130
Surrogate: 2-Chlorophenol-d4	70 %		30-130
Surrogate: 2-Fluorobiphenyl	68 %		30-130
Surrogate: 2-Fluorophenol	72 %		30-130
Surrogate: Nitrobenzene-d5	72 %		30-130
Surrogate: Phenol-d6	77 %		30-130
Surrogate: p-Terphenyl-d14	96 %		30-130



**CERTIFICATE OF ANALYSIS**

Client Name: RC & D  
Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1012057

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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**3050B/6000/7000 Total Metals**

**Batch CL00601 - 3050B**

**Blank**

Antimony	ND	5.0	mg/kg wet
Arsenic	ND	2.5	mg/kg wet
Beryllium	ND	0.10	mg/kg wet
Cadmium	ND	0.50	mg/kg wet
Chromium	ND	1.0	mg/kg wet
Copper	ND	2.5	mg/kg wet
Lead	ND	5.0	mg/kg wet
Nickel	ND	2.5	mg/kg wet
Selenium	ND	5.0	mg/kg wet
Silver	ND	0.50	mg/kg wet
Thallium	ND	0.25	mg/kg wet
Zinc	ND	2.5	mg/kg wet

**LCS**

Antimony	98.8	17.6	mg/kg wet	121.0		82	80-120
Arsenic	94.3	8.8	mg/kg wet	109.0		86	80-120
Beryllium	80.0	0.37	mg/kg wet	92.10		87	80-120
Cadmium	103	1.76	mg/kg wet	110.0		93	80-120
Chromium	83.7	3.5	mg/kg wet	93.40		90	80-120
Copper	69.2	8.8	mg/kg wet	74.70		93	80-120
Lead	149	17.6	mg/kg wet	152.0		98	80-120
Nickel	104	8.8	mg/kg wet	109.0		96	80-120
Selenium	187	17.6	mg/kg wet	207.0		90	80-120
Silver	45.4	1.76	mg/kg wet	51.90		88	80-120
Thallium	165	43.4	mg/kg wet	171.0		96	80-120
Zinc	257	8.8	mg/kg wet	299.0		86	80-120

**LCS Dup**

Antimony	118	18.2	mg/kg wet	121.0		98	80-120	18	20
Arsenic	95.9	9.1	mg/kg wet	109.0		88	80-120	2	20
Beryllium	79.4	0.38	mg/kg wet	92.10		86	80-120	0.8	20
Cadmium	100	1.83	mg/kg wet	110.0		91	80-120	2	20
Chromium	85.1	3.6	mg/kg wet	93.40		91	80-120	2	20
Copper	68.9	9.1	mg/kg wet	74.70		92	80-120	0.5	20
Lead	148	18.2	mg/kg wet	152.0		98	80-120	0.4	20
Nickel	104	9.1	mg/kg wet	109.0		95	80-120	0.7	20
Selenium	188	18.2	mg/kg wet	207.0		91	80-120	0.9	20
Silver	46.5	1.83	mg/kg wet	51.90		90	80-120	2	20
Thallium	160	45.0	mg/kg wet	171.0		93	80-120	3	20
Zinc	253	9.1	mg/kg wet	299.0		85	80-120	2	20

**Batch CL00602 - 7471A**

**Blank**



*CERTIFICATE OF ANALYSIS*

Client Name: RC & D  
Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1012057

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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**3050B/6000/7000 Total Metals**

**Batch CL00602 - 7471A**

Mercury	ND	0.033	mg/kg wet							
<b>LCS</b>										
Mercury	17.5	1.62	mg/kg wet	16.30		107	80-120			
<b>LCS Dup</b>										
Mercury	18.4	1.62	mg/kg wet	16.30		113	80-120	5	20	
<b>Duplicate Source: 1012057-01</b>										
Mercury	ND	0.030	mg/kg dry		ND				35	
<b>Matrix Spike Source: 1012057-01</b>										
Mercury	0.185	0.033	mg/kg dry	0.1974	ND	94	75-125			
<b>Matrix Spike Dup Source: 1012057-01</b>										
Mercury	0.205	0.034	mg/kg dry	0.2071	ND	99	75-125	10	35	

**5035/8260B Volatile Organic Compounds / Methanol**

**Batch CL00619 - 5035**

<b>Blank</b>										
1,1,1,2-Tetrachloroethane	ND	0.100	mg/kg wet							
1,1,1-Trichloroethane	ND	0.0500	mg/kg wet							
1,1,2,2-Tetrachloroethane	ND	0.0500	mg/kg wet							
1,1,2-Trichloroethane	ND	0.0500	mg/kg wet							
1,1-Dichloroethane	ND	0.0500	mg/kg wet							
1,1-Dichloroethene	ND	0.0500	mg/kg wet							
1,1-Dichloropropene	ND	0.0500	mg/kg wet							
1,2,3-Trichlorobenzene	ND	0.0500	mg/kg wet							
1,2,3-Trichloropropane	ND	0.0500	mg/kg wet							
1,2,4-Trichlorobenzene	ND	0.0500	mg/kg wet							
1,2,4-Trimethylbenzene	ND	0.0500	mg/kg wet							
1,2-Dibromo-3-Chloropropane	ND	0.300	mg/kg wet							
1,2-Dibromoethane	ND	0.0500	mg/kg wet							
1,2-Dichlorobenzene	ND	0.0500	mg/kg wet							
1,2-Dichloroethane	ND	0.0500	mg/kg wet							
1,2-Dichloropropane	ND	0.0500	mg/kg wet							
1,3,5-Trimethylbenzene	ND	0.0500	mg/kg wet							
1,3-Dichlorobenzene	ND	0.0500	mg/kg wet							
1,3-Dichloropropane	ND	0.0500	mg/kg wet							
1,4-Dichlorobenzene	ND	0.0500	mg/kg wet							
1,4-Dioxane - Screen	ND	5.00	mg/kg wet							
1-Chlorohexane	ND	0.0500	mg/kg wet							
2,2-Dichloropropane	ND	0.100	mg/kg wet							
2-Butanone	ND	1.25	mg/kg wet							
2-Chlorotoluene	ND	0.0500	mg/kg wet							
2-Hexanone	ND	0.500	mg/kg wet							
4-Chlorotoluene	ND	0.0500	mg/kg wet							
4-Isopropyltoluene	ND	0.0500	mg/kg wet							
4-Methyl-2-Pentanone	ND	0.500	mg/kg wet							





*CERTIFICATE OF ANALYSIS*

Client Name: RC & D  
Client Project ID: Lincoln Lacey

ESS Laboratory Work Order: 1012057

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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5035/8260B Volatile Organic Compounds / Methanol

Batch **CL00619 - 5035**

Acetone	ND	1.25	mg/kg wet							
Benzene	ND	0.0500	mg/kg wet							
Bromobenzene	ND	0.0500	mg/kg wet							
Bromochloromethane	ND	0.0500	mg/kg wet							
Bromodichloromethane	ND	0.0500	mg/kg wet							
Bromoform	ND	0.0500	mg/kg wet							
Bromomethane	ND	0.100	mg/kg wet							
Carbon Disulfide	ND	0.0500	mg/kg wet							
Carbon Tetrachloride	ND	0.0500	mg/kg wet							
Chlorobenzene	ND	0.0500	mg/kg wet							
Chloroethane	ND	0.100	mg/kg wet							
Chloroform	ND	0.0500	mg/kg wet							
Chloromethane	ND	0.100	mg/kg wet							
cis-1,2-Dichloroethene	ND	0.0500	mg/kg wet							
cis-1,3-Dichloropropene	ND	0.0500	mg/kg wet							
Dibromochloromethane	ND	0.0500	mg/kg wet							
Dibromomethane	ND	0.0500	mg/kg wet							
Dichlorodifluoromethane	ND	0.0500	mg/kg wet							
Diethyl Ether	ND	0.0500	mg/kg wet							
Di-Isopropyl ether	ND	0.0500	mg/kg wet							
Ethyl tertiary-butyl ether	ND	0.0500	mg/kg wet							
Ethylbenzene	ND	0.0500	mg/kg wet							
Hexachlorobutadiene	ND	0.0500	mg/kg wet							
Isopropylbenzene	ND	0.0500	mg/kg wet							
Methyl tert-Butyl Ether	ND	0.0500	mg/kg wet							
Methylene Chloride	ND	0.250	mg/kg wet							
Naphthalene	ND	0.0500	mg/kg wet							
n-Butylbenzene	ND	0.0500	mg/kg wet							
n-Propylbenzene	ND	0.0500	mg/kg wet							
sec-Butylbenzene	ND	0.0500	mg/kg wet							
Styrene	ND	0.0500	mg/kg wet							
tert-Butylbenzene	ND	0.0500	mg/kg wet							
Tertiary-amyl methyl ether	ND	0.0500	mg/kg wet							
Tetrachloroethene	ND	0.0500	mg/kg wet							
Tetrahydrofuran	ND	0.500	mg/kg wet							
Toluene	ND	0.0500	mg/kg wet							
trans-1,2-Dichloroethene	ND	0.0500	mg/kg wet							
trans-1,3-Dichloropropene	ND	0.0500	mg/kg wet							
Trichloroethene	ND	0.0500	mg/kg wet							
Vinyl Acetate	ND	0.250	mg/kg wet							
Vinyl Chloride	ND	0.0500	mg/kg wet							
Xylene O	ND	0.0500	mg/kg wet							
Xylene P,M	ND	0.100	mg/kg wet							
Surrogate: 1,2-Dichloroethane-d4	2.20		mg/kg wet	2.500		88	70-130			
Surrogate: 4-Bromofluorobenzene	2.25		mg/kg wet	2.500		90	70-130			



**CERTIFICATE OF ANALYSIS**

Client Name: RC & D  
Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1012057

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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**5035/8260B Volatile Organic Compounds / Methanol**

Batch CL00619 - 5035

Surrogate: Dibromofluoromethane	2.27		mg/kg wet	2.500		91	70-130			
Surrogate: Toluene-d8	2.32		mg/kg wet	2.500		93	70-130			

**LCS**

1,1,1,2-Tetrachloroethane	2.43	0.100	mg/kg wet	2.500		97	70-130			
1,1,1-Trichloroethane	2.41	0.0500	mg/kg wet	2.500		96	70-130			
1,1,2,2-Tetrachloroethane	2.45	0.0500	mg/kg wet	2.500		98	70-130			
1,1,2-Trichloroethane	2.24	0.0500	mg/kg wet	2.500		90	70-130			
1,1-Dichloroethane	2.37	0.0500	mg/kg wet	2.500		95	70-130			
1,1-Dichloroethene	2.66	0.0500	mg/kg wet	2.500		106	70-130			
1,1-Dichloropropene	2.63	0.0500	mg/kg wet	2.500		105	70-130			
1,2,3-Trichlorobenzene	2.28	0.0500	mg/kg wet	2.500		91	70-130			
1,2,3-Trichloropropane	2.60	0.0500	mg/kg wet	2.500		104	70-130			
1,2,4-Trichlorobenzene	2.44	0.0500	mg/kg wet	2.500		97	70-130			
1,2,4-Trimethylbenzene	2.47	0.0500	mg/kg wet	2.500		99	70-130			
1,2-Dibromo-3-Chloropropane	2.68	0.300	mg/kg wet	2.500		107	70-130			
1,2-Dibromoethane	2.47	0.0500	mg/kg wet	2.500		99	70-130			
1,2-Dichlorobenzene	2.42	0.0500	mg/kg wet	2.500		97	70-130			
1,2-Dichloroethane	2.43	0.0500	mg/kg wet	2.500		97	70-130			
1,2-Dichloropropane	2.62	0.0500	mg/kg wet	2.500		105	70-130			
1,3,5-Trimethylbenzene	2.50	0.0500	mg/kg wet	2.500		100	70-130			
1,3-Dichlorobenzene	2.42	0.0500	mg/kg wet	2.500		97	70-130			
1,3-Dichloropropane	2.49	0.0500	mg/kg wet	2.500		99	70-130			
1,4-Dichlorobenzene	2.40	0.0500	mg/kg wet	2.500		96	70-130			
1,4-Dioxane - Screen	58.2	5.00	mg/kg wet	50.00		116	44-241			
1-Chlorohexane	2.55	0.0500	mg/kg wet	2.500		102	70-130			
2,2-Dichloropropane	2.55	0.100	mg/kg wet	2.500		102	70-130			
2-Butanone	12.3	1.25	mg/kg wet	12.50		98	70-130			
2-Chlorotoluene	2.31	0.0500	mg/kg wet	2.500		92	70-130			
2-Hexanone	13.2	0.500	mg/kg wet	12.50		106	70-130			
4-Chlorotoluene	2.38	0.0500	mg/kg wet	2.500		95	70-130			
4-Isopropyltoluene	2.29	0.0500	mg/kg wet	2.500		92	70-130			
4-Methyl-2-Pentanone	13.9	0.500	mg/kg wet	12.50		111	70-130			
Acetone	9.52	1.25	mg/kg wet	12.50		76	70-130			
Benzene	2.51	0.0500	mg/kg wet	2.500		100	70-130			
Bromobenzene	2.42	0.0500	mg/kg wet	2.500		97	70-130			
Bromochloromethane	2.58	0.0500	mg/kg wet	2.500		103	70-130			
Bromodichloromethane	2.43	0.0500	mg/kg wet	2.500		97	70-130			
Bromoform	2.56	0.0500	mg/kg wet	2.500		102	70-130			
Bromomethane	3.05	0.100	mg/kg wet	2.500		122	70-130			
Carbon Disulfide	2.18	0.0500	mg/kg wet	2.500		87	70-130			
Carbon Tetrachloride	2.59	0.0500	mg/kg wet	2.500		103	70-130			
Chlorobenzene	2.42	0.0500	mg/kg wet	2.500		97	70-130			
Chloroethane	3.00	0.100	mg/kg wet	2.500		120	70-130			
Chloroform	2.37	0.0500	mg/kg wet	2.500		95	70-130			



**CERTIFICATE OF ANALYSIS**

Client Name: RC & D  
Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1012057

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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**5035/8260B Volatile Organic Compounds / Methanol**

Batch **CL00619 - 5035**

Chloromethane	2.40	0.100	mg/kg wet	2.500		96	70-130			
cis-1,2-Dichloroethene	2.67	0.0500	mg/kg wet	2.500		107	70-130			
cis-1,3-Dichloropropene	2.51	0.0500	mg/kg wet	2.500		100	70-130			
Dibromochloromethane	2.56	0.0500	mg/kg wet	2.500		102	70-130			
Dibromomethane	2.37	0.0500	mg/kg wet	2.500		95	70-130			
Dichlorodifluoromethane	2.72	0.0500	mg/kg wet	2.500		109	70-130			
Diethyl Ether	2.41	0.0500	mg/kg wet	2.500		96	70-130			
Diisopropyl ether	2.61	0.0500	mg/kg wet	2.500		104	70-130			
Ethyl tertiary-butyl ether	2.49	0.0500	mg/kg wet	2.500		100	70-130			
Ethylbenzene	2.52	0.0500	mg/kg wet	2.500		101	70-130			
Hexachlorobutadiene	2.51	0.0500	mg/kg wet	2.500		100	70-130			
Isopropylbenzene	2.04	0.0500	mg/kg wet	2.500		82	70-130			
Methyl tert-Butyl Ether	2.53	0.0500	mg/kg wet	2.500		101	70-130			
Methylene Chloride	2.69	0.250	mg/kg wet	2.500		108	70-130			
Naphthalene	2.26	0.0500	mg/kg wet	2.500		90	70-130			
n-Butylbenzene	2.62	0.0500	mg/kg wet	2.500		105	70-130			
n-Propylbenzene	2.56	0.0500	mg/kg wet	2.500		102	70-130			
sec-Butylbenzene	2.50	0.0500	mg/kg wet	2.500		100	70-130			
Styrene	2.46	0.0500	mg/kg wet	2.500		99	70-130			
tert-Butylbenzene	2.39	0.0500	mg/kg wet	2.500		96	70-130			
Tertiary-amyl methyl ether	2.57	0.0500	mg/kg wet	2.500		103	70-130			
Tetrachloroethene	2.37	0.0500	mg/kg wet	2.500		95	70-130			
Tetrahydrofuran	2.45	0.500	mg/kg wet	2.500		98	70-130			
Toluene	2.48	0.0500	mg/kg wet	2.500		99	70-130			
trans-1,2-Dichloroethene	2.33	0.0500	mg/kg wet	2.500		93	70-130			
trans-1,3-Dichloropropene	2.34	0.0500	mg/kg wet	2.500		94	70-130			
Trichloroethene	2.54	0.0500	mg/kg wet	2.500		102	70-130			
Vinyl Acetate	2.86	0.250	mg/kg wet	2.500		114	70-130			
Vinyl Chloride	2.82	0.0500	mg/kg wet	2.500		113	70-130			
Xylene O	2.43	0.0500	mg/kg wet	2.500		97	70-130			
Xylene P,M	5.03	0.100	mg/kg wet	5.000		101	70-130			
Surrogate: 1,2-Dichloroethane-d4	2.30		mg/kg wet	2.500		92	70-130			
Surrogate: 4-Bromofluorobenzene	2.33		mg/kg wet	2.500		93	70-130			
Surrogate: Dibromofluoromethane	2.31		mg/kg wet	2.500		92	70-130			
Surrogate: Toluene-d8	2.42		mg/kg wet	2.500		97	70-130			
LCS Dup										
1,1,1,2-Tetrachloroethane	2.45	0.100	mg/kg wet	2.500		98	70-130	0.7	25	
1,1,1-Trichloroethane	2.42	0.0500	mg/kg wet	2.500		97	70-130	0.5	25	
1,1,2,2-Tetrachloroethane	2.53	0.0500	mg/kg wet	2.500		101	70-130	4	25	
1,1,2-Trichloroethane	2.28	0.0500	mg/kg wet	2.500		91	70-130	2	25	
1,1-Dichloroethane	2.36	0.0500	mg/kg wet	2.500		95	70-130	0.4	25	
1,1-Dichloroethene	2.76	0.0500	mg/kg wet	2.500		110	70-130	4	25	
1,1-Dichloropropene	2.68	0.0500	mg/kg wet	2.500		107	70-130	2	25	
1,2,3-Trichlorobenzene	2.42	0.0500	mg/kg wet	2.500		97	70-130	6	25	
1,2,3-Trichloropropane	2.72	0.0500	mg/kg wet	2.500		109	70-130	5	25	



CERTIFICATE OF ANALYSIS

Client Name: RC & D  
Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1012057

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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5035/8260B Volatile Organic Compounds / Methanol

Batch CL00619 - 5035

1,2,4-Trichlorobenzene	2.54	0.0500	mg/kg wet	2.500		102	70-130	4	25	
1,2,4-Trimethylbenzene	2.51	0.0500	mg/kg wet	2.500		100	70-130	2	25	
1,2-Dibromo-3-Chloropropane	2.83	0.300	mg/kg wet	2.500		113	70-130	5	25	
1,2-Dibromoethane	2.49	0.0500	mg/kg wet	2.500		100	70-130	1	25	
1,2-Dichlorobenzene	2.49	0.0500	mg/kg wet	2.500		100	70-130	3	25	
1,2-Dichloroethane	2.46	0.0500	mg/kg wet	2.500		99	70-130	1	25	
1,2-Dichloropropane	2.58	0.0500	mg/kg wet	2.500		103	70-130	1	25	
1,3,5-Trimethylbenzene	2.52	0.0500	mg/kg wet	2.500		101	70-130	1	25	
1,3-Dichlorobenzene	2.49	0.0500	mg/kg wet	2.500		99	70-130	2	25	
1,3-Dichloropropane	2.52	0.0500	mg/kg wet	2.500		101	70-130	1	25	
1,4-Dichlorobenzene	2.40	0.0500	mg/kg wet	2.500		96	70-130	0.1	25	
1,4-Dioxane - Screen	61.7	5.00	mg/kg wet	50.00		123	44-241	6	200	
1-Chlorohexane	2.52	0.0500	mg/kg wet	2.500		101	70-130	1	25	
2,2-Dichloropropane	2.48	0.100	mg/kg wet	2.500		99	70-130	3	25	
2-Butanone	13.0	1.25	mg/kg wet	12.50		104	70-130	6	25	
2-Chlorotoluene	2.48	0.0500	mg/kg wet	2.500		99	70-130	7	25	
2-Hexanone	14.0	0.500	mg/kg wet	12.50		112	70-130	5	25	
4-Chlorotoluene	2.42	0.0500	mg/kg wet	2.500		97	70-130	2	25	
4-Isopropyltoluene	2.33	0.0500	mg/kg wet	2.500		93	70-130	2	25	
4-Methyl-2-Pentanone	14.4	0.500	mg/kg wet	12.50		115	70-130	4	25	
Acetone	12.1	1.25	mg/kg wet	12.50		97	70-130	24	25	
Benzene	2.49	0.0500	mg/kg wet	2.500		100	70-130	0.8	25	
Bromobenzene	2.48	0.0500	mg/kg wet	2.500		99	70-130	2	25	
Bromochloromethane	2.57	0.0500	mg/kg wet	2.500		103	70-130	0.2	25	
Bromodichloromethane	2.44	0.0500	mg/kg wet	2.500		98	70-130	0.5	25	
Bromoform	2.66	0.0500	mg/kg wet	2.500		106	70-130	4	25	
Bromomethane	2.87	0.100	mg/kg wet	2.500		115	70-130	6	25	
Carbon Disulfide	2.72	0.0500	mg/kg wet	2.500		109	70-130	22	25	
Carbon Tetrachloride	2.54	0.0500	mg/kg wet	2.500		102	70-130	2	25	
Chlorobenzene	2.46	0.0500	mg/kg wet	2.500		99	70-130	2	25	
Chloroethane	2.89	0.100	mg/kg wet	2.500		116	70-130	4	25	
Chloroform	2.37	0.0500	mg/kg wet	2.500		95	70-130	0.3	25	
Chloromethane	2.44	0.100	mg/kg wet	2.500		98	70-130	2	25	
cis-1,2-Dichloroethene	2.64	0.0500	mg/kg wet	2.500		106	70-130	1	25	
cis-1,3-Dichloropropene	2.58	0.0500	mg/kg wet	2.500		103	70-130	3	25	
Dibromochloromethane	2.56	0.0500	mg/kg wet	2.500		102	70-130	0.08	25	
Dibromomethane	2.39	0.0500	mg/kg wet	2.500		96	70-130	1	25	
Dichlorodifluoromethane	2.77	0.0500	mg/kg wet	2.500		111	70-130	2	25	
Diethyl Ether	2.50	0.0500	mg/kg wet	2.500		100	70-130	4	25	
Di-Isopropyl ether	2.61	0.0500	mg/kg wet	2.500		105	70-130	0.3	25	
Ethyl tertiary-butyl ether	2.54	0.0500	mg/kg wet	2.500		102	70-130	2	25	
Ethylbenzene	2.54	0.0500	mg/kg wet	2.500		102	70-130	0.6	25	
Hexachlorobutadiene	2.64	0.0500	mg/kg wet	2.500		106	70-130	5	25	
Isopropylbenzene	2.06	0.0500	mg/kg wet	2.500		82	70-130	0.7	25	
Methyl tert-Butyl Ether	2.61	0.0500	mg/kg wet	2.500		105	70-130	3	25	



**CERTIFICATE OF ANALYSIS**

Client Name: RC & D  
Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1012057

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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**5035/8260B Volatile Organic Compounds / Methanol**

**Batch CL00619 - 5035**

Methylene Chloride	2.68	0.250	mg/kg wet	2.500		107	70-130	0.7	25	
Naphthalene	2.51	0.0500	mg/kg wet	2.500		100	70-130	1.1	25	
n-Butylbenzene	2.72	0.0500	mg/kg wet	2.500		109	70-130	4	25	
n-Propylbenzene	2.49	0.0500	mg/kg wet	2.500		100	70-130	3	25	
sec-Butylbenzene	2.54	0.0500	mg/kg wet	2.500		102	70-130	2	25	
Styrene	2.49	0.0500	mg/kg wet	2.500		100	70-130	1	25	
tert-Butylbenzene	2.42	0.0500	mg/kg wet	2.500		97	70-130	1	25	
Tertiary-amyl methyl ether	2.60	0.0500	mg/kg wet	2.500		104	70-130	1	25	
Tetrachloroethene	2.38	0.0500	mg/kg wet	2.500		95	70-130	0.5	25	
Tetrahydrofuran	2.47	0.500	mg/kg wet	2.500		99	70-130	0.7	25	
Toluene	2.49	0.0500	mg/kg wet	2.500		100	70-130	0.2	25	
trans-1,2-Dichloroethene	2.33	0.0500	mg/kg wet	2.500		93	70-130	0.09	25	
trans-1,3-Dichloropropene	2.39	0.0500	mg/kg wet	2.500		95	70-130	2	25	
Trichloroethene	2.55	0.0500	mg/kg wet	2.500		102	70-130	0.6	25	
Vinyl Acetate	2.85	0.250	mg/kg wet	2.500		114	70-130	0.2	25	
Vinyl Chloride	2.84	0.0500	mg/kg wet	2.500		113	70-130	0.5	25	
Xylene O	2.45	0.0500	mg/kg wet	2.500		98	70-130	1	25	
Xylene P,M	4.99	0.100	mg/kg wet	5.000		100	70-130	0.8	25	
Surrogate: 1,2-Dichloroethane-d4	2.33		mg/kg wet	2.500		93	70-130			
Surrogate: 4-Bromofluorobenzene	2.34		mg/kg wet	2.500		94	70-130			
Surrogate: Dibromofluoromethane	2.28		mg/kg wet	2.500		91	70-130			
Surrogate: Toluene-d8	2.42		mg/kg wet	2.500		97	70-130			

**Matrix Spike Source: 1012057-01**

1,1,1,2-Tetrachloroethane	1.89	0.0778	mg/kg dry	1.945	ND	97	70-130			
1,1,1-Trichloroethane	1.99	0.0389	mg/kg dry	1.945	ND	102	70-130			
1,1,2,2-Tetrachloroethane	2.05	0.0389	mg/kg dry	1.945	ND	106	70-130			
1,1,2-Trichloroethane	1.88	0.0389	mg/kg dry	1.945	ND	96	70-130			
1,1-Dichloroethane	1.99	0.0389	mg/kg dry	1.945	ND	102	70-130			
1,1-Dichloroethene	2.33	0.0389	mg/kg dry	1.945	ND	120	70-130			
1,1-Dichloropropene	2.26	0.0389	mg/kg dry	1.945	ND	116	70-130			
1,2,3-Trichlorobenzene	1.67	0.0389	mg/kg dry	1.945	ND	86	70-130			
1,2,3-Trichloropropane	2.11	0.0389	mg/kg dry	1.945	ND	108	70-130			
1,2,4-Trichlorobenzene	1.80	0.0389	mg/kg dry	1.945	ND	93	70-130			
1,2,4-Trimethylbenzene	2.02	0.0389	mg/kg dry	1.945	ND	104	70-130			
1,2-Dibromo-3-Chloropropane	2.03	0.233	mg/kg dry	1.945	ND	105	70-130			
1,2-Dibromoethane	1.97	0.0389	mg/kg dry	1.945	ND	101	70-130			
1,2-Dichlorobenzene	1.93	0.0389	mg/kg dry	1.945	ND	99	70-130			
1,2-Dichloroethane	1.93	0.0389	mg/kg dry	1.945	ND	99	70-130			
1,2-Dichloropropane	2.21	0.0389	mg/kg dry	1.945	ND	114	70-130			
1,3,5-Trimethylbenzene	2.05	0.0389	mg/kg dry	1.945	ND	105	70-130			
1,3-Dichlorobenzene	1.94	0.0389	mg/kg dry	1.945	ND	100	70-130			
1,3-Dichloropropane	2.01	0.0389	mg/kg dry	1.945	ND	103	70-130			
1,4-Dichlorobenzene	1.90	0.0389	mg/kg dry	1.945	ND	98	70-130			
1,4-Dioxane - Screen	37.1	3.89	mg/kg dry	38.89	ND	95	44-241			
1-Chlorohexane	2.11	0.0389	mg/kg dry	1.945	ND	109	70-130			



**CERTIFICATE OF ANALYSIS**

Client Name: RC & D  
Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1012057

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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**5035/8260B Volatile Organic Compounds / Methanol**

Batch CL00619 - 5035

2,2-Dichloropropane	1.78	0.0778	mg/kg dry	1.945	ND	91	70-130			
2-Butanone	10.3	0.973	mg/kg dry	9.723	ND	106	70-130			
2-Chlorotoluene	2.15	0.0389	mg/kg dry	1.945	ND	110	70-130			
2-Hexanone	10.6	0.389	mg/kg dry	9.723	ND	109	70-130			
4-Chlorotoluene	1.93	0.0389	mg/kg dry	1.945	ND	99	70-130			
4-Isopropyltoluene	1.88	0.0389	mg/kg dry	1.945	ND	97	70-130			
4-Methyl-2-Pentanone	11.8	0.389	mg/kg dry	9.723	ND	121	70-130			
Acetone	7.73	0.973	mg/kg dry	9.723	ND	80	70-130			
Benzene	2.14	0.0389	mg/kg dry	1.945	ND	110	70-130			
Bromobenzene	1.97	0.0389	mg/kg dry	1.945	ND	102	70-130			
Bromochloromethane	2.19	0.0389	mg/kg dry	1.945	ND	112	70-130			
Bromodichloromethane	1.94	0.0389	mg/kg dry	1.945	ND	100	70-130			
Bromoform	1.97	0.0389	mg/kg dry	1.945	ND	101	70-130			
Bromomethane	1.96	0.0778	mg/kg dry	1.945	ND	101	70-130			
Carbon Disulfide	2.12	0.0389	mg/kg dry	1.945	ND	109	70-130			
Carbon Tetrachloride	1.98	0.0389	mg/kg dry	1.945	ND	102	70-130			
Chlorobenzene	1.97	0.0389	mg/kg dry	1.945	ND	102	70-130			
Chloroethane	2.36	0.0778	mg/kg dry	1.945	ND	121	70-130			
Chloroform	1.94	0.0389	mg/kg dry	1.945	ND	100	70-130			
Chloromethane	2.13	0.0778	mg/kg dry	1.945	ND	109	70-130			
cis-1,2-Dichloroethene	2.21	0.0389	mg/kg dry	1.945	ND	113	70-130			
cis-1,3-Dichloropropene	2.07	0.0389	mg/kg dry	1.945	ND	107	70-130			
Dibromochloromethane	1.95	0.0389	mg/kg dry	1.945	ND	101	70-130			
Dibromomethane	1.93	0.0389	mg/kg dry	1.945	ND	99	70-130			
Dichlorodifluoromethane	2.32	0.0389	mg/kg dry	1.945	ND	119	70-130			
Diethyl Ether	2.06	0.0389	mg/kg dry	1.945	ND	106	70-130			
Di-Isopropyl ether	2.22	0.0389	mg/kg dry	1.945	ND	114	70-130			
Ethyl tertiary-butyl ether	2.09	0.0389	mg/kg dry	1.945	ND	107	70-130			
Ethylbenzene	2.04	0.0389	mg/kg dry	1.945	ND	105	70-130			
Hexachlorobutadiene	1.77	0.0389	mg/kg dry	1.945	ND	91	70-130			
Isopropylbenzene	1.73	0.0389	mg/kg dry	1.945	ND	89	70-130			
Methyl tert-Butyl Ether	2.09	0.0389	mg/kg dry	1.945	ND	107	70-130			
Methylene Chloride	2.29	0.195	mg/kg dry	1.945	ND	118	70-130			
Naphthalene	1.55	0.0389	mg/kg dry	1.945	ND	80	70-130			
n-Butylbenzene	2.09	0.0389	mg/kg dry	1.945	ND	108	70-130			
n-Propylbenzene	1.96	0.0389	mg/kg dry	1.945	ND	101	70-130			
sec-Butylbenzene	2.07	0.0389	mg/kg dry	1.945	ND	107	70-130			
Styrene	1.98	0.0389	mg/kg dry	1.945	ND	102	70-130			
tert-Butylbenzene	1.94	0.0389	mg/kg dry	1.945	ND	100	70-130			
Tertiary-amyyl methyl ether	2.12	0.0389	mg/kg dry	1.945	ND	109	70-130			
Tetrachloroethene	1.93	0.0389	mg/kg dry	1.945	ND	99	70-130			
Tetrahydrofuran	2.15	0.389	mg/kg dry	1.945	ND	111	70-130			
Toluene	2.09	0.0389	mg/kg dry	1.945	ND	107	70-130			
trans-1,2-Dichloroethene	1.97	0.0389	mg/kg dry	1.945	ND	101	70-130			
trans-1,3-Dichloropropene	1.87	0.0389	mg/kg dry	1.945	ND	96	70-130			



**CERTIFICATE OF ANALYSIS**

Client Name: RC & D  
Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1012057

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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**5035/8260B Volatile Organic Compounds / Methanol**

**Batch CL00619 - 5035**

Trichloroethene	2.13	0.0389	mg/kg dry	1.945	ND	110	70-130			
Vinyl Acetate	2.29	0.195	mg/kg dry	1.945	ND	118	70-130			
Vinyl Chloride	2.50	0.0389	mg/kg dry	1.945	ND	129	70-130			
Xylene O	1.98	0.0389	mg/kg dry	1.945	ND	102	70-130			
Xylene P,M	4.04	0.0778	mg/kg dry	3.889	ND	104	70-130			
Surrogate: 1,2-Dichloroethane-d4	1.98		mg/kg dry	1.945		102	70-130			
Surrogate: 4-Bromofluorobenzene	2.03		mg/kg dry	1.945		105	70-130			
Surrogate: Dibromofluoromethane	2.06		mg/kg dry	1.945		106	70-130			
Surrogate: Toluene-d8	2.15		mg/kg dry	1.945		111	70-130			

**Matrix Spike Dup Source: 1012057-01**

1,1,1,2-Tetrachloroethane	1.84	0.0778	mg/kg dry	1.945	ND	95	70-130	2	30	
1,1,1-Trichloroethane	1.94	0.0389	mg/kg dry	1.945	ND	100	70-130	3	30	
1,1,2,2-Tetrachloroethane	2.00	0.0389	mg/kg dry	1.945	ND	103	70-130	2	30	
1,1,2-Trichloroethane	1.85	0.0389	mg/kg dry	1.945	ND	95	70-130	2	30	
1,1-Dichloroethane	1.96	0.0389	mg/kg dry	1.945	ND	101	70-130	1	30	
1,1-Dichloroethene	2.24	0.0389	mg/kg dry	1.945	ND	115	70-130	4	30	
1,1-Dichloropropene	2.09	0.0389	mg/kg dry	1.945	ND	108	70-130	8	30	
1,2,3-Trichlorobenzene	1.77	0.0389	mg/kg dry	1.945	ND	91	70-130	6	30	
1,2,3-Trichloropropane	2.12	0.0389	mg/kg dry	1.945	ND	109	70-130	0.4	30	
1,2,4-Trichlorobenzene	1.90	0.0389	mg/kg dry	1.945	ND	98	70-130	5	30	
1,2,4-Trimethylbenzene	1.97	0.0389	mg/kg dry	1.945	ND	101	70-130	3	30	
1,2-Dibromo-3-Chloropropane	2.03	0.233	mg/kg dry	1.945	ND	104	70-130	0.3	30	
1,2-Dibromoethane	1.90	0.0389	mg/kg dry	1.945	ND	98	70-130	3	30	
1,2-Dichlorobenzene	1.89	0.0389	mg/kg dry	1.945	ND	97	70-130	2	30	
1,2-Dichloroethane	1.90	0.0389	mg/kg dry	1.945	ND	98	70-130	2	30	
1,2-Dichloropropane	2.12	0.0389	mg/kg dry	1.945	ND	109	70-130	4	30	
1,3,5-Trimethylbenzene	1.98	0.0389	mg/kg dry	1.945	ND	102	70-130	4	30	
1,3-Dichlorobenzene	1.87	0.0389	mg/kg dry	1.945	ND	96	70-130	4	30	
1,3-Dichloropropane	1.95	0.0389	mg/kg dry	1.945	ND	100	70-130	3	30	
1,4-Dichlorobenzene	1.84	0.0389	mg/kg dry	1.945	ND	95	70-130	3	30	
1,4-Dioxane - Screen	44.9	3.89	mg/kg dry	38.89	ND	115	44-241	19	200	
1-Chlorohexane	1.96	0.0389	mg/kg dry	1.945	ND	101	70-130	7	30	
2,2-Dichloropropane	1.69	0.0778	mg/kg dry	1.945	ND	87	70-130	5	30	
2-Butanone	10.1	0.973	mg/kg dry	9.723	ND	103	70-130	2	30	
2-Chlorotoluene	1.88	0.0389	mg/kg dry	1.945	ND	97	70-130	13	30	
2-Hexanone	10.4	0.389	mg/kg dry	9.723	ND	107	70-130	2	30	
4-Chlorotoluene	1.87	0.0389	mg/kg dry	1.945	ND	96	70-130	3	30	
4-Isopropyltoluene	1.83	0.0389	mg/kg dry	1.945	ND	94	70-130	3	30	
4-Methyl-2-Pentanone	11.5	0.389	mg/kg dry	9.723	ND	119	70-130	2	30	
Acetone	7.71	0.973	mg/kg dry	9.723	ND	79	70-130	0.2	30	
Benzene	2.07	0.0389	mg/kg dry	1.945	ND	106	70-130	3	30	
Bromobenzene	1.90	0.0389	mg/kg dry	1.945	ND	98	70-130	4	30	
Bromochloromethane	2.12	0.0389	mg/kg dry	1.945	ND	109	70-130	3	30	
Bromodichloromethane	1.91	0.0389	mg/kg dry	1.945	ND	98	70-130	2	30	
Bromoform	1.91	0.0389	mg/kg dry	1.945	ND	98	70-130	3	30	



**CERTIFICATE OF ANALYSIS**

Client Name: RC & D  
Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1012057

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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**5035/8260B Volatile Organic Compounds / Methanol**

**Batch CL00619 - 5035**

Bromomethane	2.06	0.0778	mg/kg dry	1.945	ND	106	70-130	5	30	
Carbon Disulfide	2.13	0.0389	mg/kg dry	1.945	ND	109	70-130	0.4	30	
Carbon Tetrachloride	1.97	0.0389	mg/kg dry	1.945	ND	101	70-130	0.4	30	
Chlorobenzene	1.89	0.0389	mg/kg dry	1.945	ND	97	70-130	4	30	
Chloroethane	2.15	0.0778	mg/kg dry	1.945	ND	111	70-130	9	30	
Chloroform	1.89	0.0389	mg/kg dry	1.945	ND	97	70-130	2	30	
Chloromethane	2.09	0.0778	mg/kg dry	1.945	ND	107	70-130	2	30	
cis-1,2-Dichloroethene	2.17	0.0389	mg/kg dry	1.945	ND	111	70-130	2	30	
cis-1,3-Dichloropropene	2.03	0.0389	mg/kg dry	1.945	ND	105	70-130	2	30	
Dibromochloromethane	1.90	0.0389	mg/kg dry	1.945	ND	97	70-130	3	30	
Dibromomethane	1.88	0.0389	mg/kg dry	1.945	ND	97	70-130	3	30	
Dichlorodifluoromethane	2.23	0.0389	mg/kg dry	1.945	ND	115	70-130	4	30	
Diethyl Ether	2.04	0.0389	mg/kg dry	1.945	ND	105	70-130	1	30	
Di-isopropyl ether	2.16	0.0389	mg/kg dry	1.945	ND	111	70-130	3	30	
Ethyl tertiary-butyl ether	2.03	0.0389	mg/kg dry	1.945	ND	104	70-130	3	30	
Ethylbenzene	1.97	0.0389	mg/kg dry	1.945	ND	101	70-130	3	30	
Hexachlorobutadiene	1.87	0.0389	mg/kg dry	1.945	ND	96	70-130	5	30	
Isopropylbenzene	1.66	0.0389	mg/kg dry	1.945	ND	85	70-130	4	30	
Methyl tert-Butyl Ether	2.04	0.0389	mg/kg dry	1.945	ND	105	70-130	2	30	
Methylene Chloride	2.22	0.195	mg/kg dry	1.945	ND	114	70-130	3	30	
Naphthalene	1.77	0.0389	mg/kg dry	1.945	ND	91	70-130	13	30	
n-Butylbenzene	2.11	0.0389	mg/kg dry	1.945	ND	108	70-130	0.7	30	
n-Propylbenzene	2.04	0.0389	mg/kg dry	1.945	ND	105	70-130	4	30	
sec-Butylbenzene	2.03	0.0389	mg/kg dry	1.945	ND	105	70-130	2	30	
Styrene	1.95	0.0389	mg/kg dry	1.945	ND	100	70-130	2	30	
tert-Butylbenzene	1.90	0.0389	mg/kg dry	1.945	ND	98	70-130	2	30	
Tertiary-aryl methyl ether	2.08	0.0389	mg/kg dry	1.945	ND	107	70-130	2	30	
Tetrachloroethene	1.82	0.0389	mg/kg dry	1.945	ND	94	70-130	6	30	
Tetrahydrofuran	2.14	0.389	mg/kg dry	1.945	ND	110	70-130	0.4	30	
Toluene	2.02	0.0389	mg/kg dry	1.945	ND	104	70-130	3	30	
trans-1,2-Dichloroethene	1.91	0.0389	mg/kg dry	1.945	ND	98	70-130	3	30	
trans-1,3-Dichloropropene	1.81	0.0389	mg/kg dry	1.945	ND	93	70-130	3	30	
Trichloroethene	2.08	0.0389	mg/kg dry	1.945	ND	107	70-130	3	30	
Vinyl Acetate	2.25	0.195	mg/kg dry	1.945	ND	116	70-130	2	30	
Vinyl Chloride	2.40	0.0389	mg/kg dry	1.945	ND	123	70-130	4	30	
Xylene O	1.91	0.0389	mg/kg dry	1.945	ND	98	70-130	4	30	
Xylene P,M	3.86	0.0778	mg/kg dry	3.889	ND	99	70-130	4	30	
Surrogate: 1,2-Dichloroethane-d4	1.94		mg/kg dry	1.945		100	70-130			
Surrogate: 4-Bromofluorobenzene	1.98		mg/kg dry	1.945		102	70-130			
Surrogate: Dibromofluoromethane	2.01		mg/kg dry	1.945		103	70-130			
Surrogate: Toluene-d8	2.08		mg/kg dry	1.945		107	70-130			

**8100M Total Petroleum Hydrocarbons**

**Batch CL00819 - 3546**

Blank





*CERTIFICATE OF ANALYSIS*

Client Name: RC & D  
Client Project ID: Lincoln Lacc

ESS Laboratory Work Order: 1012057

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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**8100M Total Petroleum Hydrocarbons**

**Batch CL00819 - 3546**

Decane (C10)	ND	0.2	mg/kg wet							
Docosane (C22)	ND	0.2	mg/kg wet							
Dodecane (C12)	ND	0.2	mg/kg wet							
Eicosane (C20)	ND	0.2	mg/kg wet							
Hexacosane (C26)	ND	0.2	mg/kg wet							
Hexadecane (C16)	ND	0.2	mg/kg wet							
Nonadecane (C19)	ND	0.2	mg/kg wet							
Nonane (C9)	ND	0.2	mg/kg wet							
Octacosane (C28)	ND	0.2	mg/kg wet							
Octadecane (C18)	ND	0.2	mg/kg wet							
Tetracosane (C24)	ND	0.2	mg/kg wet							
Tetradecane (C14)	ND	0.2	mg/kg wet							
Total Petroleum Hydrocarbons	ND	37.5	mg/kg wet							
Triacotane (C30)	ND	0.2	mg/kg wet							

<i>Surrogate: O-Terphenyl</i>	<i>5.06</i>		<i>mg/kg wet</i>	<i>5.000</i>		<i>101</i>	<i>40-140</i>			
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<b>LCS</b>										
Decane (C10)	1.9	0.2	mg/kg wet	2.500		77	40-140			
Docosane (C22)	2.2	0.2	mg/kg wet	2.500		90	40-140			
Dodecane (C12)	2.2	0.2	mg/kg wet	2.500		87	40-140			
Eicosane (C20)	2.3	0.2	mg/kg wet	2.500		94	40-140			
Hexacosane (C26)	2.4	0.2	mg/kg wet	2.500		94	40-140			
Hexadecane (C16)	2.3	0.2	mg/kg wet	2.500		92	40-140			
Nonadecane (C19)	2.4	0.2	mg/kg wet	2.500		96	40-140			
Nonane (C9)	1.6	0.2	mg/kg wet	2.500		64	30-140			
Octacosane (C28)	2.4	0.2	mg/kg wet	2.500		95	40-140			
Octadecane (C18)	2.3	0.2	mg/kg wet	2.500		92	40-140			
Tetracosane (C24)	2.4	0.2	mg/kg wet	2.500		95	40-140			
Tetradecane (C14)	2.2	0.2	mg/kg wet	2.500		87	40-140			
Total Petroleum Hydrocarbons	30.0	37.5	mg/kg wet	35.00		86	40-140			
Triacotane (C30)	2.4	0.2	mg/kg wet	2.500		97	40-140			

<i>Surrogate: O-Terphenyl</i>	<i>4.68</i>		<i>mg/kg wet</i>	<i>5.000</i>		<i>94</i>	<i>40-140</i>			
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<b>LCS Dup</b>										
Decane (C10)	2.0	0.2	mg/kg wet	2.500		81	40-140	5	50	
Docosane (C22)	2.2	0.2	mg/kg wet	2.500		89	40-140	0.2	50	
Dodecane (C12)	2.3	0.2	mg/kg wet	2.500		90	40-140	4	50	
Eicosane (C20)	2.3	0.2	mg/kg wet	2.500		93	40-140	0.8	50	
Hexacosane (C26)	2.3	0.2	mg/kg wet	2.500		93	40-140	0.6	50	
Hexadecane (C16)	2.3	0.2	mg/kg wet	2.500		93	40-140	1	50	
Nonadecane (C19)	2.4	0.2	mg/kg wet	2.500		96	40-140	0.3	50	
Nonane (C9)	1.6	0.2	mg/kg wet	2.500		65	30-140	1	50	
Octacosane (C28)	2.4	0.2	mg/kg wet	2.500		94	40-140	0.7	50	
Octadecane (C18)	2.3	0.2	mg/kg wet	2.500		92	40-140	0.4	50	
Tetracosane (C24)	2.4	0.2	mg/kg wet	2.500		94	40-140	0.2	50	



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ESS Laboratory Work Order: 1012057

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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**8100M Total Petroleum Hydrocarbons**

**Batch CL00519 - 3546**

Tetradecane (C14)	2.3	0.2	mg/kg wet	2.500		91	40-140	4	50	
Total Petroleum Hydrocarbons	30.2	37.5	mg/kg wet	35.00		86	40-140	0.8	50	
Triacortane (C30)	2.4	0.2	mg/kg wet	2.500		96	40-140	0.8	50	

Surrogate: O-Terphenyl

4.71 mg/kg wet 5.000 94 40-140

**8270C Semi-Volatile Organic Compounds**

**Batch CL00623 - 3546**

**Blank**

1,1-Biphenyl	ND	0.333	mg/kg wet
1,2,4-Trichlorobenzene	ND	0.333	mg/kg wet
1,2-Dichlorobenzene	ND	0.333	mg/kg wet
1,3-Dichlorobenzene	ND	0.333	mg/kg wet
1,4-Dichlorobenzene	ND	0.333	mg/kg wet
2,3,4,6-Tetrachlorophenol	ND	1.67	mg/kg wet
2,4,5-Trichlorophenol	ND	0.333	mg/kg wet
2,4,6-Trichlorophenol	ND	0.333	mg/kg wet
2,4-Dichlorophenol	ND	0.333	mg/kg wet
2,4-Dimethylphenol	ND	0.333	mg/kg wet
2,4-Dinitrophenol	ND	1.67	mg/kg wet
2,4-Dinitrotoluene	ND	0.333	mg/kg wet
2,6-Dinitrotoluene	ND	0.333	mg/kg wet
2-Chloronaphthalene	ND	0.333	mg/kg wet
2-Chlorophenol	ND	0.333	mg/kg wet
2-Methylnaphthalene	ND	0.333	mg/kg wet
2-Methylphenol	ND	0.333	mg/kg wet
2-Nitroaniline	ND	0.333	mg/kg wet
2-Nitrophenol	ND	0.333	mg/kg wet
3,3'-Dichlorobenzidine	ND	0.667	mg/kg wet
3+4-Methylphenol	ND	0.667	mg/kg wet
3-Nitroaniline	ND	0.333	mg/kg wet
4,6-Dinitro-2-Methylphenol	ND	1.67	mg/kg wet
4-Bromophenyl-phenylether	ND	0.333	mg/kg wet
4-Chloro-3-Methylphenol	ND	0.333	mg/kg wet
4-Chloroaniline	ND	0.667	mg/kg wet
4-Chloro-phenyl-phenyl ether	ND	0.333	mg/kg wet
4-Nitroaniline	ND	0.333	mg/kg wet
4-Nitrophenol	ND	1.67	mg/kg wet
Acenaphthene	ND	0.333	mg/kg wet
Acenaphthylene	ND	0.333	mg/kg wet
Acetophenone	ND	0.667	mg/kg wet
Aniline	ND	0.667	mg/kg wet
Anthracene	ND	0.333	mg/kg wet
Azobenzene	ND	0.333	mg/kg wet
Benzo(a)anthracene	ND	0.333	mg/kg wet



# ESS Laboratory

Division of Thielsch Engineering, Inc.

# BAL Laboratory

The Microbiology Division  
of Thielsch Engineering, Inc.



## CERTIFICATE OF ANALYSIS

Client Name: RC & D  
Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1012057

### Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Umit	Qualifier
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#### 8270C Semi-Volatile Organic Compounds

Batch CL00623 - 3546

Benzo(a)pyrene	ND	0.167	mg/kg wet							
Benzo(b)fluoranthene	ND	0.333	mg/kg wet							
Benzo(g,h,i)perylene	ND	0.333	mg/kg wet							
Benzo(k)fluoranthene	ND	0.333	mg/kg wet							
Benzoic Acid	ND	1.67	mg/kg wet							
Benzyl Alcohol	ND	0.333	mg/kg wet							
bis(2-Chloroethoxy)methane	ND	0.333	mg/kg wet							
bis(2-Chloroethyl)ether	ND	0.333	mg/kg wet							
bis(2-chloroisopropyl)Ether	ND	0.333	mg/kg wet							
bis(2-Ethylhexyl)phthalate	ND	0.333	mg/kg wet							
Butylbenzylphthalate	ND	0.333	mg/kg wet							
Carbazole	ND	0.333	mg/kg wet							
Chrysene	ND	0.167	mg/kg wet							
Dibenzo(a,h)Anthracene	ND	0.167	mg/kg wet							
Dibenzofuran	ND	0.333	mg/kg wet							
Diethylphthalate	ND	0.333	mg/kg wet							
Dimethylphthalate	ND	0.333	mg/kg wet							
Di-n-butylphthalate	ND	0.333	mg/kg wet							
Di-n-octylphthalate	ND	0.333	mg/kg wet							
Fluoranthene	ND	0.333	mg/kg wet							
Fluorene	ND	0.333	mg/kg wet							
Hexachlorobenzene	ND	0.167	mg/kg wet							
Hexachlorobutadiene	ND	0.333	mg/kg wet							
Hexachlorocyclopentadiene	ND	1.67	mg/kg wet							
Hexachloroethane	ND	0.333	mg/kg wet							
Indeno(1,2,3-cd)Pyrene	ND	0.333	mg/kg wet							
Isophorone	ND	0.333	mg/kg wet							
Naphthalene	ND	0.333	mg/kg wet							
Nitrobenzene	ND	0.333	mg/kg wet							
N-Nitrosodimethylamine	ND	0.333	mg/kg wet							
N-Nitroso-Di-n-Propylamine	ND	0.333	mg/kg wet							
N-nitrosodiphenylamine	ND	0.333	mg/kg wet							
Pentachlorophenol	ND	1.67	mg/kg wet							
Phenanthrene	ND	0.333	mg/kg wet							
Phenol	ND	0.333	mg/kg wet							
Pyrene	ND	0.333	mg/kg wet							
Pyridine	ND	1.67	mg/kg wet							
Surrogate: 1,2-Dichlorobenzene-d4	2.81		mg/kg wet	3.333		84	30-130			
Surrogate: 2,4,6-Tribromophenol	4.71		mg/kg wet	5.000		94	30-130			
Surrogate: 2-Chlorophenol-d4	4.22		mg/kg wet	5.000		84	30-130			
Surrogate: 2-Fluorobiphenyl	2.75		mg/kg wet	3.333		82	30-130			
Surrogate: 2-Fluorophenol	4.22		mg/kg wet	5.000		84	30-130			
Surrogate: Nitrobenzene-d5	2.93		mg/kg wet	3.333		88	30-130			
Surrogate: Phenol-d6	4.49		mg/kg wet	5.000		90	30-130			
Surrogate: p-Terphenyl-d14	3.35		mg/kg wet	3.333		100	30-130			



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**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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**8270C Semi-Volatile Organic Compounds**

Batch **CL00623 - 3546**

**LCS**

1,1-Biphenyl	2.95	0.333	mg/kg wet	3.333		89	40-140			
1,2,4-Trichlorobenzene	2.83	0.333	mg/kg wet	3.333		85	40-140			
1,2-Dichlorobenzene	2.90	0.333	mg/kg wet	3.333		87	40-140			
1,3-Dichlorobenzene	2.86	0.333	mg/kg wet	3.333		86	40-140			
1,4-Dichlorobenzene	2.88	0.333	mg/kg wet	3.333		86	40-140			
2,3,4,6-Tetrachlorophenol	3.00	1.67	mg/kg wet	3.333		90	30-130			
2,4,5-Trichlorophenol	2.99	0.333	mg/kg wet	3.333		90	30-130			
2,4,6-Trichlorophenol	3.25	0.333	mg/kg wet	3.333		98	30-130			
2,4-Dichlorophenol	3.19	0.333	mg/kg wet	3.333		96	30-130			
2,4-Dimethylphenol	2.95	0.333	mg/kg wet	3.333		89	30-130			
2,4-Dinitrophenol	2.82	1.67	mg/kg wet	3.333		85	30-130			
2,4-Dinitrotoluene	3.02	0.333	mg/kg wet	3.333		90	40-140			
2,6-Dinitrotoluene	3.12	0.333	mg/kg wet	3.333		94	40-140			
2-Chloronaphthalene	2.90	0.333	mg/kg wet	3.333		87	40-140			
2-Chlorophenol	2.95	0.333	mg/kg wet	3.333		89	30-130			
2-Methylnaphthalene	3.07	0.333	mg/kg wet	3.333		92	40-140			
2-Methylphenol	2.87	0.333	mg/kg wet	3.333		86	30-130			
2-Nitroaniline	3.25	0.333	mg/kg wet	3.333		98	40-140			
2-Nitrophenol	3.10	0.333	mg/kg wet	3.333		93	30-130			
3,3'-Dichlorobenzidine	2.16	0.667	mg/kg wet	3.333		65	40-140			
3+4-Methylphenol	6.13	0.667	mg/kg wet	6.667		92	30-130			
3-Nitroaniline	2.35	0.333	mg/kg wet	3.333		71	40-140			
4,6-Dinitro-2-Methylphenol	3.19	1.67	mg/kg wet	3.333		96	30-130			
4-Bromophenyl-phenylether	3.24	0.333	mg/kg wet	3.333		97	40-140			
4-Chloro-3-Methylphenol	3.20	0.333	mg/kg wet	3.333		96	30-130			
4-Chloroaniline	1.87	0.667	mg/kg wet	3.333		56	40-140			
4-Chloro-phenyl-phenyl ether	2.99	0.333	mg/kg wet	3.333		90	40-140			
4-Nitroaniline	3.23	0.333	mg/kg wet	3.333		97	40-140			
4-Nitrophenol	2.78	1.67	mg/kg wet	3.333		83	30-130			
Acenaphthene	3.16	0.333	mg/kg wet	3.333		95	40-140			
Acenaphthylene	2.99	0.333	mg/kg wet	3.333		90	40-140			
Acetophenone	3.01	0.667	mg/kg wet	3.333		90	40-140			
Aniline	2.20	0.667	mg/kg wet	3.333		66	40-140			
Anthracene	3.32	0.333	mg/kg wet	3.333		100	40-140			
Azobenzene	2.85	0.333	mg/kg wet	3.333		86	40-140			
Benzo(a)anthracene	3.23	0.333	mg/kg wet	3.333		97	40-140			
Benzo(a)pyrene	3.31	0.167	mg/kg wet	3.333		99	40-140			
Benzo(b)fluoranthene	3.64	0.333	mg/kg wet	3.333		109	40-140			
Benzo(g,h,i)perylene	3.40	0.333	mg/kg wet	3.333		102	40-140			
Benzo(k)fluoranthene	3.16	0.333	mg/kg wet	3.333		95	40-140			
Benzoic Acid	2.85	1.67	mg/kg wet	3.333		85	40-140			
Benzyl Alcohol	2.81	0.333	mg/kg wet	3.333		84	40-140			
bis(2-Chloroethoxy)methane	2.79	0.333	mg/kg wet	3.333		84	40-140			
bis(2-Chloroethyl)ether	3.78	0.333	mg/kg wet	3.333		114	40-140			



**CERTIFICATE OF ANALYSIS**

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ESS Laboratory Work Order: 1012057

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
<b>8270C Semi-Volatile Organic Compounds</b>										
<b>Batch CL00623 - 3546</b>										
bis(2-chloroisopropyl)Ether	3.04	0.333	mg/kg wet	3.333		91	40-140			
bis(2-Ethylhexyl)phthalate	3.12	0.333	mg/kg wet	3.333		94	40-140			
Butylbenzylphthalate	3.12	0.333	mg/kg wet	3.333		94	40-140			
Carbazole	3.03	0.333	mg/kg wet	3.333		91	40-140			
Chrysene	3.34	0.167	mg/kg wet	3.333		100	40-140			
Dibenzo(a,h)Anthracene	3.41	0.167	mg/kg wet	3.333		102	40-140			
Dibenzofuran	2.96	0.333	mg/kg wet	3.333		89	40-140			
Diethylphthalate	2.98	0.333	mg/kg wet	3.333		89	40-140			
Dimethylphthalate	3.05	0.333	mg/kg wet	3.333		91	40-140			
Di-n-butylphthalate	2.94	0.333	mg/kg wet	3.333		88	40-140			
Di-n-octylphthalate	3.27	0.333	mg/kg wet	3.333		98	40-140			
Fluoranthene	3.09	0.333	mg/kg wet	3.333		93	40-140			
Fluorene	3.28	0.333	mg/kg wet	3.333		98	40-140			
Hexachlorobenzene	3.29	0.167	mg/kg wet	3.333		99	40-140			
Hexachlorobutadiene	2.95	0.333	mg/kg wet	3.333		88	40-140			
Hexachlorocyclopentadiene	2.43	1.67	mg/kg wet	3.333		73	40-140			
Hexachloroethane	2.56	0.333	mg/kg wet	3.333		77	40-140			
Indeno(1,2,3-cd)Pyrene	3.51	0.333	mg/kg wet	3.333		105	40-140			
Isophorone	2.34	0.333	mg/kg wet	3.333		70	40-140			
Naphthalene	2.92	0.333	mg/kg wet	3.333		88	40-140			
Nitrobenzene	2.85	0.333	mg/kg wet	3.333		85	40-140			
N-Nitrosodimethylamine	3.03	0.333	mg/kg wet	3.333		91	40-140			
N-Nitroso-Di-n-Propylamine	2.86	0.333	mg/kg wet	3.333		86	40-140			
N-nitrosodiphenylamine	3.32	0.333	mg/kg wet	3.333		100	40-140			
Pentachlorophenol	3.39	1.67	mg/kg wet	3.333		102	30-130			
Phenanthrene	3.12	0.333	mg/kg wet	3.333		94	40-140			
Phenol	2.64	0.333	mg/kg wet	3.333		79	30-130			
Pyrene	3.30	0.333	mg/kg wet	3.333		99	40-140			
Pyridine	2.40	1.67	mg/kg wet	3.333		72	40-140			
Surrogate: 1,2-Dichlorobenzene-d4	2.90		mg/kg wet	3.333		87	30-130			
Surrogate: 2,4,6-Tribromophenol	5.28		mg/kg wet	5.000		106	30-130			
Surrogate: 2-Chlorophenol-d4	4.39		mg/kg wet	5.000		88	30-130			
Surrogate: 2-Fluorobiphenyl	2.91		mg/kg wet	3.333		87	30-130			
Surrogate: 2-Fluorophenol	4.27		mg/kg wet	5.000		85	30-130			
Surrogate: Nitrobenzene-d5	2.93		mg/kg wet	3.333		88	30-130			
Surrogate: Phenol-d6	4.67		mg/kg wet	5.000		93	30-130			
Surrogate: p-Terphenyl-d14	3.12		mg/kg wet	3.333		94	30-130			
<b>LCS Dup</b>										
1,1-Biphenyl	2.90	0.333	mg/kg wet	3.333		87	40-140	2	30	
1,2,4-Trichlorobenzene	2.81	0.333	mg/kg wet	3.333		84	40-140	0.8	30	
1,2-Dichlorobenzene	2.95	0.333	mg/kg wet	3.333		89	40-140	2	30	
1,3-Dichlorobenzene	2.88	0.333	mg/kg wet	3.333		86	40-140	0.8	30	
1,4-Dichlorobenzene	2.83	0.333	mg/kg wet	3.333		85	40-140	2	30	
2,3,4,6-Tetrachlorophenol	3.09	1.67	mg/kg wet	3.333		93	30-130	3	30	
2,4,5-Trichlorophenol	3.09	0.333	mg/kg wet	3.333		93	30-130	3	30	



**CERTIFICATE OF ANALYSIS**

Client Name: RC & D  
Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1012057

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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**8270C Semi-Volatile Organic Compounds**

Batch **CL00623 - 3546**

2,4,6-Trichlorophenol	3.18	0.333	mg/kg wet	3.333		96	30-130	2	30	
2,4-Dichlorophenol	3.23	0.333	mg/kg wet	3.333		97	30-130	1	30	
2,4-Dimethylphenol	3.04	0.333	mg/kg wet	3.333		91	30-130	3	30	
2,4-Dinitrophenol	2.86	1.67	mg/kg wet	3.333		86	30-130	1	30	
2,4-Dinitrotoluene	3.15	0.333	mg/kg wet	3.333		95	40-140	4	30	
2,6-Dinitrotoluene	3.22	0.333	mg/kg wet	3.333		97	40-140	3	30	
2-Chloronaphthalene	2.84	0.333	mg/kg wet	3.333		85	40-140	2	30	
2-Chlorophenol	3.04	0.333	mg/kg wet	3.333		91	30-130	3	30	
2-Methylnaphthalene	3.12	0.333	mg/kg wet	3.333		94	40-140	2	30	
2-Methylphenol	3.02	0.333	mg/kg wet	3.333		91	30-130	5	30	
2-Nitroaniline	3.40	0.333	mg/kg wet	3.333		102	40-140	4	30	
2-Nitrophenol	3.13	0.333	mg/kg wet	3.333		94	30-130	0.8	30	
3,3'-Dichlorobenzidine	2.11	0.667	mg/kg wet	3.333		63	40-140	3	30	
3+4-Methylphenol	6.16	0.667	mg/kg wet	6.667		92	30-130	0.5	30	
3-Nitroaniline	2.52	0.333	mg/kg wet	3.333		76	40-140	7	30	
4,6-Dinitro-2-Methylphenol	3.15	1.67	mg/kg wet	3.333		94	30-130	1	30	
4-Bromophenyl-phenylether	2.97	0.333	mg/kg wet	3.333		89	40-140	9	30	
4-Chloro-3-Methylphenol	3.33	0.333	mg/kg wet	3.333		100	30-130	4	30	
4-Chloroaniline	1.98	0.667	mg/kg wet	3.333		59	40-140	6	30	
4-Chloro-phenyl-phenyl ether	2.97	0.333	mg/kg wet	3.333		89	40-140	0.5	30	
4-Nitroaniline	2.97	0.333	mg/kg wet	3.333		89	40-140	8	30	
4-Nitrophenol	2.68	1.67	mg/kg wet	3.333		80	30-130	4	30	
Acenaphthene	3.15	0.333	mg/kg wet	3.333		95	40-140	0.4	30	
Acenaphthylene	2.99	0.333	mg/kg wet	3.333		90	40-140	0.2	30	
Acetophenone	3.30	0.667	mg/kg wet	3.333		99	40-140	9	30	
Aniline	2.28	0.667	mg/kg wet	3.333		68	40-140	4	30	
Anthracene	3.34	0.333	mg/kg wet	3.333		100	40-140	0.5	30	
Azobenzene	2.80	0.333	mg/kg wet	3.333		84	40-140	2	30	
Benzo(a)anthracene	3.26	0.333	mg/kg wet	3.333		98	40-140	0.6	30	
Benzo(e)pyrene	3.30	0.167	mg/kg wet	3.333		99	40-140	0.4	30	
Benzo(b)fluoranthene	3.29	0.333	mg/kg wet	3.333		99	40-140	10	30	
Benzo(g,h,i)perylene	3.23	0.333	mg/kg wet	3.333		97	40-140	5	30	
Benzo(k)fluoranthene	3.54	0.333	mg/kg wet	3.333		106	40-140	11	30	
Benzoic Acid	2.73	1.67	mg/kg wet	3.333		82	40-140	4	30	
Benzyl Alcohol	2.89	0.333	mg/kg wet	3.333		87	40-140	3	30	
bis(2-Chloroethoxy)methane	2.76	0.333	mg/kg wet	3.333		83	40-140	1	30	
bis(2-Chloroethyl)ether	3.51	0.333	mg/kg wet	3.333		105	40-140	8	30	
bis(2-chloroisopropyl)Ether	3.04	0.333	mg/kg wet	3.333		91	40-140	0.2	30	
bis(2-Ethylhexyl)phthalate	3.12	0.333	mg/kg wet	3.333		94	40-140	0.07	30	
Butylbenzylphthalate	3.08	0.333	mg/kg wet	3.333		92	40-140	1	30	
Carbazole	3.04	0.333	mg/kg wet	3.333		91	40-140	0.2	30	
Chrysene	3.32	0.167	mg/kg wet	3.333		100	40-140	0.5	30	
Dibenzo(a,h)Anthracene	3.24	0.167	mg/kg wet	3.333		97	40-140	5	30	
Dibenzofuran	3.03	0.333	mg/kg wet	3.333		91	40-140	2	30	
Diethylphthalate	3.04	0.333	mg/kg wet	3.333		91	40-140	2	30	



**CERTIFICATE OF ANALYSIS**

Client Name: RC & D  
Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1012057

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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**8270C Semi-Volatile Organic Compounds**

**Batch CL06623 - 3546**

Dimethylphthalate	3.08	0.333	mg/kg wet	3.333		93	40-140	1	30	
Di-n-butylphthalate	2.89	0.333	mg/kg wet	3.333		87	40-140	2	30	
Di-n-octylphthalate	3.19	0.333	mg/kg wet	3.333		96	40-140	2	30	
Fluoranthene	3.13	0.333	mg/kg wet	3.333		94	40-140	1	30	
Fluorene	3.34	0.333	mg/kg wet	3.333		100	40-140	2	30	
Hexachlorobenzene	3.24	0.167	mg/kg wet	3.333		97	40-140	2	30	
Hexachlorobutadiene	2.85	0.333	mg/kg wet	3.333		86	40-140	3	30	
Hexachlorocyclopentadiene	2.32	1.67	mg/kg wet	3.333		70	40-140	4	30	
Hexachloroethane	2.70	0.333	mg/kg wet	3.333		81	40-140	5	30	
Indeno(1,2,3-cd)Pyrene	3.31	0.333	mg/kg wet	3.333		99	40-140	6	30	
Isophorone	2.38	0.333	mg/kg wet	3.333		72	40-140	2	30	
Naphthalene	2.96	0.333	mg/kg wet	3.333		89	40-140	1	30	
Nitrobenzene	2.92	0.333	mg/kg wet	3.333		88	40-140	3	30	
N-Nitrosodimethylamine	3.08	0.333	mg/kg wet	3.333		92	40-140	2	30	
N-Nitroso-Di-n-Propylamine	3.03	0.333	mg/kg wet	3.333		91	40-140	6	30	
N-nitrosodiphenylamine	3.20	0.333	mg/kg wet	3.333		96	40-140	4	30	
Pentachlorophenol	3.28	1.67	mg/kg wet	3.333		99	30-130	3	30	
Phenanthrene	3.06	0.333	mg/kg wet	3.333		92	40-140	2	30	
Phenol	3.16	0.333	mg/kg wet	3.333		95	30-130	18	30	
Pyrene	3.26	0.333	mg/kg wet	3.333		98	40-140	1	30	
Pyridine	2.69	1.67	mg/kg wet	3.333		81	40-140	11	30	
Surrogate: 1,2-Dichlorobenzene-d4	2.87		mg/kg wet	3.333		86	30-130			
Surrogate: 2,4,6-Tribromophenol	5.02		mg/kg wet	5.000		100	30-130			
Surrogate: 2-Chlorophenol-d4	4.46		mg/kg wet	5.000		89	30-130			
Surrogate: 2-Fluorobiphenyl	2.83		mg/kg wet	3.333		85	30-130			
Surrogate: 2-Fluorophenol	4.14		mg/kg wet	5.000		83	30-130			
Surrogate: Nitrobenzene-d5	2.88		mg/kg wet	3.333		86	30-130			
Surrogate: Phenol-d6	4.90		mg/kg wet	5.000		98	30-130			
Surrogate: p-Terphenyl-d14	3.04		mg/kg wet	3.333		91	30-130			

Matrix Spike	Source: 1012057-01	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
1,1-Biphenyl		2.47	0.358	mg/kg dry	3.580	ND	69	40-140			
1,2,4-Trichlorobenzene		2.23	0.358	mg/kg dry	3.580	ND	62	40-140			
1,2-Dichlorobenzene		2.13	0.358	mg/kg dry	3.580	ND	59	40-140			
1,3-Dichlorobenzene		2.07	0.358	mg/kg dry	3.580	ND	58	40-140			
1,4-Dichlorobenzene		2.04	0.358	mg/kg dry	3.580	ND	57	40-140			
2,3,4,6-Tetrachlorophenol		2.86	1.79	mg/kg dry	3.580	ND	80	30-130			
2,4,5-Trichlorophenol		2.73	0.358	mg/kg dry	3.580	ND	76	30-130			
2,4,6-Trichlorophenol		2.82	0.358	mg/kg dry	3.580	ND	79	30-130			
2,4-Dichlorophenol		2.61	0.358	mg/kg dry	3.580	ND	73	30-130			
2,4-Dimethylphenol		2.49	0.358	mg/kg dry	3.580	ND	69	30-130			
2,4-Dinitrophenol		2.31	1.79	mg/kg dry	3.580	ND	65	30-130			
2,4-Dinitrotoluene		3.04	0.358	mg/kg dry	3.580	ND	85	40-140			
2,6-Dinitrotoluene		2.94	0.358	mg/kg dry	3.580	ND	82	40-140			
2-Chloronaphthalene		2.35	0.358	mg/kg dry	3.580	ND	66	40-140			
2-Chlorophenol		2.31	0.358	mg/kg dry	3.580	ND	65	30-130			



*CERTIFICATE OF ANALYSIS*

Client Name: RC & D  
Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1012057

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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**8270C Semi-Volatile Organic Compounds**

Batch **CL00623 - 3546**

2-Methylnaphthalene	2.53	0.358	mg/kg dry	3.580	ND	71	40-140			
2-Methylphenol	2.36	0.358	mg/kg dry	3.580	ND	66	30-130			
2-Nitroaniline	3.11	0.358	mg/kg dry	3.580	ND	87	40-140			
2-Nitrophenol	2.51	0.358	mg/kg dry	3.580	ND	70	30-130			
3,3'-Dichlorobenzidine	2.92	0.716	mg/kg dry	3.580	ND	82	40-140			
3+4-Methylphenol	5.50	0.716	mg/kg dry	7.161	ND	77	30-130			
3-Nitroaniline	2.58	0.358	mg/kg dry	3.580	ND	72	40-140			
4,6-Dinitro-2-Methylphenol	3.23	1.79	mg/kg dry	3.580	ND	90	30-130			
4-Bromophenyl-phenylether	3.15	0.358	mg/kg dry	3.580	ND	88	40-140			
4-Chloro-3-Methylphenol	2.95	0.358	mg/kg dry	3.580	ND	82	30-130			
4-Chloroaniline	2.14	0.716	mg/kg dry	3.580	ND	60	40-140			
4-Chloro-phenyl-phenyl ether	2.64	0.358	mg/kg dry	3.580	ND	74	40-140			
4-Nitroaniline	3.33	0.358	mg/kg dry	3.580	ND	93	40-140			
4-Nitrophenol	2.77	1.79	mg/kg dry	3.580	ND	77	30-130			
Acenaphthene	2.76	0.358	mg/kg dry	3.580	ND	77	40-140			
Acenaphthylene	2.63	0.358	mg/kg dry	3.580	ND	73	40-140			
Acetophenone	2.55	0.716	mg/kg dry	3.580	ND	71	40-140			
Aniline	2.10	0.716	mg/kg dry	3.580	ND	59	40-140			
Anthracene	3.44	0.358	mg/kg dry	3.580	ND	96	40-140			
Azobenzene	2.81	0.358	mg/kg dry	3.580	ND	78	40-140			
Benzo(a)anthracene	3.39	0.358	mg/kg dry	3.580	ND	95	40-140			
Benzo(a)pyrene	3.48	0.179	mg/kg dry	3.580	ND	97	40-140			
Benzo(b)fluoranthene	3.65	0.358	mg/kg dry	3.580	ND	102	40-140			
Benzo(g,h,i)perylene	3.46	0.358	mg/kg dry	3.580	ND	97	40-140			
Benzo(k)fluoranthene	3.52	0.358	mg/kg dry	3.580	ND	98	40-140			
Benzoic Acid	1.42	1.79	mg/kg dry	3.580	ND	40	40-140			
Benzyl Alcohol	2.45	0.358	mg/kg dry	3.580	ND	68	40-140			
bis(2-Chloroethoxy)methane	2.47	0.358	mg/kg dry	3.580	ND	69	40-140			
bis(2-Chloroethyl)ether	3.02	0.358	mg/kg dry	3.580	ND	84	40-140			
bis(2-chloroisopropyl)Ether	2.26	0.358	mg/kg dry	3.580	ND	63	40-140			
bis(2-Ethylhexyl)phthalate	3.34	0.358	mg/kg dry	3.580	ND	93	40-140			
Butylbenzylphthalate	3.29	0.358	mg/kg dry	3.580	ND	92	40-140			
Carbazole	3.20	0.358	mg/kg dry	3.580	ND	89	40-140			
Chrysene	3.55	0.179	mg/kg dry	3.580	ND	99	40-140			
Dibenzo(a,h)Anthracene	3.41	0.179	mg/kg dry	3.580	ND	95	40-140			
Dibenzofuran	2.65	0.358	mg/kg dry	3.580	ND	74	40-140			
Diethylphthalate	2.84	0.358	mg/kg dry	3.580	ND	79	40-140			
Dimethylphthalate	2.83	0.358	mg/kg dry	3.580	ND	79	40-140			
Di-n-butylphthalate	3.15	0.358	mg/kg dry	3.580	ND	88	40-140			
Di-n-octylphthalate	3.44	0.358	mg/kg dry	3.580	ND	96	40-140			
Fluoranthene	3.28	0.358	mg/kg dry	3.580	ND	92	40-140			
Fluorene	2.98	0.358	mg/kg dry	3.580	ND	83	40-140			
Hexachlorobenzene	3.32	0.179	mg/kg dry	3.580	ND	93	40-140			
Hexachlorobutadiene	2.20	0.358	mg/kg dry	3.580	ND	61	40-140			
Hexachlorocyclopentadiene	1.82	1.79	mg/kg dry	3.580	ND	51	40-140			





**CERTIFICATE OF ANALYSIS**

Client Name: RC & D  
Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1012057

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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**8270C Semi-Volatile Organic Compounds**

**Batch CL00623 - 3546**

Hexachloroethane	2.00	0.358	mg/kg dry	3.580	ND	56	40-140			
Indeno(1,2,3-cd)Pyrene	3.58	0.358	mg/kg dry	3.580	ND	100	40-140			
Isophorone	2.00	0.358	mg/kg dry	3.580	ND	56	40-140			
Naphthalene	2.40	0.358	mg/kg dry	3.580	ND	67	40-140			
Nitrobenzene	2.28	0.358	mg/kg dry	3.580	ND	64	40-140			
N-Nitrosodimethylamine	2.19	0.358	mg/kg dry	3.580	ND	61	40-140			
N-Nitroso-Di-n-Propylamine	2.39	0.358	mg/kg dry	3.580	ND	67	40-140			
N-nitrosodiphenylamine	3.25	0.358	mg/kg dry	3.580	ND	91	40-140			
Pentachlorophenol	3.44	1.79	mg/kg dry	3.580	ND	96	30-130			
Phenanthrene	3.20	0.358	mg/kg dry	3.580	ND	89	40-140			
Phenol	2.38	0.358	mg/kg dry	3.580	ND	67	30-130			
Pyrene	3.45	0.358	mg/kg dry	3.580	ND	96	40-140			
Pyridine	1.53	1.79	mg/kg dry	3.580	ND	43	40-140			
Surrogate: 1,2-Dichlorobenzene-d4	2.10		mg/kg dry	3.580		59	30-130			
Surrogate: 2,4,6-Tribromophenol	5.18		mg/kg dry	5.371		96	30-130			
Surrogate: 2-Chlorophenol-d4	3.46		mg/kg dry	5.371		64	30-130			
Surrogate: 2-Fluorobiphenyl	2.40		mg/kg dry	3.580		67	30-130			
Surrogate: 2-Fluorophenol	3.20		mg/kg dry	5.371		60	30-130			
Surrogate: Nitrobenzene-d5	2.33		mg/kg dry	3.580		65	30-130			
Surrogate: Phenol-d6	3.78		mg/kg dry	5.371		70	30-130			
Surrogate: p-Terphenyl-d14	3.28		mg/kg dry	3.580		92	30-130			

**Matrix Spike Dup Source: 1012057-01**

1,1-Biphenyl	2.58	0.360	mg/kg dry	3.605	ND	71	40-140	4	30	
1,2,4-Trichlorobenzene	2.50	0.360	mg/kg dry	3.605	ND	69	40-140	11	30	
1,2-Dichlorobenzene	2.56	0.360	mg/kg dry	3.605	ND	71	40-140	19	30	
1,3-Dichlorobenzene	2.56	0.360	mg/kg dry	3.605	ND	71	40-140	21	30	
1,4-Dichlorobenzene	2.55	0.360	mg/kg dry	3.605	ND	71	40-140	22	30	
2,3,4,6-Tetrachlorophenol	2.94	1.81	mg/kg dry	3.605	ND	81	30-130	3	30	
2,4,5-Trichlorophenol	2.76	0.360	mg/kg dry	3.605	ND	77	30-130	0.8	30	
2,4,6-Trichlorophenol	2.87	0.360	mg/kg dry	3.605	ND	80	30-130	2	30	
2,4-Dichlorophenol	2.70	0.360	mg/kg dry	3.605	ND	75	30-130	3	30	
2,4-Dimethylphenol	2.59	0.360	mg/kg dry	3.605	ND	72	30-130	4	30	
2,4-Dinitrophenol	2.37	1.81	mg/kg dry	3.605	ND	66	30-130	3	30	
2,4-Dinitrotoluene	3.18	0.360	mg/kg dry	3.605	ND	88	40-140	5	30	
2,6-Dinitrotoluene	3.00	0.360	mg/kg dry	3.605	ND	83	40-140	2	30	
2-Chloronaphthalene	2.45	0.360	mg/kg dry	3.605	ND	68	40-140	4	30	
2-Chlorophenol	2.61	0.360	mg/kg dry	3.605	ND	72	30-130	12	30	
2-Methylnaphthalene	2.68	0.360	mg/kg dry	3.605	ND	74	40-140	6	30	
2-Methylphenol	2.57	0.360	mg/kg dry	3.605	ND	71	30-130	9	30	
2-Nitroaniline	3.19	0.360	mg/kg dry	3.605	ND	88	40-140	2	30	
2-Nitrophenol	2.69	0.360	mg/kg dry	3.605	ND	75	30-130	7	30	
3,3'-Dichlorobenzidine	2.65	0.721	mg/kg dry	3.605	ND	74	40-140	10	30	
3+4-Methylphenol	5.65	0.721	mg/kg dry	7.210	ND	78	30-130	3	30	
3-Nitroaniline	2.69	0.360	mg/kg dry	3.605	ND	75	40-140	4	30	
4,6-Dinitro-2-Methylphenol	3.09	1.81	mg/kg dry	3.605	ND	86	30-130	4	30	



**CERTIFICATE OF ANALYSIS**

Client Name: RC & D  
Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1012057

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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**8270C Semi-Volatile Organic Compounds**

Batch **CL00623 - 3546**

4-Bromophenyl-phenylether	2.91	0.360	mg/kg dry	3.605	ND	81	40-140	8	30	
4-Chloro-3-Methylphenol	3.01	0.360	mg/kg dry	3.605	ND	83	30-130	2	30	
4-Chloroaniline	2.06	0.721	mg/kg dry	3.605	ND	57	40-140	4	30	
4-Chloro-phenyl-phenyl ether	2.67	0.360	mg/kg dry	3.605	ND	74	40-140	1	30	
4-Nitroaniline	3.32	0.360	mg/kg dry	3.605	ND	92	40-140	0.3	30	
4-Nitrophenol	2.83	1.81	mg/kg dry	3.605	ND	78	30-130	2	30	
Acenaphthene	2.87	0.360	mg/kg dry	3.605	ND	80	40-140	4	30	
Acenaphthylene	2.70	0.360	mg/kg dry	3.605	ND	75	40-140	3	30	
Acetophenone	2.90	0.721	mg/kg dry	3.605	ND	80	40-140	13	30	
Aniline	2.37	0.721	mg/kg dry	3.605	ND	66	40-140	12	30	
Anthracene	3.38	0.360	mg/kg dry	3.605	ND	94	40-140	2	30	
Azobenzene	2.78	0.360	mg/kg dry	3.605	ND	77	40-140	1	30	
Benzo(a)anthracene	3.31	0.360	mg/kg dry	3.605	ND	92	40-140	2	30	
Benzo(a)pyrene	3.41	0.181	mg/kg dry	3.605	ND	95	40-140	2	30	
Benzo(b)fluoranthene	3.21	0.360	mg/kg dry	3.605	ND	89	40-140	13	30	
Benzo(g,h,i)perylene	3.30	0.360	mg/kg dry	3.605	ND	91	40-140	5	30	
Benzo(k)fluoranthene	3.74	0.360	mg/kg dry	3.605	ND	104	40-140	6	30	
Benzoic Acid	1.54	1.81	mg/kg dry	3.605	ND	43	40-140	8	30	
Benzyl Alcohol	2.70	0.360	mg/kg dry	3.605	ND	75	40-140	10	30	
bis(2-Chloroethoxy)methane	2.61	0.360	mg/kg dry	3.605	ND	72	40-140	6	30	
bis(2-Chloroethyl)ether	2.98	0.360	mg/kg dry	3.605	ND	83	40-140	1	30	
bis(2-chloroisopropyl)Ether	2.61	0.360	mg/kg dry	3.605	ND	72	40-140	15	30	
bis(2-Ethylhexyl)phthalate	3.14	0.360	mg/kg dry	3.605	ND	87	40-140	6	30	
Butylbenzylphthalate	3.15	0.360	mg/kg dry	3.605	ND	87	40-140	4	30	
Carbazole	3.13	0.360	mg/kg dry	3.605	ND	87	40-140	2	30	
Chrysene	3.44	0.181	mg/kg dry	3.605	ND	95	40-140	3	30	
Dibenzo(a,h)Anthracene	3.38	0.181	mg/kg dry	3.605	ND	94	40-140	0.7	30	
Dibenzofuran	2.73	0.360	mg/kg dry	3.605	ND	76	40-140	3	30	
Diethylphthalate	2.93	0.360	mg/kg dry	3.605	ND	81	40-140	3	30	
Dimethylphthalate	2.91	0.360	mg/kg dry	3.605	ND	81	40-140	3	30	
Di-n-butylphthalate	2.96	0.360	mg/kg dry	3.605	ND	82	40-140	6	30	
Di-n-octylphthalate	3.24	0.360	mg/kg dry	3.605	ND	90	40-140	6	30	
Fluoranthene	3.16	0.360	mg/kg dry	3.605	ND	88	40-140	4	30	
Fluorene	3.09	0.360	mg/kg dry	3.605	ND	86	40-140	4	30	
Hexachlorobenzene	3.16	0.181	mg/kg dry	3.605	ND	88	40-140	5	30	
Hexachlorobutadiene	2.48	0.360	mg/kg dry	3.605	ND	69	40-140	12	30	
Hexachlorocyclopentadiene	1.96	1.81	mg/kg dry	3.605	ND	54	40-140	7	30	
Hexachloroethane	2.44	0.360	mg/kg dry	3.605	ND	68	40-140	20	30	
Indeno(1,2,3-cd)Pyrene	3.40	0.360	mg/kg dry	3.605	ND	94	40-140	5	30	
Isophorone	2.02	0.360	mg/kg dry	3.605	ND	56	40-140	1	30	
Naphthalene	2.59	0.360	mg/kg dry	3.605	ND	72	40-140	8	30	
Nitrobenzene	2.56	0.360	mg/kg dry	3.605	ND	71	40-140	12	30	
N-Nitrosodimethylamine	2.84	0.360	mg/kg dry	3.605	ND	79	40-140	26	30	
N-Nitroso-Di-n-Propylamine	2.67	0.360	mg/kg dry	3.605	ND	74	40-140	11	30	
N-nitrosodiphenylamine	3.19	0.360	mg/kg dry	3.605	ND	88	40-140	2	30	



*CERTIFICATE OF ANALYSIS*

Client Name: RC & D  
 Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1012057

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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8270C Semi-Volatile Organic Compounds

**Batch CL00623 - 3546**

Pentachlorophenol	3.32	1.81	mg/kg dry	3.605	ND	92	30-130	4	30	
Phenanthrene	3.18	0.360	mg/kg dry	3.605	ND	88	40-140	0.4	30	
Phenol	2.64	0.360	mg/kg dry	3.605	ND	73	30-130	10	30	
Pyrene	3.35	0.360	mg/kg dry	3.605	ND	93	40-140	3	30	
Pyridine	2.14	1.81	mg/kg dry	3.605	ND	59	40-140	33	30	D+
Surrogate: 1,2-Dichlorobenzene-d4	2.51		mg/kg dry	3.605		70	30-130			
Surrogate: 2,4,6-Tribromophenol	4.96		mg/kg dry	5.407		92	30-130			
Surrogate: 2-Chlorophenol-d4	3.90		mg/kg dry	5.407		72	30-130			
Surrogate: 2-Fluorobiphenyl	2.48		mg/kg dry	3.605		69	30-130			
Surrogate: 2-Fluorophenol	3.73		mg/kg dry	5.407		69	30-130			
Surrogate: Nitrobenzene-d5	2.53		mg/kg dry	3.605		70	30-130			
Surrogate: Phenol-d6	4.17		mg/kg dry	5.407		77	30-130			
Surrogate: p-Terphenyl-d14	3.09		mg/kg dry	3.605		86	30-130			



**ESS Laboratory**

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**BAL Laboratory**

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*CERTIFICATE OF ANALYSIS*

Client Name: RC & D

Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1012057

**Notes and Definitions**

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



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**CERTIFICATE OF ANALYSIS**

Client Name: RC & D  
Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1012057

**ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS**

**ENVIRONMENTAL**

Department of Defense (DoD) Environmental Laboratory Accreditation Program (ELAP)

A2LA Accredited: Testing Cert# 2864.01  
<http://www.a2la.org/scopepdf/2864-01.pdf>

Rhode Island Potable and Non Potable Water: LA100179  
<http://www.health.ri.gov/labs/waterlabs-instate.php>

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750  
[http://www.ct.gov/dph/lib/dph/environmental\\_health/environmental\\_laboratories/pdf/out\\_state.pdf](http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/out_state.pdf)

Maine Potable and Non Potable Water: RI0002  
[http://www.maine.gov/dep/blwq/topic/vessel/lab\\_list.pdf](http://www.maine.gov/dep/blwq/topic/vessel/lab_list.pdf)

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

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424  
<http://www4.egov.nh.gov/des/nhelap/namesearch.asp>

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

United States Department of Agriculture Soil Permit: S-54210

Maryland Potable Water: 301  
[http://www.mde.state.md.us/assets/document/WSP\\_labs-2009apr20.pdf](http://www.mde.state.md.us/assets/document/WSP_labs-2009apr20.pdf)

South Carolina Volatile Organic Compounds in Potable Water: 78003

New Jersey Potable (VOA) and Non Potable Water (RCRA), Solids and Hazardous Waste: RI002  
<http://www.nj.gov/dep/oqa/certlabs.htm>

Pennsylvania Potable and Non Potable Water, Solid and Hazardous Waste: 68-01752  
[http://files.dep.state.pa.us/RegionalResources/Labs/LabsPortalFiles/2009-0911\\_accruited\\_laboratories.pdf](http://files.dep.state.pa.us/RegionalResources/Labs/LabsPortalFiles/2009-0911_accruited_laboratories.pdf)

**CHEMISTRY**

A2LA Accredited: Testing Cert # 2864.01  
Lead in Paint, Phthalates, Lead in Children's Metals Products (Including Jewelry)  
<http://www.A2LA.org/dirsearchnew/newsearch.cfm>

CPSC ID# 1141  
Lead Paint, Lead in Children's Metals Jewelry  
<http://www.cpsc.gov/cgi-bin/labapplist.aspx>

**Sample and Cooler Receipt Checklist**

Client: RC and D  
Client Project ID: \_\_\_\_\_  
Shipped/Delivered Via: ESS Courier

ESS Project ID: 10120057  
Date Project Due: 12/8/10  
Days For Project: 3 Day

**Items to be checked upon receipt:**

- |  |                               |   |                                 |
|--|-------------------------------|---|---------------------------------|
| 1. Air Bill Manifest Present?          | <input type="checkbox"/> * No | 10. Are the samples properly preserved?   | <input type="checkbox"/> Yes    |
| Air No.:                               |                               | 11. Proper sample containers used?        | <input type="checkbox"/> Yes    |
| 2. Were Custody Seals Present?         | <input type="checkbox"/> No   | 12. Any air bubbles in the VOA vials?     | <input type="checkbox"/> N/A    |
| 3. Were Custody Seals Intact?          | <input type="checkbox"/> N/A  | 13. Holding times exceeded?               | <input type="checkbox"/> No     |
| 4. Is Radiation count < 100 CPM?       | <input type="checkbox"/> Yes  | 14. Sufficient sample volumes?            | <input type="checkbox"/> Yes    |
| 5. Is a cooler present?                | <input type="checkbox"/> * No | 15. Any Subcontracting needed?            | <input type="checkbox"/> No     |
| <u>Cooler Temp: NA</u>                 |                               | 16. Are ESS labels on correct containers? | <input type="checkbox"/> Yes/No |
| <u>Iced With: None</u>                 |                               | 17. Were samples received intact?         | <input type="checkbox"/> Yes/No |
| 6. Was COC Included with samples?      | <input type="checkbox"/> Yes  | ESS Sample IDs: _____                     |                                 |
| 7. Was COC signed and dated by client? | <input type="checkbox"/> Yes  | Sub Lab: _____                            |                                 |
| 8. Does the COC match the sample       | <input type="checkbox"/> Yes  | Analysis: _____                           |                                 |
| 9. Is COC complete and correct?        | <input type="checkbox"/> Yes  | TAT: _____                                |                                 |

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

\_\_\_\_\_

\_\_\_\_\_

Who was called?: \_\_\_\_\_ By whom? \_\_\_\_\_

Sample Number	Properly Preserved	Container Type	# of Containers	Preservative
1	Yes	40 ml - VOA	1	MeOH
1	Yes	Plastic Bag	1	NP

Completed By: [Signature]  
Reviewed By: \_\_\_\_\_

Date/Time: 12/3/10  
Date/Time: 12/3/10



CERTIFICATE OF ANALYSIS

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BAL Laboratory  
The Microbiology Division  
of Thielisch Engineering, Inc.



Rob Schuster  
RC & D

17 Gordon Avenue, Suite 204  
Providence, RI 02905-1952

RE: Lincoln Lace (1006)

ESS Laboratory Work Order Number: 1012068

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

Laurel Stoddard

Laboratory Director

Analytical Summary

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

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



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*CERTIFICATE OF ANALYSIS*

Client Name: RC & D  
Client Project ID: Lincoln Lacey

ESS Laboratory Work Order: 1012068

**SAMPLE RECEIPT**

The following samples were received on December 07, 2010 for the analyses specified on the enclosed Chain of Custody Record.

Client did not deliver samples in a cooler.

Lab Number	SampleName	Matrix	Analysis
1012068-01	1006-ReadTS-05	Soil	6010B, 7471A, 7841, 8100M, 8260B, 8270C
1012068-02	1006-Lopes-09	Soil	6010B



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CERTIFICATE OF ANALYSIS

Client Name: RC & D  
Client Project ID: Lincoln Lacey

ESS Laboratory Work Order: 1012068

PROJECT NARRATIVE

5035/8260B Volatile Organic Compounds / Methanol  
 CL00808-MS1 Matrix Spike recovery is above upper control limit (M+).  
 1,1-Dichloroethene (151% @ 70-130%), Vinyl Chloride (131% @ 70-130%)  
 CL00808-MSD1 Relative percent difference for duplicate is outside of criteria (D+).  
 Acetone (34%)  
 8270C Semi-Volatile Organic Compounds  
 CL00820-BSD1 Relative percent difference for duplicate is outside of criteria (D+).  
 3+4-Methylphenol (33%), 4-Nitrophenol (51%), Benzoic Acid (46%)  
 CTL0089-CCV1 Calibration required quadratic regression (Q).  
 2,4-Dinitrophenol (87% @ 70-130%), Pentachlorophenol (108% @ 80-120%)

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

- [Definitions of Quality Control Parameters](#)
- [Semi-volatile Organics Internal Standard Information](#)
- [Semi-volatile Organics Surrogate Information](#)
- [Volatile Organics Internal Standard Information](#)
- [Volatile Organics Surrogate Information](#)
- [EPH and VPH Alkane Lists](#)



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**CERTIFICATE OF ANALYSIS**

Client Name: RC & D  
 Client Project ID: Lincoln Lane  
 Client Sample ID: 1006-ReadTS-05  
 Date Sampled: 12/07/10 13:00  
 Percent Solids: 80  
 ESS Laboratory Work Order: 1012068  
 ESS Laboratory Sample ID: 1012068-01  
 Sample Matrix: Soil  
 Units: mg/kg dry

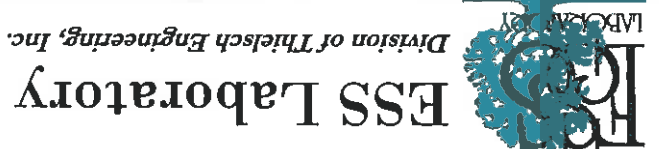
**3050B/6000/7000 Total Metals**

RI - RES DEC

Analyte	Results (MRL)	Method	Limit	DF	Analyst	Analyzed	IV	F/V	Batch
Antimony	ND (5.6)	6010B	10	1	SVD	12/09/10 18:31	2.22	100	CL00816
Arsenic	ND (2.8)	6010B	7	1	SVD	12/09/10 18:31	2.22	100	CL00816
Beryllium	0.32 (0.12)	6010B	0.4	1	SVD	12/09/10 18:31	2.22	100	CL00816
Cadmium	ND (0.57)	6010B	39	1	SVD	12/09/10 18:31	2.22	100	CL00816
Chromium	8.4 (1.1)	6010B	1400	1	SVD	12/09/10 18:31	2.22	100	CL00816
Copper	9.9 (2.8)	6010B	3100	1	SVD	12/09/10 18:31	2.22	100	CL00816
Lead	23.0 (5.6)	6010B	150	1	SVD	12/09/10 18:31	2.22	100	CL00816
Mercury	ND (0.040)	7471A	23	1	JP	12/10/10 11:26	0.62	40	CL00817
Nickel	6.2 (2.8)	6010B	1000	1	SVD	12/09/10 18:31	2.22	100	CL00816
Selenium	ND (5.6)	6010B	390	1	SVD	12/09/10 18:31	2.22	100	CL00816
Silver	ND (0.57)	6010B	200	1	SVD	12/09/10 18:31	2.22	100	CL00816
Thallium	ND (1.39)	7841	5.5	5	SVD	12/10/10 14:20	2.22	100	CL00816
Zinc	29.4 (2.8)	6010B	6000	1	SVD	12/09/10 18:31	2.22	100	CL00816



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Division of Thielsch Engineering, Inc.

**CERTIFICATE OF ANALYSIS**

Client Name: RC & D  
 Client Project ID: Lincoln Lane  
 Client Sample ID: 1006-ReadTS-05  
 Date Sampled: 12/07/10 13:00  
 Percent Solids: 80  
 Initial Volume: 12.8  
 Final Volume: 15  
 Extraction Method: 5035

ESS Laboratory Work Order: 1012068  
 ESS Laboratory Sample ID: 1012068-01  
 Sample Matrix: Soil  
 Units: mg/kg dry  
 Analyst: MD

**5035/8260B Volatile Organic Compounds / Methanol**

**RI - RES DEC**

Analyte	Results (MRL)	MDL	Limit	DF	Analyzed	Sequence	Batch
1,1,1,2-Tetrachloroethane	ND (0.171)	0.0149	2.2	1	12/08/10 11:55	CTL0062	CL00808
1,1,1-Trichloroethane	ND (0.0857)	0.0151	540	1	12/08/10 11:55	CTL0062	CL00808
1,1,2,2-Tetrachloroethane	ND (0.0857)	0.0233	1.3	1	12/08/10 11:55	CTL0062	CL00808
1,1,2-Trichloroethane	ND (0.0857)	0.0214	3.6	1	12/08/10 11:55	CTL0062	CL00808
1,1-Dichloroethane	ND (0.0857)	0.0137	920	1	12/08/10 11:55	CTL0062	CL00808
1,1-Dichloroethene	ND (0.0857)	0.0211	0.2	1	12/08/10 11:55	CTL0062	CL00808
1,1-Dichloropropene	ND (0.0857)	0.0132		1	12/08/10 11:55	CTL0062	CL00808
1,2,3-Trichlorobenzene	ND (0.0857)	0.0286		1	12/08/10 11:55	CTL0062	CL00808
1,2,3-Trichloropropane	ND (0.0857)	0.0213		1	12/08/10 11:55	CTL0062	CL00808
1,2,4-Trichlorobenzene	ND (0.0857)	0.0189	96	1	12/08/10 11:55	CTL0062	CL00808
1,2,4-Trimethylbenzene	ND (0.0857)	0.0165		1	12/08/10 11:55	CTL0062	CL00808
1,2-Dibromo-3-Chloropropane	ND (0.514)	0.171	0.5	1	12/08/10 11:55	CTL0062	CL00808
1,2-Dibromochloroethane	ND (0.0857)	0.0218	0.01	1	12/08/10 11:55	CTL0062	CL00808
1,2-Dichlorobenzene	ND (0.0857)	0.0122	510	1	12/08/10 11:55	CTL0062	CL00808
1,2-Dichloroethane	ND (0.0857)	0.0230	0.9	1	12/08/10 11:55	CTL0062	CL00808
1,2-Dichloropropane	ND (0.0857)	0.0225	1.9	1	12/08/10 11:55	CTL0062	CL00808
1,3,5-Trimethylbenzene	ND (0.0857)	0.0151		1	12/08/10 11:55	CTL0062	CL00808
1,3-Dichlorobenzene	ND (0.0857)	0.0108	430	1	12/08/10 11:55	CTL0062	CL00808
1,3-Dichloropropane	ND (0.0857)	0.0192		1	12/08/10 11:55	CTL0062	CL00808
1,4-Dichlorobenzene	ND (0.0857)	0.0228	27	1	12/08/10 11:55	CTL0062	CL00808
1,4-Dioxane - Screen	ND (8.57)	2.86		1	12/08/10 11:55	CTL0062	CL00808
1-Chlorohexane	ND (0.0857)	0.0163		1	12/08/10 11:55	CTL0062	CL00808
2,2-Dichloropropane	ND (0.171)	0.0293		1	12/08/10 11:55	CTL0062	CL00808
2-Butanone	ND (2.14)	0.496	10000	1	12/08/10 11:55	CTL0062	CL00808
2-Chlorotoluene	ND (0.0857)	0.0242		1	12/08/10 11:55	CTL0062	CL00808
2-Hexanone	ND (0.0857)	0.148		1	12/08/10 11:55	CTL0062	CL00808
4-Chlorotoluene	ND (0.0857)	0.0111		1	12/08/10 11:55	CTL0062	CL00808
4-Isopropyltoluene	ND (0.0857)	0.0153		1	12/08/10 11:55	CTL0062	CL00808
4-Methyl-2-Pentanone	ND (0.857)	0.103	1200	1	12/08/10 11:55	CTL0062	CL00808
Acetone	ND (2.14)	0.634	7800	1	12/08/10 11:55	CTL0062	CL00808
Benzene	ND (0.0857)	0.0139	2.5	1	12/08/10 11:55	CTL0062	CL00808

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BAL Laboratory  
 The Microbiology Division  
 of Thielisch Engineering, Inc.



CERTIFICATE OF ANALYSIS

Client Name: RC & D  
 Client Project ID: Lincoln Lane  
 Client Sample ID: 1006-ReadTS-05  
 Date Sampled: 12/07/10 13:00  
 Percent Solids: 80  
 Initial Volume: 12.8  
 Final Volume: 15  
 Extraction Method: 5035

ESS Laboratory Work Order: 1012068  
 ESS Laboratory Sample ID: 1012068-01  
 Sample Matrix: Soil  
 Units: mg/kg dry  
 Analyst: MD

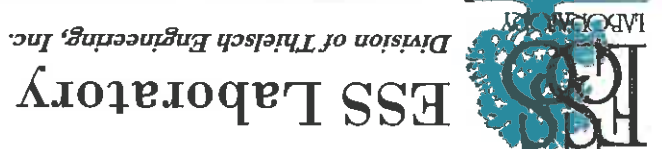
5035/8260B Volatile Organic Compounds / Methanol

RI - RES DEC

Analyte	Results (MRL)	MDL	Limit	DF	Analyzed	Sequence	Batch
Bromobenzene	ND (0.0857)	0.0235		1	12/08/10 11:55	CTL0062	CL00808
Bromochloromethane	ND (0.0857)	0.0278		1	12/08/10 11:55	CTL0062	CL00808
Bromodichloromethane	ND (0.0857)	0.0118		1	12/08/10 11:55	CTL0062	CL00808
Bromoform	ND (0.0857)	0.0247		1	12/08/10 11:55	CTL0062	CL00808
Bromomethane	ND (0.171)	0.0573		1	12/08/10 11:55	CTL0062	CL00808
Carbon Disulfide	ND (0.0857)	0.0127		1	12/08/10 11:55	CTL0062	CL00808
Carbon Tetrachloride	ND (0.0857)	0.0149		1	12/08/10 11:55	CTL0062	CL00808
Chlorobenzene	ND (0.0857)	0.0135		1	12/08/10 11:55	CTL0062	CL00808
Chloroethane	ND (0.171)	0.0571		1	12/08/10 11:55	CTL0062	CL00808
Chloroform	ND (0.0857)	0.0177		1	12/08/10 11:55	CTL0062	CL00808
Chloromethane	ND (0.171)	0.0218		1	12/08/10 11:55	CTL0062	CL00808
cis-1,2-Dichloroethene	ND (0.0857)	0.0213		1	12/08/10 11:55	CTL0062	CL00808
cis-1,3-Dichloropropene	ND (0.0857)	0.0194		1	12/08/10 11:55	CTL0062	CL00808
Dibromochloromethane	ND (0.0857)	0.0216		1	12/08/10 11:55	CTL0062	CL00808
Dibromomethane	ND (0.0857)	0.0271		1	12/08/10 11:55	CTL0062	CL00808
Dichlorodifluoromethane	ND (0.0857)	0.0149		1	12/08/10 11:55	CTL0062	CL00808
Diethyl Ether	ND (0.0857)	0.0218		1	12/08/10 11:55	CTL0062	CL00808
Di-isopropyl ether	ND (0.0857)	0.0161		1	12/08/10 11:55	CTL0062	CL00808
Ethyl tertiary-butyl ether	ND (0.0857)	0.0216		1	12/08/10 11:55	CTL0062	CL00808
Ethylbenzene	ND (0.0857)	0.0111		1	12/08/10 11:55	CTL0062	CL00808
Hexachlorobutadiene	ND (0.0857)	0.0286		1	12/08/10 11:55	CTL0062	CL00808
Isopropylbenzene	ND (0.0857)	0.0151		1	12/08/10 11:55	CTL0062	CL00808
Methyl tert-Butyl Ether	ND (0.0857)	0.0137		1	12/08/10 11:55	CTL0062	CL00808
Methylene Chloride	ND (0.429)	0.0225		1	12/08/10 11:55	CTL0062	CL00808
Naphthalene	ND (0.0857)	0.0225		1	12/08/10 11:55	CTL0062	CL00808
n-Butylbenzene	ND (0.0857)	0.0211		1	12/08/10 11:55	CTL0062	CL00808
n-Propylbenzene	ND (0.0857)	0.0209		1	12/08/10 11:55	CTL0062	CL00808
sec-Butylbenzene	ND (0.0857)	0.0115		1	12/08/10 11:55	CTL0062	CL00808
Styrene	ND (0.0857)	0.0113		13	12/08/10 11:55	CTL0062	CL00808
tert-Butylbenzene	ND (0.0857)	0.0201		1	12/08/10 11:55	CTL0062	CL00808
Tertiary-aryl methyl ether	ND (0.0857)	0.0123		1	12/08/10 11:55	CTL0062	CL00808



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**CERTIFICATE OF ANALYSIS**

Client Name: RC & D  
 Client Project ID: Lincoln Lane  
 Client Sample ID: 1006-ReadTS-05  
 Date Sampled: 12/07/10 13:00  
 Percent Solids: 80  
 Initial Volume: 12.8  
 Final Volume: 15  
 Extraction Method: 5035

ESS Laboratory Work Order: 1012068  
 ESS Laboratory Sample ID: 1012068-01  
 Sample Matrix: Soil  
 Units: mg/kg dry  
 Analyst: MD

**5035/8260B Volatile Organic Compounds / Methanol**

RI - RES DEC

Analyte	Results (MRL)	MDL	Limit	DF	Analyzed	Sequence	Batch
Tetrachloroethene	ND (0.0857)	0.0286	12	1	12/08/10 11:55	CTL0062	CL00808
Tetrahydrofuran	ND (0.857)	0.221		1	12/08/10 11:55	CTL0062	CL00808
Toluene	ND (0.0857)	0.0218	190	1	12/08/10 11:55	CTL0062	CL00808
trans-1,2-Dichloroethene	ND (0.0857)	0.0281	1100	1	12/08/10 11:55	CTL0062	CL00808
trans-1,3-Dichloropropene	ND (0.0857)	0.0264		1	12/08/10 11:55	CTL0062	CL00808
Trichloroethene	ND (0.0857)	0.0177	13	1	12/08/10 11:55	CTL0062	CL00808
Trichlorofluoromethane	ND (0.0857)	0.0226		1	12/08/10 11:55	CTL0062	CL00808
Vinyl Acetate	ND (0.429)	0.0177		1	12/08/10 11:55	CTL0062	CL00808
Vinyl Chloride	ND (0.0857)	0.0283	0.02	1	12/08/10 11:55	CTL0062	CL00808
Xylene O	ND (0.0857)	0.0165	110	1	12/08/10 11:55	CTL0062	CL00808
Xylene P,M	ND (0.171)	0.0333	110	1	12/08/10 11:55	CTL0062	CL00808
Xylenes (Total)	ND (0.257)		110	1	12/08/10 11:55		[CALC]

Surrogate: 1,2-Dichloroethane-d4  
 99 %  
 70-130

Surrogate: 4-Bromofluorobenzene  
 106 %  
 70-130

Surrogate: Dibromofluoromethane  
 111 %  
 70-130

Surrogate: Toluene-d8  
 110 %  
 70-130

Limits Qualifier



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*CERTIFICATE OF ANALYSIS*

Client Name: RC & D  
Client Project ID: Lincoln Lane  
Client Sample ID: 1006-ReadTS-05  
Date Sampled: 12/07/10 13:00  
Percent Solids: 80  
Initial Volume: 20.6  
Final Volume: 1  
Extraction Method: 3546

**8100M Total Petroleum Hydrocarbons**

**RI - RES DEC**

Analyte	Results (MRL)	Limit DF	Units	Sample Matrix	Analyzed	Sequence	Batch
Total Petroleum Hydrocarbons	174 (45.5)	500	mg/kg dry	Soil	12/09/10 4:29	CTL0066	CL00819

*Surrogate: O-Terphenyl*

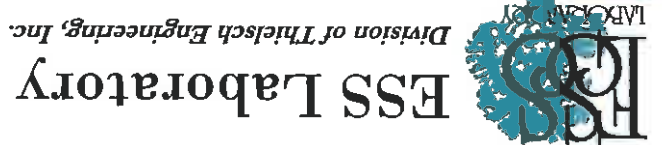
*%Recovery*

*Qualifier*

*Limits*



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**CERTIFICATE OF ANALYSIS**

Client Name: RC & D  
 Client Project ID: Lincoln Lane  
 Client Sample ID: 1006-ReadTS-05  
 Date Sampled: 12/07/10 13:00  
 Percent Solids: 80  
 Initial Volume: 15.5  
 Final Volume: 0.5  
 Extraction Method: 3546

ESS Laboratory Work Order: 1012068  
 ESS Laboratory Sample ID: 1012068-01  
 Sample Matrix: Soil  
 Units: mg/kg dry  
 Analyst: IBM  
 Prepared: 12/8/10 18:00

**8270C Semi-Volatile Organic Compounds**

RI - RES DEC

Analyte	Results (MRL)	Limit	DF	Analyzed	Sequence	Batch
1,1-Biphenyl	ND (0.403)	0.8	1	12/11/10 5:11	CTL0089	CL00820
1,2,4-Trichlorobenzene	ND (0.403)	96	1	12/11/10 5:11	CTL0089	CL00820
1,2-Dichlorobenzene	ND (0.403)	510	1	12/11/10 5:11	CTL0089	CL00820
1,3-Dichlorobenzene	ND (0.403)	430	1	12/11/10 5:11	CTL0089	CL00820
1,4-Dichlorobenzene	ND (0.403)	27	1	12/11/10 5:11	CTL0089	CL00820
2,3,4,6-Tetrachlorophenol	ND (2.02)		1	12/11/10 5:11	CTL0089	CL00820
2,4,5-Trichlorophenol	ND (0.403)	330	1	12/11/10 5:11	CTL0089	CL00820
2,4,6-Trichlorophenol	ND (0.403)	58	1	12/11/10 5:11	CTL0089	CL00820
2,4-Dichlorophenol	ND (0.403)	30	1	12/11/10 5:11	CTL0089	CL00820
2,4-Dimethylphenol	ND (0.403)	1400	1	12/11/10 5:11	CTL0089	CL00820
2,4-Dinitrophenol	ND (2.02)	160	1	12/11/10 5:11	CTL0089	CL00820
2,4-Dinitrotoluene	ND (0.403)	0.9	1	12/11/10 5:11	CTL0089	CL00820
2,6-Dinitrotoluene	ND (0.403)		1	12/11/10 5:11	CTL0089	CL00820
2-Chloronaphthalene	ND (0.403)		1	12/11/10 5:11	CTL0089	CL00820
2-Chlorophenol	ND (0.403)	50	1	12/11/10 5:11	CTL0089	CL00820
2-Methylnaphthalene	ND (0.403)	123	1	12/11/10 5:11	CTL0089	CL00820
2-Methylphenol	ND (0.403)		1	12/11/10 5:11	CTL0089	CL00820
2-Nitroaniline	ND (0.403)		1	12/11/10 5:11	CTL0089	CL00820
2-Nitrophenol	ND (0.403)		1	12/11/10 5:11	CTL0089	CL00820
3,3'-Dichlorobenzidine	ND (0.807)	1.4	1	12/11/10 5:11	CTL0089	CL00820
3,4-Methylphenol	ND (0.807)		1	12/11/10 5:11	CTL0089	CL00820
3-Nitroaniline	ND (0.403)		1	12/11/10 5:11	CTL0089	CL00820
4,6-Dinitro-2-Methylphenol	ND (2.02)		1	12/11/10 5:11	CTL0089	CL00820
4-Bromophenyl-phenylether	ND (0.403)		1	12/11/10 5:11	CTL0089	CL00820
4-Chloro-3-Methylphenol	ND (0.403)		1	12/11/10 5:11	CTL0089	CL00820
4-Chloroaniline	ND (0.807)	310	1	12/11/10 5:11	CTL0089	CL00820
4-Chloro-phenyl-phenyl ether	ND (0.403)		1	12/11/10 5:11	CTL0089	CL00820
4-Nitroaniline	ND (0.403)		1	12/11/10 5:11	CTL0089	CL00820
4-Nitrophenol	ND (2.02)		1	12/11/10 5:11	CTL0089	CL00820
Acenaphthene	ND (0.403)	43	1	12/11/10 5:11	CTL0089	CL00820
Acenaphthylene	ND (0.403)	23	1	12/11/10 5:11	CTL0089	CL00820

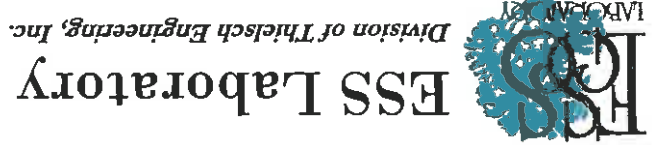
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**CERTIFICATE OF ANALYSIS**

Client Name: RC & D  
 Client Project ID: Lincoln Lace  
 Client Sample ID: 1006-ReadTS-05  
 Date Sampled: 12/07/10 13:00  
 Percent Solids: 80  
 Initial Volume: 15.5  
 Final Volume: 0.5  
 Extraction Method: 3546  
 Sample Matrix: Soil  
 Units: mg/kg dry  
 Analyst: IBM  
 Prepared: 12/8/10 18:00

**8270C Semi-Volatile Organic Compounds**

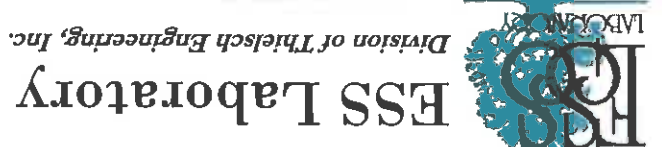
RI - RES DEC

Analyte	Results (MRL)	Limit	DF	Analyzed	Sequence	Batch
Acetophenone	ND (0.807)		1	12/11/10 5:11	CTL0089	CL00820
Aniline	ND (0.807)		1	12/11/10 5:11	CTL0089	CL00820
Anthracene	ND (0.403)	35	1	12/11/10 5:11	CTL0089	CL00820
Azobenzene	ND (0.403)		1	12/11/10 5:11	CTL0089	CL00820
Benzo(a)anthracene	ND (0.403)	0.9	1	12/11/10 5:11	CTL0089	CL00820
Benzo(a)pyrene	ND (0.202)	0.4	1	12/11/10 5:11	CTL0089	CL00820
Benzo(b)fluoranthene	ND (0.403)	0.9	1	12/11/10 5:11	CTL0089	CL00820
Benzo(g,h,i)perylene	ND (0.403)	0.8	1	12/11/10 5:11	CTL0089	CL00820
Benzo(k)fluoranthene	ND (0.403)	0.9	1	12/11/10 5:11	CTL0089	CL00820
Benzoic Acid	ND (2.02)		1	12/11/10 5:11	CTL0089	CL00820
Benzyl Alcohol	ND (0.403)		1	12/11/10 5:11	CTL0089	CL00820
bis(2-Chloroethoxy)methane	ND (0.403)		1	12/11/10 5:11	CTL0089	CL00820
bis(2-Chloroethyl)ether	ND (0.403)	0.6	1	12/11/10 5:11	CTL0089	CL00820
bis(2-chloroisopropyl)ether	ND (0.403)	9.1	1	12/11/10 5:11	CTL0089	CL00820
bis(2-Ethylhexyl)phthalate	ND (0.403)	46	1	12/11/10 5:11	CTL0089	CL00820
Butylbenzylphthalate	ND (0.403)		1	12/11/10 5:11	CTL0089	CL00820
Carbazole	ND (0.403)		1	12/11/10 5:11	CTL0089	CL00820
Chrysene	ND (0.202)	0.4	1	12/11/10 5:11	CTL0089	CL00820
Dibenzo(a,h)Anthracene	ND (0.202)	0.4	1	12/11/10 5:11	CTL0089	CL00820
Dibenzofuran	ND (0.403)		1	12/11/10 5:11	CTL0089	CL00820
Diethylphthalate	ND (0.403)	340	1	12/11/10 5:11	CTL0089	CL00820
Dimethylphthalate	ND (0.403)	1900	1	12/11/10 5:11	CTL0089	CL00820
Di-n-butylphthalate	ND (0.403)		1	12/11/10 5:11	CTL0089	CL00820
Di-n-octylphthalate	ND (0.403)		1	12/11/10 5:11	CTL0089	CL00820
Fluoranthene	ND (0.403)	20	1	12/11/10 5:11	CTL0089	CL00820
Fluorene	ND (0.403)	28	1	12/11/10 5:11	CTL0089	CL00820
Hexachlorobenzene	ND (0.202)	0.4	1	12/11/10 5:11	CTL0089	CL00820
Hexachlorobutadiene	ND (0.403)	8.2	1	12/11/10 5:11	CTL0089	CL00820
Hexachlorocyclopentadiene	ND (2.02)		1	12/11/10 5:11	CTL0089	CL00820
Hexachloroethane	ND (0.403)	46	1	12/11/10 5:11	CTL0089	CL00820
Indeno(1,2,3-cd)Pyrene	ND (0.403)	0.9	1	12/11/10 5:11	CTL0089	CL00820

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**ESS Laboratory**  
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**CERTIFICATE OF ANALYSIS**

Client Name: RC & D  
 Client Project ID: Lincoln Lace  
 Client Sample ID: 1006-ReadTS-05  
 Date Sampled: 12/07/10 13:00  
 Percent Solids: 80  
 Initial Volume: 15.5  
 Final Volume: 0.5  
 Extraction Method: 3546  
 ESS Laboratory Work Order: 1012068  
 ESS Laboratory Sample ID: 1012068-01  
 Sample Matrix: Soil  
 Units: mg/kg dry  
 Analyst: IBM  
 Prepared: 12/8/10 18:00

**8270C Semi-Volatile Organic Compounds**

RI - RES DEC

Analyte	Results (MRL)	Limit	DF	Analyzed	Sequence	Batch
Isophorone	ND (0.403)	1	1	12/11/10	CTL0089	CL00820
Naphthalene	ND (0.403)	54	1	12/11/10	CTL0089	CL00820
Nitrobenzene	ND (0.403)	1	1	12/11/10	CTL0089	CL00820
N-Nitrosodimethylamine	ND (0.403)	1	1	12/11/10	CTL0089	CL00820
N-Nitroso-Di-n-Propylamine	ND (0.403)	1	1	12/11/10	CTL0089	CL00820
N-nitrosodiphenylamine	ND (0.403)	1	1	12/11/10	CTL0089	CL00820
Pentachlorophenol	ND (2.02)	5.3	1	12/11/10	CTL0089	CL00820
Phenanthrene	ND (0.403)	40	1	12/11/10	CTL0089	CL00820
Phenol	ND (0.403)	6000	1	12/11/10	CTL0089	CL00820
Pyrene	ND (0.403)	13	1	12/11/10	CTL0089	CL00820
Pyridine	ND (2.02)	1	1	12/11/10	CTL0089	CL00820

Surrogate: 1,2-Dichlorobenzene-d4 52 %  
 Surrogate: 2,4,6-Trichlorophenol 96 %  
 Surrogate: 2-Chlorophenol-d4 59 %  
 Surrogate: 2-Fluorobiphenyl 67 %  
 Surrogate: 2-Fluorophenol 54 %  
 Surrogate: Nitrobenzene-d5 61 %  
 Surrogate: Phenol-d6 63 %  
 Surrogate: p-Terphenyl-d14 86 %

%Recovery  
 Qualifier  
 Limits

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Analyte  
Arsenic

Results (MRL)  
ND (2.2)

Method  
6010B

Limit  
7

DF  
1

Analyst  
SVD

Analyzed  
12/09/10 18:36

LV  
2.34

F/V  
100

Batch  
CL00816

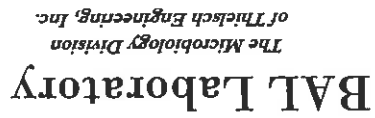
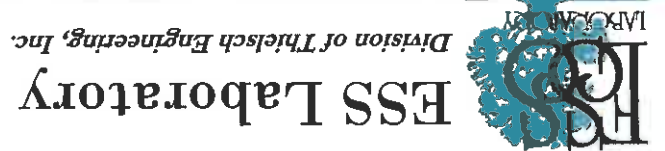
RI - RES DEC

3050B/6000/7000 Total Metals

Client Name: RC & D  
Client Project ID: Lincoln Lane  
Client Sample ID: 1006-Lopes-09  
Date Sampled: 12/07/10 13:00  
Percent Solids: 95

ESS Laboratory Work Order: 1012068  
ESS Laboratory Sample ID: 1012068-02  
Sample Matrix: Soil  
Units: mg/kg dry

CERTIFICATE OF ANALYSIS





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**CERTIFICATE OF ANALYSIS**

Client Name: RC & D  
 Client Project ID: Lincoln Lacey

ESS Laboratory Work Order: 1012068

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source	%REC	Limits	RPD	Limit	Qualifier
---------	--------	-----	-------	-------------	--------	------	--------	-----	-------	-----------

3050B/6000/7000 Total Metals

Blank Batch C100816 - 3050B

Analyte	Result	MRL	Units	Spike Level	Source	%REC	Limits	RPD	Limit	Qualifier
Antimony	ND	5.0	mg/kg wet							
Arsenic	ND	2.5	mg/kg wet							
Beryllium	ND	0.10	mg/kg wet							
Cadmium	ND	0.50	mg/kg wet							
Chromium	ND	1.0	mg/kg wet							
Copper	ND	2.5	mg/kg wet							
Lead	ND	5.0	mg/kg wet							
Nickel	ND	2.5	mg/kg wet							
Selenium	ND	5.0	mg/kg wet							
Silver	ND	0.50	mg/kg wet							
Thallium	ND	0.25	mg/kg wet							
Zinc	ND	2.5	mg/kg wet							
Antimony	18.8	17.6	mg/kg wet	98.00	80-120	19	98.00			
Arsenic	12.2	8.8	mg/kg wet	137.0	80-120	89	137.0			
Beryllium	127	0.37	mg/kg wet	138.0	80-120	92	138.0			
Cadmium	78.3	1.76	mg/kg wet	85.00	80-120	92	85.00			
Chromium	156	3.5	mg/kg wet	168.0	80-120	93	168.0			
Copper	182	8.8	mg/kg wet	187.0	80-120	97	187.0			
Lead	112	17.6	mg/kg wet	120.0	80-120	93	120.0			
Nickel	152	8.8	mg/kg wet	159.0	80-120	96	159.0			
Selenium	36.8	17.6	mg/kg wet	43.50	80-120	85	43.50			
Silver	6.42	1.76	mg/kg wet	55.20	80-120	12	55.20			
Thallium	142	21.7	mg/kg wet	146.0	80-120	97	146.0			
Zinc	179	8.8	mg/kg wet	206.0	80-120	87	206.0			
Antimony	20.3	17.9	mg/kg wet	98.00	80-120	21	98.00			
Arsenic	119	8.9	mg/kg wet	137.0	80-120	87	137.0			
Beryllium	123	0.38	mg/kg wet	138.0	80-120	89	138.0			
Cadmium	78.3	1.79	mg/kg wet	85.00	80-120	92	85.00		0.1	
Chromium	151	3.6	mg/kg wet	168.0	80-120	90	168.0			
Copper	176	8.9	mg/kg wet	187.0	80-120	94	187.0			
Lead	114	17.9	mg/kg wet	120.0	80-120	95	120.0			
Nickel	147	8.9	mg/kg wet	159.0	80-120	92	159.0			
Selenium	38.9	17.9	mg/kg wet	43.50	80-120	89	43.50			
Silver	8.48	1.79	mg/kg wet	55.20	80-120	15	55.20			
Thallium	145	22.1	mg/kg wet	146.0	80-120	99	146.0			
Zinc	173	8.9	mg/kg wet	206.0	80-120	84	206.0			

Blank Batch C100817 - 7471A

Analyte	Result	MRL	Units	Spike Level	Source	%REC	Limits	RPD	Limit	Qualifier
Antimony	20.3	17.9	mg/kg wet	98.00	80-120	21	98.00			
Arsenic	119	8.9	mg/kg wet	137.0	80-120	87	137.0			
Beryllium	123	0.38	mg/kg wet	138.0	80-120	89	138.0			
Cadmium	78.3	1.79	mg/kg wet	85.00	80-120	92	85.00		0.1	
Chromium	151	3.6	mg/kg wet	168.0	80-120	90	168.0			
Copper	176	8.9	mg/kg wet	187.0	80-120	94	187.0			
Lead	114	17.9	mg/kg wet	120.0	80-120	95	120.0			
Nickel	147	8.9	mg/kg wet	159.0	80-120	92	159.0			
Selenium	38.9	17.9	mg/kg wet	43.50	80-120	89	43.50			
Silver	8.48	1.79	mg/kg wet	55.20	80-120	15	55.20			
Thallium	145	22.1	mg/kg wet	146.0	80-120	99	146.0			
Zinc	173	8.9	mg/kg wet	206.0	80-120	84	206.0			

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**CERTIFICATE OF ANALYSIS**

Client Name: RC & D  
 Client Project ID: Lincoln Lane

ESS Laboratory Work Order: 1012068

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source	%REC	Limits	RPD	Limit	Qualifier
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**3050B/6000/7000 Total Metals**

Batch CL00817 - 7471A

Mercury	ND	0.033	mg/kg wet							
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LCS

Mercury	6.83	0.798	mg/kg wet	89	80-120					
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LCS Dup

Mercury	6.91	0.773	mg/kg wet	90	80-120	1			20	
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**5035/8260B Volatile Organic Compounds / Methanol**

Batch CL00808 - 5035

Blank	ND	0.100	mg/kg wet							
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1,1,1,2-Tetrachloroethane	ND	0.0500	mg/kg wet							
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1,1,1-Trichloroethane	ND	0.0500	mg/kg wet							
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1,1,2-Trichloroethane	ND	0.0500	mg/kg wet							
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1,1,2-Trichloroethane	ND	0.0500	mg/kg wet							
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1,1-Dichloroethane	ND	0.0500	mg/kg wet							
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1,1-Dichloroethane	ND	0.0500	mg/kg wet							
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1,1-Dichloroethane	ND	0.0500	mg/kg wet							
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1,2-Dichloroethane	ND	0.0500	mg/kg wet							
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1,2-Dichloroethane	ND	0.0500	mg/kg wet							
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1,2-Dichloroethane	ND	0.0500	mg/kg wet							
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1,2-Dichloroethane	ND	0.0500	mg/kg wet							
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1,2,3-Trichloropropane	ND	0.0500	mg/kg wet							
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1,2,4-Trichlorobenzene	ND	0.0500	mg/kg wet							
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1,2,4-Trichlorobenzene	ND	0.0500	mg/kg wet							
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1,2,4-Trichlorobenzene	ND	0.0500	mg/kg wet							
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1,2-Dibromo-3-Chloropropane	ND	0.300	mg/kg wet							
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1,2-Dibromoethane	ND	0.0500	mg/kg wet							
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1,2-Dichloroethane	ND	0.0500	mg/kg wet							
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1,2-Dichloroethane	ND	0.0500	mg/kg wet							
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1,2-Dichloroethane	ND	0.0500	mg/kg wet							
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1,3-Dichlorobenzene	ND	0.0500	mg/kg wet							
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1,3-Dichlorobenzene	ND	0.0500	mg/kg wet							
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1,3-Dichloropropane	ND	0.0500	mg/kg wet							
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1,4-Dioxane - Screen	ND	5.00	mg/kg wet							
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1-Chlorohexane	ND	0.0500	mg/kg wet							
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2,2-Dichloropropane	ND	0.100	mg/kg wet							
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2-Butanone	ND	1.25	mg/kg wet							
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2-Chlorobutene	ND	0.0500	mg/kg wet							
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2-Hexanone	ND	0.500	mg/kg wet							
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4-Chlorobutene	ND	0.0500	mg/kg wet							
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4-Isopropyltoluene	ND	0.0500	mg/kg wet							
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4-Methyl-2-Pentanone	ND	0.500	mg/kg wet							
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Acetone	ND	1.25	mg/kg wet							
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Benzene	ND	0.0500	mg/kg wet							
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Bromobenzene	ND	0.0500	mg/kg wet							
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Bromochloromethane	ND	0.0500	mg/kg wet							
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Bromochloromethane	ND	0.0500	mg/kg wet							
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Bromodichloromethane	ND	0.0500	mg/kg wet							
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Bromoforn	ND	0.0500	mg/kg wet							
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CERTIFICATE OF ANALYSIS

Client Name: RC & D  
 Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1012068

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source	%REC	Limits	RPD	RPD	Qualifier
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5035/8260B Volatile Organic Compounds / Methanol

Batch C100808 - 5035

Analyte	Result	MRL	Units	Spike Level	Source	%REC	Limits	RPD	RPD	Qualifier
Bromomethane	ND	0.100	mg/kg wet							
Carbon Disulfide	ND	0.0500	mg/kg wet							
Carbon Tetrachloride	ND	0.0500	mg/kg wet							
Chlorobenzene	ND	0.0500	mg/kg wet							
Chloroethane	ND	0.100	mg/kg wet							
Chloroform	ND	0.0500	mg/kg wet							
Chloromethane	ND	0.100	mg/kg wet							
cs-1,2-Dichloroethene	ND	0.0500	mg/kg wet							
cs-1,3-Dichloropropene	ND	0.0500	mg/kg wet							
Dibromochloromethane	ND	0.0500	mg/kg wet							
Dichloromethane	ND	0.0500	mg/kg wet							
Dichlorodifluoromethane	ND	0.0500	mg/kg wet							
Diethyl Ether	ND	0.0500	mg/kg wet							
Di-isopropyl ether	ND	0.0500	mg/kg wet							
Ethyl tertary-butyl ether	ND	0.0500	mg/kg wet							
Ethylbenzene	ND	0.0500	mg/kg wet							
Hexachlorobutadiene	ND	0.0500	mg/kg wet							
Isopropylbenzene	ND	0.0500	mg/kg wet							
Methyl tert-butyl Ether	ND	0.0500	mg/kg wet							
Methylene Chloride	ND	0.250	mg/kg wet							
Naphthalene	ND	0.0500	mg/kg wet							
n-Butylbenzene	ND	0.0500	mg/kg wet							
n-Propylbenzene	ND	0.0500	mg/kg wet							
sec-Butylbenzene	ND	0.0500	mg/kg wet							
Styrene	ND	0.0500	mg/kg wet							
tert-Butylbenzene	ND	0.0500	mg/kg wet							
Tertiary amyl methyl ether	ND	0.0500	mg/kg wet							
Tetrahydrofuran	ND	0.500	mg/kg wet							
Tetrachloroethene	ND	0.0500	mg/kg wet							
Toluene	ND	0.0500	mg/kg wet							
trans-1,2-Dichloroethene	ND	0.0500	mg/kg wet							
trans-1,3-Dichloropropene	ND	0.0500	mg/kg wet							
Trichloroethene	ND	0.0500	mg/kg wet							
Vinyl Acetate	ND	0.250	mg/kg wet							
Vinyl Chloride	ND	0.0500	mg/kg wet							
Xylene O	ND	0.0500	mg/kg wet							
Xylene P,M	ND	0.100	mg/kg wet							
Sumogate: 1,2-Dichloroethane-d4	2.12		mg/kg wet	2.500						
Sumogate: 4-Bromofluorobenzene	2.19		mg/kg wet	2.500						
Sumogate: Dibromofluoromethane	2.29		mg/kg wet	2.500						
Sumogate: Toluene-d8	2.25		mg/kg wet	2.500						
1,1,1,2-Tetrachloroethane	2.33	0.100	mg/kg wet	2.500						
1,1,1-Trichloroethane	2.36	0.0500	mg/kg wet	2.500						
1,1,2,2-Tetrachloroethane	2.52	0.0500	mg/kg wet	2.500						

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**CERTIFICATE OF ANALYSIS**

Client Name: RC & D  
 Client Project ID: Lincoln Lacey

ESS Laboratory Work Order: 1012068

**Quality Control Data**

Analyte	Result	MRL	Units	Spike	Source	%REC	Limits	RPD	RPD	Qualifier
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**5035/8260B Volatile Organic Compounds / Methanol**

Analyte	Result	MRL	Units	Spike	Source	%REC	Limits	RPD	RPD	Qualifier
1,1,2-Trichloroethane	2.44	0.0500	mg/kg wet	2.500	97	70-130	2.500	97	70-130	
1,1-Dichloroethane	2.44	0.0500	mg/kg wet	2.500	98	70-130	2.500	98	70-130	
1,1-Dichloroethene	2.83	0.0500	mg/kg wet	2.500	113	70-130	2.500	113	70-130	
1,1-Dichloropropene	2.69	0.0500	mg/kg wet	2.500	108	70-130	2.500	108	70-130	
1,1,3-Trichlorobenzene	2.30	0.0500	mg/kg wet	2.500	92	70-130	2.500	92	70-130	
1,2,3-Trichloropropane	2.40	0.0500	mg/kg wet	2.500	96	70-130	2.500	96	70-130	
1,2,4-Trichlorobenzene	2.35	0.0500	mg/kg wet	2.500	94	70-130	2.500	94	70-130	
1,2,4-Trimethylbenzene	2.46	0.0500	mg/kg wet	2.500	98	70-130	2.500	98	70-130	
1,2-Dibromo-3-Chloropropane	2.58	0.300	mg/kg wet	2.500	103	70-130	2.500	103	70-130	
1,2-Dibromoethane	2.43	0.0500	mg/kg wet	2.500	97	70-130	2.500	97	70-130	
1,2-Dichlorobenzene	2.38	0.0500	mg/kg wet	2.500	95	70-130	2.500	95	70-130	
1,2-Dichloroethane	2.38	0.0500	mg/kg wet	2.500	95	70-130	2.500	95	70-130	
1,2-Dichloropropane	2.74	0.0500	mg/kg wet	2.500	110	70-130	2.500	110	70-130	
1,3,5-Trimethylbenzene	2.46	0.0500	mg/kg wet	2.500	98	70-130	2.500	98	70-130	
1,3-Dichlorobenzene	2.36	0.0500	mg/kg wet	2.500	94	70-130	2.500	94	70-130	
1,3-Dichloropropane	2.48	0.0500	mg/kg wet	2.500	99	70-130	2.500	99	70-130	
1,4-Dichlorobenzene	2.35	0.0500	mg/kg wet	2.500	94	70-130	2.500	94	70-130	
1,4-Dioxane - Solen	59.8	5.00	mg/kg wet	50.00	120	44-241	50.00	120	44-241	
1-Chlorohexane	2.45	0.0500	mg/kg wet	2.500	98	70-130	2.500	98	70-130	
2,2-Dichloropropane	2.46	0.100	mg/kg wet	2.500	98	70-130	2.500	98	70-130	
2-Butanone	13.5	1.25	mg/kg wet	12.50	108	70-130	12.50	108	70-130	
2-Chlorobutene	2.42	0.0500	mg/kg wet	2.500	97	70-130	2.500	97	70-130	
2-Hexanone	13.1	0.500	mg/kg wet	12.50	107	70-130	12.50	107	70-130	
4-Chlorobutene	2.35	0.0500	mg/kg wet	2.500	94	70-130	2.500	94	70-130	
4-Isopropyltoluene	2.27	0.0500	mg/kg wet	2.500	91	70-130	2.500	91	70-130	
4-Methyl-2-pentanone	14.9	0.500	mg/kg wet	12.50	119	70-130	12.50	119	70-130	
Acetone	12.3	1.25	mg/kg wet	12.50	98	70-130	12.50	98	70-130	
Benzene	2.58	0.0500	mg/kg wet	2.500	103	70-130	2.500	103	70-130	
Bromobenzene	2.39	0.0500	mg/kg wet	2.500	96	70-130	2.500	96	70-130	
Bromodichloromethane	2.60	0.0500	mg/kg wet	2.500	104	70-130	2.500	104	70-130	
Bromodichloromethane	2.42	0.0500	mg/kg wet	2.500	97	70-130	2.500	97	70-130	
Bromoforn	2.43	0.0500	mg/kg wet	2.500	97	70-130	2.500	97	70-130	
Bromomethane	2.57	0.100	mg/kg wet	2.500	103	70-130	2.500	103	70-130	
Carbon Disulfide	2.86	0.0500	mg/kg wet	2.500	115	70-130	2.500	115	70-130	
Carbon Tetrachloride	2.43	0.0500	mg/kg wet	2.500	97	70-130	2.500	97	70-130	
Chlorobenzene	2.38	0.0500	mg/kg wet	2.500	95	70-130	2.500	95	70-130	
Chloroethane	2.75	0.100	mg/kg wet	2.500	110	70-130	2.500	110	70-130	
Chloroform	2.38	0.0500	mg/kg wet	2.500	95	70-130	2.500	95	70-130	
Chloromethane	2.64	0.100	mg/kg wet	2.500	105	70-130	2.500	105	70-130	
ds-1,2-Dichloroethene	2.73	0.0500	mg/kg wet	2.500	109	70-130	2.500	109	70-130	
ds-1,3-Dichloropropene	2.58	0.0500	mg/kg wet	2.500	103	70-130	2.500	103	70-130	
Dibromodichloromethane	2.42	0.0500	mg/kg wet	2.500	97	70-130	2.500	97	70-130	
Dibromomethane	2.43	0.0500	mg/kg wet	2.500	97	70-130	2.500	97	70-130	
Dibromomethane	2.40	0.0500	mg/kg wet	2.500	96	70-130	2.500	96	70-130	
Dichlorodifluoromethane	2.69	0.0500	mg/kg wet	2.500	108	70-130	2.500	108	70-130	
Diethyl Ether	2.63	0.0500	mg/kg wet	2.500	105	70-130	2.500	105	70-130	

March Closest - 5035

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CERTIFICATE OF ANALYSIS

Client Name: RC & D  
 Client Project ID: Lincoln Lane

ESS Laboratory Work Order: 1012068

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source	%REC	Limits	RPD	RPD Limit	Qualifier
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5035/8260B Volatile Organic Compounds / Methanol

Dihexopropyl ether	2.76	0.0500	mg/kg wet	2.500	70-130	111	70-130	25	1	25
Ethyl tertiary-butyl ether	2.59	0.0500	mg/kg wet	2.500	70-130	104	70-130	25	3	25
Ethylbenzene	2.42	0.0500	mg/kg wet	2.500	70-130	97	70-130	25	0	25
Hexachlorobutadiene	2.40	0.0500	mg/kg wet	2.500	70-130	96	70-130	25	0.2	25
Isopropylbenzene	2.07	0.0500	mg/kg wet	2.500	70-130	83	70-130	25	0.7	25
Methyl tert-butyl Ether	2.61	0.0500	mg/kg wet	2.500	70-130	105	70-130	25	4	25
Methylene Chloride	2.81	0.250	mg/kg wet	2.500	70-130	112	70-130	25	3	25
Naphthalene	2.28	0.0500	mg/kg wet	2.500	70-130	91	70-130	25	3	25
n-Butylbenzene	2.65	0.0500	mg/kg wet	2.500	70-130	106	70-130	25	3	25
n-Propylbenzene	2.50	0.0500	mg/kg wet	2.500	70-130	100	70-130	25	3	25
sec-Butylbenzene	2.49	0.0500	mg/kg wet	2.500	70-130	99	70-130	25	3	25
Styrene	2.42	0.0500	mg/kg wet	2.500	70-130	97	70-130	25	3	25
tert-Butylbenzene	2.37	0.0500	mg/kg wet	2.500	70-130	95	70-130	25	3	25
Tertiary-amy methyl ether	2.64	0.0500	mg/kg wet	2.500	70-130	105	70-130	25	3	25
Tetrahydrofuran	2.25	0.0500	mg/kg wet	2.500	70-130	90	70-130	25	3	25
Tetrahydrofuran	2.75	0.500	mg/kg wet	2.500	70-130	110	70-130	25	3	25
Toluene	2.52	0.0500	mg/kg wet	2.500	70-130	101	70-130	25	3	25
trans-1,2-Dichloroethene	2.39	0.0500	mg/kg wet	2.500	70-130	96	70-130	25	3	25
trans-1,3-Dichloropropene	2.38	0.0500	mg/kg wet	2.500	70-130	95	70-130	25	3	25
Trichloroethene	2.57	0.0500	mg/kg wet	2.500	70-130	103	70-130	25	3	25
Vinyl Acetate	2.92	0.250	mg/kg wet	2.500	70-130	117	70-130	25	3	25
Vinyl Chloride	2.98	0.0500	mg/kg wet	2.500	70-130	119	70-130	25	3	25
Xylene O	2.40	0.0500	mg/kg wet	2.500	70-130	96	70-130	25	3	25
Xylene P,M	4.83	0.100	mg/kg wet	5.000	70-130	97	70-130	25	3	25
Surrogate: 1,2-Dichloroethane-d4	2.20	2.500	mg/kg wet	2.500	70-130	88	70-130	25	3	25
Surrogate: 4-Bromofluorobenzene	2.24	2.500	mg/kg wet	2.500	70-130	90	70-130	25	3	25
Surrogate: Dibromofluoromethane	2.29	2.500	mg/kg wet	2.500	70-130	92	70-130	25	3	25
Surrogate: Toluene-d8	2.32	2.500	mg/kg wet	2.500	70-130	93	70-130	25	3	25
LCS Dup										
1,1,1,2-Tetrachloroethane	2.36	0.100	mg/kg wet	2.500	70-130	95	70-130	25	1	25
1,1,1-Trichloroethane	2.36	0.0500	mg/kg wet	2.500	70-130	94	70-130	25	0.3	25
1,1,2,2-Tetrachloroethane	2.58	0.0500	mg/kg wet	2.500	70-130	103	70-130	25	3	25
1,1,2-Trichloroethane	2.35	0.0500	mg/kg wet	2.500	70-130	94	70-130	25	4	25
1,1-Dichloroethane	2.42	0.0500	mg/kg wet	2.500	70-130	97	70-130	25	0.7	25
1,1-Dichloroethene	2.77	0.0500	mg/kg wet	2.500	70-130	111	70-130	25	2	25
1,1-Dichloroethane	2.66	0.0500	mg/kg wet	2.500	70-130	106	70-130	25	2	25
1,2,3-Trichlorobenzene	2.35	0.0500	mg/kg wet	2.500	70-130	94	70-130	25	1	25
1,2,3-Trichloropropane	2.54	0.0500	mg/kg wet	2.500	70-130	102	70-130	25	6	25
1,2,4-Trichlorobenzene	2.43	0.0500	mg/kg wet	2.500	70-130	97	70-130	25	3	25
1,2,4-Trimethylbenzene	2.50	0.0500	mg/kg wet	2.500	70-130	100	70-130	25	1	25
1,2-Dibromo-3-Chloropropane	2.77	0.300	mg/kg wet	2.500	70-130	111	70-130	25	7	25
1,2-Dibromoethane	2.43	0.0500	mg/kg wet	2.500	70-130	97	70-130	25	0	25
1,2-Dichlorobenzene	2.44	0.0500	mg/kg wet	2.500	70-130	98	70-130	25	2	25
1,2-Dichloroethane	2.41	0.0500	mg/kg wet	2.500	70-130	96	70-130	25	1	25
1,2-Dichloropropane	2.74	0.0500	mg/kg wet	2.500	70-130	109	70-130	25	0.2	25

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**CERTIFICATE OF ANALYSIS**

Client Name: RC & D  
 Client Project ID: Lincoln Lane

ESS Laboratory Work Order: 1012068

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source	%REC	Limits	RPD	Limit	Qualifier
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**5035/8260B Volatile Organic Compounds / Methanol**

Analyte	Result	MRL	Units	Spike Level	Source	%REC	Limits	RPD	Limit	Qualifier
1,3,5-Trimethylbenzene	2.50	0.0500	mg/kg wet	2.500	100	70-130	1	25	25	
1,3-Dichloropropane	2.48	0.0500	mg/kg wet	2.500	99	70-130	0.08	25	25	
1,3-Dichlorobenzene	2.38	0.0500	mg/kg wet	2.500	95	70-130	0.9	25	25	
1,4-Dioxane - Screen	61.6	5.00	mg/kg wet	50.00	123	44-241	3	200	25	
1-Chlorohexane	2.53	0.0500	mg/kg wet	2.500	101	70-130	3	25	25	
2,2-Dichloropropane	2.47	0.100	mg/kg wet	2.500	99	70-130	0.2	25	25	
2-Butanone	13.2	1.25	mg/kg wet	12.50	106	70-130	2	25	25	
2-Chlorobutene	2.59	0.0500	mg/kg wet	2.500	103	70-130	7	25	25	
2-Hexanone	13.5	0.500	mg/kg wet	12.50	108	70-130	2	25	25	
4-Chlorobutene	2.37	0.0500	mg/kg wet	2.500	95	70-130	0.6	25	25	
4-Isopropyltoluene	2.31	0.0500	mg/kg wet	2.500	92	70-130	2	25	25	
4-Methyl-2-Pentanone	14.9	0.500	mg/kg wet	12.50	119	70-130	0.1	25	25	
Acetone	11.7	1.25	mg/kg wet	12.50	94	70-130	5	25	25	
Benzene	2.59	0.0500	mg/kg wet	2.500	104	70-130	0.2	25	25	
Bromobenzene	2.42	0.0500	mg/kg wet	2.500	97	70-130	1	25	25	
Bromochloromethane	2.63	0.0500	mg/kg wet	2.500	105	70-130	1	25	25	
Bromodichloromethane	2.41	0.0500	mg/kg wet	2.500	97	70-130	0.2	25	25	
Bromotoluene	2.47	0.0500	mg/kg wet	2.500	99	70-130	2	25	25	
Bromomethane	2.69	0.100	mg/kg wet	2.500	107	70-130	5	25	25	
Carbon Disulfide	2.81	0.0500	mg/kg wet	2.500	112	70-130	2	25	25	
Carbon Tetrachloride	2.51	0.0500	mg/kg wet	2.500	100	70-130	3	25	25	
Chlorobenzene	2.39	0.0500	mg/kg wet	2.500	96	70-130	0.2	25	25	
Chloroethane	2.50	0.100	mg/kg wet	2.500	100	70-130	10	25	25	
Chloroform	2.37	0.0500	mg/kg wet	2.500	95	70-130	0.08	25	25	
Chloromethane	2.57	0.100	mg/kg wet	2.500	103	70-130	3	25	25	
cis-1,2-Dichloroethene	2.70	0.0500	mg/kg wet	2.500	108	70-130	0.9	25	25	
cis-1,3-Dichloropropene	2.62	0.0500	mg/kg wet	2.500	105	70-130	2	25	25	
Dibromomethane	2.42	0.0500	mg/kg wet	2.500	97	70-130	0.7	25	25	
Dichlorodifluoromethane	2.71	0.0500	mg/kg wet	2.500	108	70-130	0.7	25	25	
Diethyl Ether	2.62	0.0500	mg/kg wet	2.500	105	70-130	0.4	25	25	
Diheteropropyl ether	2.75	0.0500	mg/kg wet	2.500	110	70-130	0.7	25	25	
Ethyl tertiary-butyl ether	2.58	0.0500	mg/kg wet	2.500	103	70-130	0.3	25	25	
Ethylbenzene	2.44	0.0500	mg/kg wet	2.500	97	70-130	0.5	25	25	
Hexachlorocyclopentadiene	2.51	0.0500	mg/kg wet	2.500	100	70-130	5	25	25	
Isopropylbenzene	2.09	0.0500	mg/kg wet	2.500	84	70-130	1	25	25	
Methyl tert-butyl Ether	2.63	0.0500	mg/kg wet	2.500	105	70-130	0.6	25	25	
Methylene Chloride	2.79	0.250	mg/kg wet	2.500	112	70-130	0.6	25	25	
Naphthalene	2.38	0.0500	mg/kg wet	2.500	95	70-130	4	25	25	
n-Butylbenzene	2.68	0.0500	mg/kg wet	2.500	107	70-130	1	25	25	
n-Propylbenzene	2.44	0.0500	mg/kg wet	2.500	98	70-130	2	25	25	
sec-Butylbenzene	2.51	0.0500	mg/kg wet	2.500	100	70-130	0.9	25	25	
Styrene	2.42	0.0500	mg/kg wet	2.500	97	70-130	0.08	25	25	
tert-Butylbenzene	2.42	0.0500	mg/kg wet	2.500	97	70-130	2	25	25	

Batch C00608 - 5035

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**CERTIFICATE OF ANALYSIS**

Client Name: RC & D  
Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1012068

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source	%REC	Limits	RPD	Limit	Qualifier
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**5035/8260B Volatile Organic Compounds / Methanol**

Tertiary-amy methyl ether	2.66	0.0500	mg/kg wet	2.500	2.500	107	70-130	1	25	
Tetrahydrofuran	2.79	0.500	mg/kg wet	2.500	111	70-130	1	25		
Toluene	2.52	0.0500	mg/kg wet	2.500	101	70-130	0.4	25		
trans-1,2-Dichloroethene	2.44	0.0500	mg/kg wet	2.500	98	70-130	2	25		
trans-1,3-Dichloropropene	2.37	0.0500	mg/kg wet	2.500	95	70-130	0.4	25		
Trichloroethene	2.58	0.0500	mg/kg wet	2.500	103	70-130	0.6	25		
Vinyl Acetate	2.96	0.250	mg/kg wet	2.500	119	70-130	2	25		
Vinyl Chloride	2.95	0.0500	mg/kg wet	2.500	118	70-130	0.8	25		
Xylene O	2.36	0.0500	mg/kg wet	2.500	95	70-130	2	25		
Xylene P,M	4.84	0.100	mg/kg wet	5.000	97	70-130	0.1	25		
Surrogate: 1,2-Dichloroethane-d4										
	2.20	2.500	mg/kg wet	2.500	88	70-130				
Surrogate: 4-Bromofluorobenzene										
	2.23	2.500	mg/kg wet	2.500	89	70-130				
Surrogate: Dibromofluoromethane										
	2.27	2.500	mg/kg wet	2.500	91	70-130				
Surrogate: Toluene-d8										
	2.30	2.500	mg/kg wet	2.500	92	70-130				

Matrix Spike Source: 1012068-01

1,1,1,2-Tetrachloroethane	3.66	0.146	mg/kg dry	3.662	ND	100	70-130			
1,1,1-Trichloroethane	3.78	0.0732	mg/kg dry	3.662	ND	103	70-130			
1,1,2-Trichloroethane	3.92	0.0732	mg/kg dry	3.662	ND	107	70-130			
1,1,2-Trichloroethane	3.56	0.0732	mg/kg dry	3.662	ND	97	70-130			
1,1-Dichloroethane	3.85	0.0732	mg/kg dry	3.662	ND	105	70-130			
1,1-Dichloroethene	5.53	0.0732	mg/kg dry	3.662	ND	151	70-130			
1,1-Dichloropropene	4.27	0.0732	mg/kg dry	3.662	ND	117	70-130			
1,2,3-Trichlorobenzene	3.30	0.0732	mg/kg dry	3.662	ND	90	70-130			
1,2,3-Trichloropropene	3.98	0.0732	mg/kg dry	3.662	ND	109	70-130			
1,2,4-Trichlorobenzene	3.55	0.0732	mg/kg dry	3.662	ND	97	70-130			
1,2,4-Trichloropropene	3.88	0.0732	mg/kg dry	3.662	ND	106	70-130			
1,2-Dibromo-3-Chloropropane	3.98	0.439	mg/kg dry	3.662	ND	109	70-130			
1,2-Dibromoethane	3.79	0.0732	mg/kg dry	3.662	ND	103	70-130			
1,2-Dichlorobenzene	3.73	0.0732	mg/kg dry	3.662	ND	102	70-130			
1,2-Dichloroethane	3.71	0.0732	mg/kg dry	3.662	ND	101	70-130			
1,2-Dichloropropene	4.26	0.0732	mg/kg dry	3.662	ND	116	70-130			
1,3,5-Trimethylbenzene	3.95	0.0732	mg/kg dry	3.662	ND	108	70-130			
1,3-Dichlorobenzene	3.81	0.0732	mg/kg dry	3.662	ND	104	70-130			
1,3-Dichloropropene	3.85	0.0732	mg/kg dry	3.662	ND	105	70-130			
1,4-Dichlorobenzene	3.62	0.0732	mg/kg dry	3.662	ND	99	70-130			
1,4-Dioxane - Screen	75.6	7.32	mg/kg dry	73.24	ND	103	44-241			
1-Chlorohexane	4.04	0.0732	mg/kg dry	3.662	ND	110	70-130			
2,2-Dichloropropane	3.84	0.146	mg/kg dry	3.662	ND	105	70-130			
2-Butanone	22.3	1.83	mg/kg dry	18.31	ND	122	70-130			
2-Chlorobutane	3.88	0.0732	mg/kg dry	3.662	ND	106	70-130			
2-Hexanone	22.4	0.732	mg/kg dry	18.31	ND	123	70-130			
4-Chlorobutane	3.80	0.0732	mg/kg dry	3.662	ND	104	70-130			
4-Isopropyltoluene	3.69	0.0732	mg/kg dry	3.662	0.0394	100	70-130			
4-Methyl-2-Pentanone	23.6	0.732	mg/kg dry	18.31	ND	129	70-130			

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**CERTIFICATE OF ANALYSIS**

Client Name: RC & D  
Client Project ID: Lincoln Lacey

ESS Laboratory Work Order: 1012068

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source	Result	%REC	Limits	RPD	Limit	RPD	Qualifier
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**5035/8260B Volatile Organic Compounds / Methanol**

Batch C10808 - 5035

Analyte	Result	MRL	Units	Spike Level	Source	Result	%REC	Limits	RPD	Limit	RPD	Qualifier
Acetone	23.0	1.83	mg/kg dry	18.31	ND	126	70-130	ND	126	70-130	ND	
Benzene	4.12	0.0732	mg/kg dry	3.662	ND	113	70-130	ND	113	70-130	ND	
Bromobenzene	3.75	0.0732	mg/kg dry	3.662	ND	103	70-130	ND	103	70-130	ND	
Bromochloromethane	4.07	0.0732	mg/kg dry	3.662	ND	111	70-130	ND	111	70-130	ND	
Bromomethane	3.74	0.0732	mg/kg dry	3.662	ND	102	70-130	ND	102	70-130	ND	
Bromoform	3.79	0.0732	mg/kg dry	3.662	ND	104	70-130	ND	104	70-130	ND	
Bromomethane	3.86	0.146	mg/kg dry	3.662	ND	105	70-130	ND	105	70-130	ND	
Carbon Disulfide	4.61	0.0732	mg/kg dry	3.662	ND	126	70-130	ND	126	70-130	ND	
Carbon Tetrachloride	3.81	0.0732	mg/kg dry	3.662	ND	104	70-130	ND	104	70-130	ND	
Chlorobenzene	3.79	0.0732	mg/kg dry	3.662	ND	104	70-130	ND	104	70-130	ND	
Chloroethane	3.87	0.146	mg/kg dry	3.662	ND	106	70-130	ND	106	70-130	ND	
Chloroform	3.73	0.0732	mg/kg dry	3.662	ND	102	70-130	ND	102	70-130	ND	
Chloromethane	4.10	0.146	mg/kg dry	3.662	ND	112	70-130	ND	112	70-130	ND	
ds-1,2-Dichloroethene	4.27	0.0732	mg/kg dry	3.662	ND	117	70-130	ND	117	70-130	ND	
ds-1,3-Dichloropropene	4.00	0.0732	mg/kg dry	3.662	ND	109	70-130	ND	109	70-130	ND	
Dibromochloromethane	3.74	0.0732	mg/kg dry	3.662	ND	102	70-130	ND	102	70-130	ND	
Dibromomethane	3.69	0.0732	mg/kg dry	3.662	ND	101	70-130	ND	101	70-130	ND	
Dichlorodifluoromethane	4.53	0.0732	mg/kg dry	3.662	ND	124	70-130	ND	124	70-130	ND	
Diethyl Ether	4.04	0.0732	mg/kg dry	3.662	ND	110	70-130	ND	110	70-130	ND	
D-isopropyl ether	4.32	0.0732	mg/kg dry	3.662	ND	118	70-130	ND	118	70-130	ND	
Ethyl tert-butyl ether	4.02	0.0732	mg/kg dry	3.662	ND	110	70-130	ND	110	70-130	ND	
Ethylbenzene	3.96	0.0732	mg/kg dry	3.662	ND	108	70-130	ND	108	70-130	ND	
Hexachlorobutadiene	3.85	0.0732	mg/kg dry	3.662	ND	105	70-130	ND	105	70-130	ND	
Isopropylbenzene	3.31	0.0732	mg/kg dry	3.662	ND	90	70-130	ND	90	70-130	ND	
Methyl tert-butyl Ether	4.05	0.0732	mg/kg dry	3.662	ND	110	70-130	ND	110	70-130	ND	
Methylene Chloride	4.37	0.366	mg/kg dry	3.662	ND	119	70-130	ND	119	70-130	ND	
Naphthalene	3.85	0.0732	mg/kg dry	3.662	ND	105	70-130	ND	105	70-130	ND	
n-Butylbenzene	4.28	0.0732	mg/kg dry	3.662	ND	117	70-130	ND	117	70-130	ND	
n-Propylbenzene	3.96	0.0732	mg/kg dry	3.662	ND	108	70-130	ND	108	70-130	ND	
sec-Butylbenzene	4.04	0.0732	mg/kg dry	3.662	ND	110	70-130	ND	110	70-130	ND	
Styrene	3.80	0.0732	mg/kg dry	3.662	ND	104	70-130	ND	104	70-130	ND	
tert-Butylbenzene	3.81	0.0732	mg/kg dry	3.662	ND	104	70-130	ND	104	70-130	ND	
Tertary-amy methyl ether	4.10	0.0732	mg/kg dry	3.662	ND	112	70-130	ND	112	70-130	ND	
Tetrachloroethene	3.67	0.0732	mg/kg dry	3.662	ND	100	70-130	ND	100	70-130	ND	
Tetrahydrofuran	4.11	0.732	mg/kg dry	3.662	ND	112	70-130	ND	112	70-130	ND	
Toluene	3.97	0.0732	mg/kg dry	3.662	ND	108	70-130	ND	108	70-130	ND	
trans-1,2-Dichloroethene	3.86	0.0732	mg/kg dry	3.662	ND	105	70-130	ND	105	70-130	ND	
trans-1,3-Dichloropropene	3.68	0.0732	mg/kg dry	3.662	ND	101	70-130	ND	101	70-130	ND	
Trichloroethene	4.12	0.0732	mg/kg dry	3.662	ND	113	70-130	ND	113	70-130	ND	
Vinyl Acetate	4.43	0.366	mg/kg dry	3.662	ND	121	70-130	ND	121	70-130	ND	
Vinyl Chloride	4.81	0.0732	mg/kg dry	3.662	ND	131	70-130	ND	131	70-130	ND	
Xylene O	3.73	0.0732	mg/kg dry	3.662	ND	102	70-130	ND	102	70-130	ND	
Xylene P,M	7.76	0.146	mg/kg dry	7.324	ND	106	70-130	ND	106	70-130	ND	
Surrogate: 1,2-Dichloroethane-d4	3.38		mg/kg dry	3.662		92	70-130		92	70-130		
Surrogate: 4-Bromofluorobenzene	3.45		mg/kg dry	3.662		94	70-130		94	70-130		

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CERTIFICATE OF ANALYSIS

Client Name: RC & D  
 Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1012068

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source	%REC	Limits	RPD	Limit	RPD	Qualifier
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5035/8260B Volatile Organic Compounds / Methanol

Batch C00808 - 5035

Surrogate: Dimethylmethane	3.52	3.662	mg/kg dry	3.662	96		70-130				
Surrogate: Toluene-d8	3.72	3.662	mg/kg dry	3.662	101		70-130				
Matrix Spike Dup											
Source: 1012068-01											
1,1,1,2-Tetrachloroethane	3.59	0.146	mg/kg dry	3.662	98	ND	70-130	2		30	
1,1,1-Trichloroethane	3.71	0.0732	mg/kg dry	3.662	101	ND	70-130	2		30	
1,1,2,2-Tetrachloroethane	3.81	0.0732	mg/kg dry	3.662	104	ND	70-130	3		30	
1,1,2-Trichloroethane	3.48	0.0732	mg/kg dry	3.662	95	ND	70-130	2		30	
1,1-Dichloroethane	3.78	0.0732	mg/kg dry	3.662	103	ND	70-130	2		30	
1,1-Dichloroethane	4.30	0.0732	mg/kg dry	3.662	117	ND	70-130	25		30	
1,1-Dichloroethane	4.20	0.0732	mg/kg dry	3.662	115	ND	70-130	2		30	
1,2,3-Trichlorobenzene	3.39	0.0732	mg/kg dry	3.662	93	ND	70-130	3		30	
1,2,3-Trichlorobenzene	3.72	0.0732	mg/kg dry	3.662	102	ND	70-130	7		30	
1,2,4-Trichlorobenzene	3.80	0.0732	mg/kg dry	3.662	104	ND	70-130	7		30	
1,2,4-Trichlorobenzene	3.90	0.0732	mg/kg dry	3.662	106	ND	70-130	0.3		30	
1,2-Dibromo-3-Chloropropane	3.77	0.439	mg/kg dry	3.662	103	ND	70-130	5		30	
1,2-Dibromoethane	3.64	0.0732	mg/kg dry	3.662	99	ND	70-130	4		30	
1,2-Dichlorobenzene	3.75	0.0732	mg/kg dry	3.662	102	ND	70-130	0.7		30	
1,2-Dichloroethane	3.66	0.0732	mg/kg dry	3.662	100	ND	70-130	1		30	
1,2-Dichloropropane	4.15	0.0732	mg/kg dry	3.662	113	ND	70-130	2		30	
1,3,5-Trimethylbenzene	3.95	0.0732	mg/kg dry	3.662	108	ND	70-130	0.1		30	
1,3-Dichlorobenzene	3.79	0.0732	mg/kg dry	3.662	104	ND	70-130	0.4		30	
1,3-Dichloropropane	3.71	0.0732	mg/kg dry	3.662	101	ND	70-130	4		30	
1,4-Dichlorobenzene	3.62	0.0732	mg/kg dry	3.662	99	ND	70-130	0.04		30	
1,4-Dioxane - Screen	85.4	7.32	mg/kg dry	73.24	117	ND	44-241	12		200	
1-Chlorohexane	3.96	0.0732	mg/kg dry	3.662	108	ND	70-130	2		30	
2,2-Dichloropropane	3.92	0.146	mg/kg dry	3.662	107	ND	70-130	2		30	
2-Butanone	19.0	1.83	mg/kg dry	18.31	104	ND	70-130	16		30	
2-Chlorobutane	4.08	0.0732	mg/kg dry	3.662	112	ND	70-130	5		30	
2-Hexanone	19.3	0.732	mg/kg dry	18.31	105	ND	70-130	15		30	
4-Chlorobutane	3.68	0.0732	mg/kg dry	3.662	100	ND	70-130	3		30	
4-Isopropyltoluene	3.71	0.0732	mg/kg dry	3.662	100	0.0394	70-130	0.6		30	
4-Methyl-2-Pentanone	21.7	0.732	mg/kg dry	18.31	118	ND	70-130	8		30	
Acetone	16.3	1.83	mg/kg dry	18.31	89	ND	70-130	34		30	D+
Bromobenzene	3.79	0.0732	mg/kg dry	3.662	104	ND	70-130	1		30	
Bromochloromethane	4.01	0.0732	mg/kg dry	3.662	109	ND	70-130	2		30	
Bromodichloromethane	3.73	0.0732	mg/kg dry	3.662	102	ND	70-130	0.2		30	
Bromomethane	4.13	0.146	mg/kg dry	3.662	113	ND	70-130	7		30	
Carbon Disulfide	4.40	0.0732	mg/kg dry	3.662	120	ND	70-130	5		30	
Carbon Tetrachloride	3.88	0.0732	mg/kg dry	3.662	106	ND	70-130	2		30	
Chlorobenzene	3.68	0.0732	mg/kg dry	3.662	100	ND	70-130	3		30	
Chloroethane	4.41	0.146	mg/kg dry	3.662	120	ND	70-130	13		30	
Chloroform	3.69	0.0732	mg/kg dry	3.662	101	ND	70-130	1		30	

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CERTIFICATE OF ANALYSIS

Client Name: RC & D  
Client Project ID: Lincoln Lane

Quality Control Data

ESS Laboratory Work Order: 1012068

BAL Laboratory  
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Analyte	Result	MRL	Units	Spike	Source	%REC	Limits	RPD	Limit	Qualifier
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5035/8260B Volatile Organic Compounds / Methanol

Analyte	Result	MRL	Units	Spike	Source	%REC	Limits	RPD	Limit	Qualifier
Chloromethane	4.15	0.146	mg/kg dry	3.662	ND	113	70-130	1	30	
ds-1,2-Dichloroethene	4.18	0.0732	mg/kg dry	3.662	ND	114	70-130	2	30	
ds-1,2-Dichloropropene	3.92	0.0732	mg/kg dry	3.662	ND	107	70-130	2	30	
Dibromochloromethane	3.69	0.0732	mg/kg dry	3.662	ND	101	70-130	1	30	
Dibromomethane	3.59	0.0732	mg/kg dry	3.662	ND	98	70-130	3	30	
Dichlorodifluoromethane	4.35	0.0732	mg/kg dry	3.662	ND	119	70-130	4	30	
Diethyl Ether	4.02	0.0732	mg/kg dry	3.662	ND	110	70-130	0.6	30	
D-Isopropyl ether	4.23	0.0732	mg/kg dry	3.662	ND	116	70-130	2	30	
Ethyl tertiary-butyl ether	3.88	0.0732	mg/kg dry	3.662	ND	106	70-130	3	30	
Ethylbenzene	3.85	0.0732	mg/kg dry	3.662	ND	105	70-130	3	30	
Hexachlorobutadiene	4.15	0.0732	mg/kg dry	3.662	ND	113	70-130	8	30	
Isopropylbenzene	3.32	0.0732	mg/kg dry	3.662	ND	91	70-130	0.2	30	
Methyl tert-butyl Ether	3.87	0.0732	mg/kg dry	3.662	ND	106	70-130	4	30	
Methylene Chloride	4.27	0.366	mg/kg dry	3.662	ND	117	70-130	2	30	
Naphthalene	4.01	0.0732	mg/kg dry	3.662	ND	110	70-130	4	30	
n-Butylbenzene	4.41	0.0732	mg/kg dry	3.662	ND	120	70-130	3	30	
n-Propylbenzene	3.82	0.0732	mg/kg dry	3.662	ND	104	70-130	4	30	
sec-Butylbenzene	4.08	0.0732	mg/kg dry	3.662	ND	111	70-130	0.9	30	
Styrene	3.78	0.0732	mg/kg dry	3.662	ND	103	70-130	0.5	30	
tert-Butylbenzene	3.81	0.0732	mg/kg dry	3.662	ND	104	70-130	0	30	
Tertiary-amyl methyl ether	3.94	0.0732	mg/kg dry	3.662	ND	108	70-130	4	30	
Tetrachloroethene	3.58	0.0732	mg/kg dry	3.662	ND	98	70-130	3	30	
Tetrahydrofuran	3.81	0.732	mg/kg dry	3.662	ND	104	70-130	8	30	
Toluene	3.92	0.0732	mg/kg dry	3.662	ND	107	70-130	1	30	
trans-1,2-Dichloroethene	3.73	0.0732	mg/kg dry	3.662	ND	102	70-130	3	30	
trans-1,3-Dichloropropene	3.58	0.0732	mg/kg dry	3.662	ND	98	70-130	3	30	
Trichloroethene	4.09	0.0732	mg/kg dry	3.662	ND	112	70-130	0.8	30	
Vinyl Acetate	4.42	0.366	mg/kg dry	3.662	ND	121	70-130	0.2	30	
Vinyl Chloride	4.60	0.0732	mg/kg dry	3.662	ND	126	70-130	4	30	
Xylene O	3.72	0.0732	mg/kg dry	3.662	ND	101	70-130	0.4	30	
Xylene P,M	7.67	0.146	mg/kg dry	7.324	ND	105	70-130	1	30	
Surrogate: 1,2-Dichlorobenzene-d4	3.35	3.662	mg/kg dry	3.662	91	70-130				
Surrogate: 4-Bromofluorobenzene	3.44	3.662	mg/kg dry	3.662	94	70-130				
Surrogate: Dibromofluoromethane	3.46	3.662	mg/kg dry	3.662	94	70-130				
Surrogate: Toluene-d8	3.61	3.662	mg/kg dry	3.662	99	70-130				

8100M Total Petroleum Hydrocarbons

Batch C100819 - 3546

Blank

Decane (C10)	ND	0.2	mg/kg wet							
Dodecane (C12)	ND	0.2	mg/kg wet							
Eicosane (C20)	ND	0.2	mg/kg wet							
Hexacosane (C26)	ND	0.2	mg/kg wet							
Hexadecane (C16)	ND	0.2	mg/kg wet							

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**CERTIFICATE OF ANALYSIS**

Client Name: RC & D  
Client Project ID: Lincoln Lane

ESS Laboratory Work Order: 1012068

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source	%REC	Limits	RPD	Limit	Qualifier
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**8100M Total Petroleum Hydrocarbons**

Batch CL00819 - 3546

Surrogate: O-Terphenyl										
	4.71	5.000	94	40-140						
Decane (C10)	2.0	2.500	81	40-140	5	50				
Dodecane (C12)	2.2	2.500	90	40-140		50				
Docosane (C22)	2.2	2.500	87	40-140		50				
Eicosane (C20)	2.3	2.500	94	40-140		50				
Hexacosane (C26)	2.4	2.500	94	40-140		50				
Nonadecane (C19)	2.4	2.500	92	40-140		50				
Nonane (C9)	1.6	2.500	64	30-140		50				
Octacosane (C28)	2.4	2.500	95	40-140		50				
Octadecane (C18)	2.3	2.500	92	40-140		50				
Tetradecane (C14)	2.4	2.500	95	40-140		50				
Tetradecane (C14)	2.2	2.500	87	40-140		50				
Total Petroleum Hydrocarbons	30.0	35.00	86	40-140		50				
Tricortane (C30)	2.4	2.500	97	40-140		50				

Surrogate: O-Terphenyl										
	4.71	5.000	94	40-140						
Decane (C10)	2.0	2.500	81	40-140	5	50				
Dodecane (C12)	2.3	2.500	90	40-140	4	50				
Docosane (C22)	2.2	2.500	89	40-140	0.2	50				
Eicosane (C20)	2.3	2.500	93	40-140	0.8	50				
Hexacosane (C26)	2.3	2.500	93	40-140	0.6	50				
Nonadecane (C19)	2.4	2.500	96	40-140	1	50				
Nonane (C9)	1.6	2.500	65	30-140	1	50				
Octacosane (C28)	2.4	2.500	94	40-140	0.7	50				
Octadecane (C18)	2.3	2.500	92	40-140	0.4	50				
Tetradecane (C14)	2.4	2.500	94	40-140	0.2	50				
Tetradecane (C14)	2.3	2.500	91	40-140	4	50				
Total Petroleum Hydrocarbons	30.2	35.00	86	40-140	0.8	50				
Tricortane (C30)	2.4	2.500	96	40-140	0.8	50				

LCS Dup

**8270C Semi-Volatile Organic Compounds**

Surrogate: O-Terphenyl										
	4.71	5.000	94	40-140						
Decane (C10)	2.0	2.500	81	40-140	5	50				
Dodecane (C12)	2.3	2.500	90	40-140	4	50				
Docosane (C22)	2.2	2.500	89	40-140	0.2	50				
Eicosane (C20)	2.3	2.500	93	40-140	0.8	50				
Hexacosane (C26)	2.3	2.500	93	40-140	0.6	50				
Nonadecane (C19)	2.4	2.500	96	40-140	1	50				
Nonane (C9)	1.6	2.500	65	30-140	1	50				
Octacosane (C28)	2.4	2.500	94	40-140	0.7	50				
Octadecane (C18)	2.3	2.500	92	40-140	0.4	50				
Tetradecane (C14)	2.4	2.500	94	40-140	0.2	50				
Tetradecane (C14)	2.3	2.500	91	40-140	4	50				
Total Petroleum Hydrocarbons	30.2	35.00	86	40-140	0.8	50				
Tricortane (C30)	2.4	2.500	96	40-140	0.8	50				

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CERTIFICATE OF ANALYSIS

Client Name: RC & D  
Client Project ID: Lincoln Lacey

ESS Laboratory Work Order: 1012068

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source	%REC	Limits	RPD	RPD	Qualifier
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8270C Semi-Volatile Organic Compounds

Batch C100820 - 3546

Blank

1,1-Biphenyl	ND	0.333	mg/kg wet							
1,2-Dichlorobenzene	ND	0.333	mg/kg wet							
1,3-Dichlorobenzene	ND	0.333	mg/kg wet							
1,4-Dichlorobenzene	ND	0.333	mg/kg wet							
2,3,4,5-Tetrachlorophenol	ND	1.67	mg/kg wet							
2,4,5-Trichlorophenol	ND	0.333	mg/kg wet							
2,4,6-Trichlorophenol	ND	0.333	mg/kg wet							
2,4-Dichlorophenol	ND	0.333	mg/kg wet							
2,4-Dimethylphenol	ND	0.333	mg/kg wet							
2,4-Dinitrophenol	ND	1.67	mg/kg wet							
2,4-Dinitrobenzene	ND	0.333	mg/kg wet							
2,5-Dinitrobenzene	ND	0.333	mg/kg wet							
2-Chlorophenol	ND	0.333	mg/kg wet							
2-Methylnaphthalene	ND	0.333	mg/kg wet							
2-Methylphenol	ND	0.333	mg/kg wet							
2-Nitroaniline	ND	0.333	mg/kg wet							
2-Nitrophenol	ND	0.333	mg/kg wet							
3,3'-Dichlorobenzidine	ND	0.667	mg/kg wet							
3,4-Methylphenol	ND	0.667	mg/kg wet							
3-Nitroaniline	ND	0.333	mg/kg wet							
4,6-Dinitro-2-methylphenol	ND	1.67	mg/kg wet							
4-Bromophenyl-phenylether	ND	0.333	mg/kg wet							
4-Chloro-3-methylphenol	ND	0.333	mg/kg wet							
4-Chloroaniline	ND	0.667	mg/kg wet							
4-Chlorophenyl-phenyl ether	ND	0.333	mg/kg wet							
4-Nitroaniline	ND	0.333	mg/kg wet							
4-Nitrophenol	ND	1.67	mg/kg wet							
Acenaphthene	ND	0.333	mg/kg wet							
Acenaphthylene	ND	0.333	mg/kg wet							
Acetophenone	ND	0.667	mg/kg wet							
Aniline	ND	0.667	mg/kg wet							
Anthracene	ND	0.333	mg/kg wet							
Azobenzene	ND	0.333	mg/kg wet							
Benz(a)anthracene	ND	0.333	mg/kg wet							
Benz(a)pyrene	ND	0.167	mg/kg wet							
Benz(b)fluoranthene	ND	0.333	mg/kg wet							
Benz(g,h,i)perylene	ND	0.333	mg/kg wet							
Benz(k)fluoranthene	ND	0.333	mg/kg wet							
Benzoic Acid	ND	1.67	mg/kg wet							
Benzyl Alcohol	ND	0.333	mg/kg wet							
bis(2-Chloroethoxy)methane	ND	0.333	mg/kg wet							
bis(2-Chloroethyl)ether	ND	0.333	mg/kg wet							

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CERTIFICATE OF ANALYSIS

Client Name: RC & D  
 Client Project ID: Lincoln Lane

ESS Laboratory Work Order: 1012068

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source	Result	%REC	Limits	RPD	RPD Limit	Qualifier
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8270C Semi-Volatile Organic Compounds

Batch CLO020 - 3546

bis(2-chloroisopropyl) Ether	ND	0.333	mg/kg wet								
bis(2-ethylhexyl)phthalate	ND	0.333	mg/kg wet								
Butylbenzylphthalate	ND	0.333	mg/kg wet								
Carbazole	ND	0.333	mg/kg wet								
Chrysene	ND	0.167	mg/kg wet								
Dibenz(a,h)Anthracene	ND	0.167	mg/kg wet								
Dibenzfuran	ND	0.333	mg/kg wet								
Diethylphthalate	ND	0.333	mg/kg wet								
Dimethylphthalate	ND	0.333	mg/kg wet								
D-n-butylphthalate	ND	0.333	mg/kg wet								
D-n-octylphthalate	ND	0.333	mg/kg wet								
Fluorene	ND	0.333	mg/kg wet								
Hexachlorobenzene	ND	0.167	mg/kg wet								
Hexachlorobutadiene	ND	0.333	mg/kg wet								
Hexachlorocyclopentadiene	ND	1.67	mg/kg wet								
Hexachloroethane	ND	0.333	mg/kg wet								
Indeno(1,2,3-cd)Pyrene	ND	0.333	mg/kg wet								
Isophorone	ND	0.333	mg/kg wet								
Naphthalene	ND	0.333	mg/kg wet								
Nitrobenzene	ND	0.333	mg/kg wet								
N-Nitrosodimethylamine	ND	0.333	mg/kg wet								
N-Nitroso-Di-n-Propylamine	ND	0.333	mg/kg wet								
N-Nitrosodiphenylamine	ND	0.333	mg/kg wet								
Perchlorophenol	ND	1.67	mg/kg wet								
Phenanthrene	ND	0.333	mg/kg wet								
Phenol	ND	0.333	mg/kg wet								
Pyrene	ND	0.333	mg/kg wet								
Pyridine	ND	1.67	mg/kg wet								
Surrogate: 1,2-Dichlorobenzene-d4	2.89	3.333	mg/kg wet								
Surrogate: 2,4,6-Trichlorophenol	5.29	5.000	mg/kg wet								
Surrogate: 2-Chlorophenol-d4	3.85	5.000	mg/kg wet								
Surrogate: 2-Fluorobiphenyl	3.01	3.333	mg/kg wet								
Surrogate: 2-Fluorophenol	4.20	5.000	mg/kg wet								
Surrogate: Nitrobenzene-d5	2.88	3.333	mg/kg wet								
Surrogate: Phenol-d6	3.89	5.000	mg/kg wet								
Surrogate: p-Terphenyl-d14	3.61	3.333	mg/kg wet								
LCS											
1,1-Biphenyl	2.67	0.333	mg/kg wet								
1,2,4-Trichlorobenzene	2.70	0.333	mg/kg wet								
1,2-Dichlorobenzene	2.62	0.333	mg/kg wet								
1,3-Dichlorobenzene	2.56	0.333	mg/kg wet								
1,4-Dichlorobenzene	2.56	0.333	mg/kg wet								
2,3,4,5-Tetrachlorophenol	2.66	1.67	mg/kg wet								
2,4,5-Trichlorophenol	2.71	0.333	mg/kg wet								

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**CERTIFICATE OF ANALYSIS**

Client Name: RC & D  
 Client Project ID: Lincoln Lane

ESS Laboratory Work Order: 1012068

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source	%REC	Limhs	RPD	RPD	Qualifier
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**8270C Semi-Volatile Organic Compounds**

Analyte	Result	MRL	Units	Spike Level	Source	%REC	Limhs	RPD	RPD	Qualifier
2,4,6-Trichlorophenol	2.98	0.333	mg/kg wet	3.333	0.333	89	30-130			
2,4-Dichlorophenol	2.61	0.333	mg/kg wet	3.333	0.333	78	30-130			
2,4-Dimethylphenol	2.45	0.333	mg/kg wet	3.333	0.333	73	30-130			
2,4-Dinitrophenol	2.48	1.67	mg/kg wet	3.333	0.333	74	30-130			
2,4-Dinitrotoluene	2.81	0.333	mg/kg wet	3.333	0.333	84	40-140			
2,6-Dinitrotoluene	2.86	0.333	mg/kg wet	3.333	0.333	86	40-140			
2-Chloronaphthalene	2.57	0.333	mg/kg wet	3.333	0.333	77	40-140			
2-Chlorophenol	2.25	0.333	mg/kg wet	3.333	0.333	68	30-130			
2-Methylnaphthalene	2.52	0.333	mg/kg wet	3.333	0.333	76	40-140			
2-Methylphenol	2.52	0.333	mg/kg wet	3.333	0.333	76	30-130			
2-Nitroaniline	2.55	0.333	mg/kg wet	3.333	0.333	76	40-140			
2-Nitrophenol	2.66	0.333	mg/kg wet	3.333	0.333	80	30-130			
3,3'-Dichlorobenzidine	2.56	0.667	mg/kg wet	3.333	0.333	77	40-140			
3,4-Methylphenol	5.90	0.667	mg/kg wet	6.667	0.333	89	30-130			
3-Nitroaniline	2.41	0.333	mg/kg wet	3.333	0.333	72	40-140			
4,6-Dinitro-2-methylphenol	2.82	1.67	mg/kg wet	3.333	0.333	85	30-130			
4-Bromophenyl-phenylether	3.06	0.333	mg/kg wet	3.333	0.333	92	40-140			
4-Chloro-3-methylphenol	2.53	0.333	mg/kg wet	3.333	0.333	76	30-130			
4-Chloroaniline	1.61	0.667	mg/kg wet	3.333	0.333	48	40-140			
4-Chloro-phenyl-phenyl ether	2.80	0.333	mg/kg wet	3.333	0.333	84	40-140			
4-Nitroaniline	2.64	0.333	mg/kg wet	3.333	0.333	79	40-140			
4-Nitrophenol	1.90	1.67	mg/kg wet	3.333	0.333	57	30-130			
Acenaphthene	2.98	0.333	mg/kg wet	3.333	0.333	90	40-140			
Acenaphthylene	2.65	0.333	mg/kg wet	3.333	0.333	79	40-140			
Acetophenone	3.01	0.667	mg/kg wet	3.333	0.333	90	40-140			
Aniline	2.12	0.667	mg/kg wet	3.333	0.333	64	40-140			
Anthracene	3.21	0.333	mg/kg wet	3.333	0.333	96	40-140			
Azobenzene	2.49	0.333	mg/kg wet	3.333	0.333	75	40-140			
Benzo(a)anthracene	3.20	0.333	mg/kg wet	3.333	0.333	96	40-140			
Benzo(a)pyrene	3.37	0.167	mg/kg wet	3.333	0.333	101	40-140			
Benzo(b)fluoranthene	2.87	0.333	mg/kg wet	3.333	0.333	86	40-140			
Benzo(g,h,i)perylene	3.15	0.333	mg/kg wet	3.333	0.333	95	40-140			
Benzo(k)fluoranthene	3.54	0.333	mg/kg wet	3.333	0.333	106	40-140			
Benzoic Acid	1.87	1.67	mg/kg wet	3.333	0.333	56	40-140			
Benzyl Alcohol	2.45	0.333	mg/kg wet	3.333	0.333	73	40-140			
bis(2-Chloroethoxy)methane	2.44	0.333	mg/kg wet	3.333	0.333	73	40-140			
bis(2-Chloroethoxy)ether	2.37	0.333	mg/kg wet	3.333	0.333	71	40-140			
bis(2-Chloroisopropyl)ether	2.82	0.333	mg/kg wet	3.333	0.333	85	40-140			
bis(2-Ethylhexyl)phthalate	2.91	0.333	mg/kg wet	3.333	0.333	87	40-140			
Butylbenzylphthalate	2.95	0.333	mg/kg wet	3.333	0.333	89	40-140			
Carbazole	2.78	0.333	mg/kg wet	3.333	0.333	83	40-140			
Chrysene	3.30	0.167	mg/kg wet	3.333	0.333	99	40-140			
Dibenz(a,h)anthracene	3.27	0.167	mg/kg wet	3.333	0.333	98	40-140			
Dibenzofuran	2.72	0.333	mg/kg wet	3.333	0.333	82	40-140			
Dicyclopentadiene	2.63	0.333	mg/kg wet	3.333	0.333	79	40-140			

Batch C100820 - 3546

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 Fax: 401-461-4486 \* Service

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 Division of Thielisch Engineering, Inc.

BAL Laboratory  
 The Microbiology Division  
 of Thielisch Engineering, Inc.



CERTIFICATE OF ANALYSIS

Client Name: RC & D  
 Client Project ID: Lincoln Lacey

ESS Laboratory Work Order: 1012068

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	Limits	RPD	Limit	Qualifier
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8270C Semi-Volatile Organic Compounds

Batch CL00220 - 3546

Dimethylphthalate	2.76	0.333	mg/kg wet	3.333	83	40-140	0.333	7	30	
Dt-n-butylphthalate	2.70	0.333	mg/kg wet	3.333	81	40-140	0.333	7	30	
Dt-n-octylphthalate	2.90	0.333	mg/kg wet	3.333	87	40-140	0.333	7	30	
Fluoranthene	2.91	0.333	mg/kg wet	3.333	87	40-140	0.333	7	30	
Fluorene	2.89	0.333	mg/kg wet	3.333	87	40-140	0.333	7	30	
Hexachlorobenzene	3.28	0.167	mg/kg wet	3.333	98	40-140	0.167	7	30	
Hexachlorobutadiene	2.81	0.333	mg/kg wet	3.333	84	40-140	0.333	7	30	
Hexachlorocyclopentadiene	2.53	1.67	mg/kg wet	3.333	76	40-140	1.67	7	30	
Hexachloroethane	2.51	0.333	mg/kg wet	3.333	75	40-140	0.333	7	30	
Indeno(1,2,3-cd)Pyrene	3.25	0.333	mg/kg wet	3.333	97	40-140	0.333	7	30	
Isophorone	1.86	0.333	mg/kg wet	3.333	56	40-140	0.333	7	30	
Naphthalene	2.49	0.333	mg/kg wet	3.333	75	40-140	0.333	7	30	
Nitrobenzene	2.39	0.333	mg/kg wet	3.333	72	40-140	0.333	7	30	
N-Nitrosodimethylamine	2.44	0.333	mg/kg wet	3.333	73	40-140	0.333	7	30	
N-Nitroso-Dt-n-Propylamine	2.36	0.333	mg/kg wet	3.333	71	40-140	0.333	7	30	
N-nitrosodiphenylamine	2.96	0.333	mg/kg wet	3.333	89	40-140	0.333	7	30	
Pentachlorophenol	2.84	1.67	mg/kg wet	3.333	85	30-130	1.67	7	30	
Phenanthrene	2.92	0.333	mg/kg wet	3.333	87	40-140	0.333	7	30	
Phenol	2.03	0.333	mg/kg wet	3.333	61	30-130	0.333	7	30	
Pyrene	3.19	0.333	mg/kg wet	3.333	96	40-140	0.333	7	30	
Pyridine	2.28	1.67	mg/kg wet	3.333	68	40-140	1.67	7	30	
Surrogate: 1,2-Dichlorobenzene-d4	2.72	3.333	mg/kg wet	3.333	81	30-130	3.333	7	30	
Surrogate: 2,4,6-Trichlorophenol	5.35	5.000	mg/kg wet	5.000	107	30-130	5.000	7	30	
Surrogate: 2-Chlorophenol-d4	3.72	5.000	mg/kg wet	5.000	74	30-130	5.000	7	30	
Surrogate: 2-Fluorophenyl	2.98	3.333	mg/kg wet	3.333	90	30-130	3.333	7	30	
Surrogate: 2-Fluorophenol	3.88	5.000	mg/kg wet	5.000	78	30-130	5.000	7	30	
Surrogate: Nitrobenzene-d5	2.61	3.333	mg/kg wet	3.333	78	30-130	3.333	7	30	
Surrogate: Phenol-d6	3.60	5.000	mg/kg wet	5.000	72	30-130	5.000	7	30	
Surrogate: p-Terphenyl-d14	3.14	3.333	mg/kg wet	3.333	94	30-130	3.333	7	30	
LC5 Dup										
1,1-Biphenyl	2.86	0.333	mg/kg wet	3.333	86	40-140	0.333	7	30	
1,2,4-Trichlorobenzene	2.76	0.333	mg/kg wet	3.333	83	40-140	0.333	7	30	
1,2-Dichlorobenzene	2.62	0.333	mg/kg wet	3.333	79	40-140	0.333	0.05	30	
1,3-Dichlorobenzene	2.56	0.333	mg/kg wet	3.333	77	40-140	0.333	0.3	30	
1,4-Dichlorobenzene	2.71	0.333	mg/kg wet	3.333	81	40-140	0.333	6	30	
2,3,4,6-Tetrachlorophenol	3.02	1.67	mg/kg wet	3.333	91	30-130	1.67	13	30	
2,4,5-Trichlorophenol	3.03	0.333	mg/kg wet	3.333	91	30-130	0.333	11	30	
2,4,6-Trichlorophenol	2.93	0.333	mg/kg wet	3.333	88	30-130	0.333	2	30	
2,4-Dichlorophenol	2.77	0.333	mg/kg wet	3.333	83	30-130	0.333	6	30	
2,4-Dimethylphenol	2.72	0.333	mg/kg wet	3.333	82	30-130	0.333	10	30	
2,4-Dinitrophenol	2.77	1.67	mg/kg wet	3.333	83	30-130	1.67	11	30	
2,4-Dinitrotoluene	3.10	0.333	mg/kg wet	3.333	93	40-140	0.333	10	30	
2,6-Dinitrotoluene	3.01	0.333	mg/kg wet	3.333	90	40-140	0.333	5	30	
2-Chloronaphthalene	2.40	0.333	mg/kg wet	3.333	72	40-140	0.333	7	30	
2-Chlorophenol	2.44	0.333	mg/kg wet	3.333	73	30-130	0.333	8	30	

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BAL Laboratory  
The Microbiology Division  
of Thielisch Engineering, Inc.



CERTIFICATE OF ANALYSIS

Client Name: RC & D  
Client Project ID: Lincoln Lane

ESS Laboratory Work Order: 1012068

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source	%REC	Limits	RPD	Limit	Qualifier
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8270C Semi-Volatile Organic Compounds

Batch CL00820 - 3546

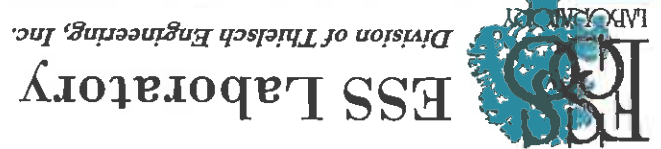
2-Methylnaphthalene	2.70	0.333	mg/kg wet	3.333	81	40-140	7	30		
2-Methylphenol	2.51	0.333	mg/kg wet	3.333	75	30-130	0.1	30		
2-Nitroaniline	3.12	0.333	mg/kg wet	3.333	94	40-140	20	30		
2-Nitrophenol	2.92	0.333	mg/kg wet	3.333	88	30-130	9	30		
3,3'-Dichlorobenzidine	2.28	0.667	mg/kg wet	3.333	68	40-140	12	30		
3+4-Methylphenol	4.23	0.667	mg/kg wet	6.667	63	30-130	33	30		D+
3-Nitroaniline	2.61	0.333	mg/kg wet	3.333	78	40-140	8	30		
4,6-Dinitro-2-Methylphenol	3.09	1.67	mg/kg wet	3.333	93	30-130	9	30		
4-Bromophenyl-phenylether	3.02	0.333	mg/kg wet	3.333	91	40-140	1	30		
4-Chloro-3-Methylphenol	2.78	0.333	mg/kg wet	3.333	83	30-130	9	30		
4-Chloroaniline	1.84	0.667	mg/kg wet	3.333	55	40-140	13	30		
4-Chloro-phenyl-phenyl ether	2.93	0.333	mg/kg wet	3.333	88	40-140	4	30		
4-Nitroaniline	3.12	0.333	mg/kg wet	3.333	94	40-140	16	30		
4-Nitrophenol	3.20	1.67	mg/kg wet	3.333	96	30-130	51	30		D+
Acenaphthene	2.99	0.333	mg/kg wet	3.333	90	40-140	0.02	30		
Acenaphthylene	2.72	0.333	mg/kg wet	3.333	82	40-140	3	30		
Acetophenone	2.34	0.667	mg/kg wet	3.333	70	40-140	25	30		
Aniline	1.71	0.667	mg/kg wet	3.333	51	40-140	21	30		
Anthracene	3.07	0.333	mg/kg wet	3.333	92	40-140	4	30		
Azobenzene	2.69	0.333	mg/kg wet	3.333	81	40-140	8	30		
Benzo(a)anthracene	3.39	0.333	mg/kg wet	3.333	102	40-140	6	30		
Benzo(a)pyrene	3.49	0.167	mg/kg wet	3.333	105	40-140	3	30		
Benzo(b)fluoranthene	3.42	0.333	mg/kg wet	3.333	103	40-140	18	30		
Benzo(g,h,i)perylene	3.41	0.333	mg/kg wet	3.333	102	40-140	8	30		
Benzo(k)fluoranthene	3.52	0.333	mg/kg wet	3.333	106	40-140	0.7	30		
Benzo(l)fluoranthene	3.00	1.67	mg/kg wet	3.333	90	40-140	46	30		D+
Benzyl Alcohol	2.41	0.333	mg/kg wet	3.333	72	40-140	2	30		
bis(2-Chloroethoxy)methane	2.67	0.333	mg/kg wet	3.333	80	40-140	9	30		
bis(2-Chloroethyl)ether	2.56	0.333	mg/kg wet	3.333	77	40-140	8	30		
bis(2-chloroisopropyl)Ether	2.61	0.333	mg/kg wet	3.333	78	40-140	8	30		
bis(2-Ethylhexyl)phthalate	3.29	0.333	mg/kg wet	3.333	99	40-140	12	30		
Butylbenzylphthalate	3.26	0.333	mg/kg wet	3.333	98	40-140	10	30		
Carbazole	2.99	0.333	mg/kg wet	3.333	90	40-140	7	30		
Chrysene	3.32	0.167	mg/kg wet	3.333	100	40-140	0.4	30		
Dibenz(a,h)Anthracene	3.36	0.167	mg/kg wet	3.333	101	40-140	3	30		
Dibenzofuran	2.62	0.333	mg/kg wet	3.333	79	40-140	4	30		
Diethylphthalate	2.96	0.333	mg/kg wet	3.333	89	40-140	12	30		
Dimethylphthalate	2.75	0.333	mg/kg wet	3.333	83	40-140	0.4	30		
D-n-butylphthalate	2.95	0.333	mg/kg wet	3.333	88	40-140	9	30		
D-n-octylphthalate	3.35	0.333	mg/kg wet	3.333	100	40-140	14	30		
Fluoranthene	3.15	0.333	mg/kg wet	3.333	95	40-140	8	30		
Fluorene	2.96	0.333	mg/kg wet	3.333	89	40-140	3	30		
Hexachlorobenzene	3.13	0.167	mg/kg wet	3.333	94	40-140	5	30		
Hexachlorobutadiene	3.10	0.333	mg/kg wet	3.333	93	40-140	10	30		
Hexachlorocyclopentadiene	2.81	1.67	mg/kg wet	3.333	84	40-140	10	30		

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**ESS Laboratory**  
 Division of Thielsch Engineering, Inc.

*CERTIFICATE OF ANALYSIS*

Client Name: RC & D  
 Client Project ID: Lincoln Lane

ESS Laboratory Work Order: 1012068

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source	%REC	Limit	RPD	RPD	Qualifier
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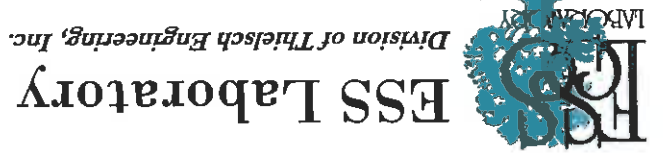
8270C Semi-Volatile Organic Compounds

Hexachloroethane	2.67	0.333	mg/kg wet	3.333	80	80	40-140	6	30	
Indeno(1,2,3-cd)Pyrene	3.36	0.333	mg/kg wet	3.333	101	101	40-140	3	30	
Isophorone	2.23	0.333	mg/kg wet	3.333	67	67	40-140	18	30	
Naphthalene	2.76	0.333	mg/kg wet	3.333	83	83	40-140	10	30	
Nitrobenzene	2.79	0.333	mg/kg wet	3.333	84	84	40-140	15	30	
N-Nitrosodimethylamine	2.68	0.333	mg/kg wet	3.333	80	80	40-140	9	30	
N-Nitroso-Di-n-Propylamine	2.46	0.333	mg/kg wet	3.333	74	74	40-140	4	30	
N-Nitrosodiphenylamine	3.07	0.333	mg/kg wet	3.333	92	92	40-140	4	30	
Pentachlorophenol	3.32	1.67	mg/kg wet	3.333	100	100	30-130	16	30	
Phenanthrene	2.89	0.333	mg/kg wet	3.333	87	87	40-140	0.8	30	
Phenol	2.66	0.333	mg/kg wet	3.333	80	80	30-130	27	30	
Pyrene	3.33	0.333	mg/kg wet	3.333	100	100	40-140	4	30	
Pyridine	2.52	1.67	mg/kg wet	3.333	76	76	40-140	10	30	
Surrogate: 1,2-Dichlorobenzene-d4	2.53	3.333	mg/kg wet	3.333	76	76	30-130			
Surrogate: 2,4,6-Trichlorophenol	5.26	5.000	mg/kg wet	5.000	105	105	30-130			
Surrogate: 2-Chlorophenol-d4	3.75	5.000	mg/kg wet	5.000	75	75	30-130			
Surrogate: 2-Fluorobiphenyl	3.07	3.333	mg/kg wet	3.333	92	92	30-130			
Surrogate: 2-Fluorophenol	3.59	5.000	mg/kg wet	5.000	72	72	30-130			
Surrogate: Nitrobenzene-d5	2.90	3.333	mg/kg wet	3.333	87	87	30-130			
Surrogate: Phenol-d6	3.68	5.000	mg/kg wet	5.000	74	74	30-130			
Surrogate: p-Terphenyl-d14	3.34	3.333	mg/kg wet	3.333	100	100	30-130			

Batch CL00820 - 3546



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**CERTIFICATE OF ANALYSIS**

Client Name: RC & D  
 Client Project ID: Lincoln Lane

ESS Laboratory Work Order: 1012068

**Notes and Definitions**

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

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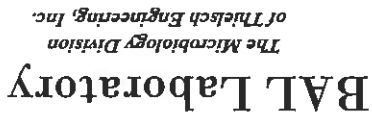
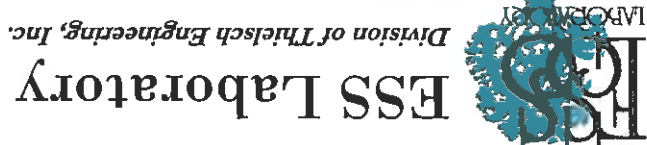
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**CERTIFICATE OF ANALYSIS**

Client Name: RC & D  
Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1012068  
**ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS**



**ENVIRONMENTAL**

Department of Defense (DoD) Environmental Laboratory Accreditation Program (ELAP)  
A2LA Accredited: Testing Cert# 2864.01  
<http://www.a2la.org/scopepdf/2864-01.pdf>

Rhode Island Potable and Non Potable Water: LA100179  
<http://www.health.ri.gov/labs/waterlabs-instate.php>

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750  
[http://www.ct.gov/dph/lib/dph/environmental\\_health/environmental\\_laboratories/pdf/out\\_state.pdf](http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/out_state.pdf)

Maine Potable and Non Potable Water: RI0002  
[http://www.maine.gov/dep/bwq/topic/vessel/lab\\_list.pdf](http://www.maine.gov/dep/bwq/topic/vessel/lab_list.pdf)

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

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424  
<http://www4.e.gov.nh.gov/des/nhclap/namesearch.asp>

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

United States Department of Agriculture Soil Permit: S-54210

Maryland Potable Water: 301  
[http://www.mde.state.md.us/assets/document/WSP\\_labs-2009apr20.pdf](http://www.mde.state.md.us/assets/document/WSP_labs-2009apr20.pdf)

South Carolina Volatile Organic Compounds in Potable Water: 78003

New Jersey Potable (VOA) and Non Potable Water (RCRA), Solids and Hazardous Waste: RI002  
<http://www.nj.gov/dep/ogqa/certlabs.htm>

Pensylvania Potable and Non Potable Water, Solid and Hazardous Waste: 68-01752  
[http://files.dep.state.pa.us/RegionalResources/Labs/LabsPortalFiles/2009-0911\\_accredited\\_laboratories.pdf](http://files.dep.state.pa.us/RegionalResources/Labs/LabsPortalFiles/2009-0911_accredited_laboratories.pdf)

**CHEMISTRY**

A2LA Accredited: Testing Cert # 2864.01  
Lead in Paint, Phthalates, Lead in Children's Metals Products (Including Jewelry)  
<http://www.A2LA.org/dirsearch/new/newsearch.cfm>

CPSC ID# 1141  
Lead Paint, Lead in Children's Metals Jewelry  
<http://www.cpsc.gov/cgi-bin/labapplist.aspx>

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**Sample and Cooler Receipt Checklist**

Client: RC and D  
 Client Project ID: \_\_\_\_\_  
 Shipped/Delivered Via: ESS Courier

Items to be checked upon receipt:

1. Air Bill Manifest Present?  Yes  No

Air No.: \_\_\_\_\_

2. Were Custody Seals Present?  Yes  No

3. Were Custody Seals Intact?  Yes  No

4. Is Radiation count < 100 CPM?  Yes  No

5. Is a cooler present?  Yes  No

Cooler Temp: NA

Iced With: None

6. Was COC included with samples?  Yes  No

7. Was COC signed and dated by client?  Yes  No

8. Does the COC match the sample  Yes  No

9. Is COC complete and correct?  Yes  No

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

- 10. Are the samples properly preserved?  Yes  No
- 11. Proper sample containers used?  Yes  No
- 12. Any air bubbles in the VOA vials?  Yes  No
- 13. Holding times exceeded?  Yes  No
- 14. Sufficient sample volumes?  Yes  No
- 15. Any subcontracting needed?  Yes  No
- 16. Are ESS labels on correct containers?  Yes  No
- 17. Were samples received intact?  Yes  No

TAT: \_\_\_\_\_  
 Analysis: \_\_\_\_\_  
 Sub Lab: \_\_\_\_\_  
 ESS Sample IDs: \_\_\_\_\_

Who was called? \_\_\_\_\_  
 By whom? \_\_\_\_\_

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

Completed By: [Signature] Date/Time: 12/7/10  
 Reviewed By: \_\_\_\_\_ Date/Time: 12/7/10

# ESS Laboratory

# CHAIN OF CUSTODY

Page 1 of 1

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 Tel. (401) 461-7181 Fax (401) 461-4486  
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Turn Time: Standard 3 DAY Other \_\_\_\_\_  
 If faster than 5 days, prior approval by laboratory is required # \_\_\_\_\_  
 State where samples were collected from: MA RI CT NH NJ NY ME Other \_\_\_\_\_  
 Is this project for any of the following: USACE Other \_\_\_\_\_  
 Navy \_\_\_\_\_

Reporting Limits: R1 RES DEC  
 Electronic Deliverable: 1012068  
 Format: Excel Access PDF Other \_\_\_\_\_

Co. Name <b>RC + D</b>		Project # <b>1006</b>		Project Name (20 Char. or less) <b>Lindyn Lane</b>	
Contract Person <b>Bob Schuster</b>		Address <b>17 Gordon Ave, Suite 204</b>		Circle and/or Write Required Analysis	
City <b>Providence</b>		State <b>RI</b>		Zip <b>02905</b>	
Telephone # <b>401-290-5483</b>		Fax # <b>401-290-5486</b>		Email Address <b>mblade@rcindinc.com</b>	
ESS LAB Sample #		Date		Collection Time	
1		12/7/10		13:00	
2		12/2/10		13:00	
COMP		GRAB		MATRIX	
Sample Identification (20 Char. or less)		1006-READTS-05		1006-LOPES-09	
Number of Containers		Type of Containers		Pre Code	
624		8260 VPH		X	
625		8015 VPH		X	
625		8100 DRO		X	
608		EPH 4 Dred		X	
608		EPH 4 Dred		X	
625		8270 PAH		X	
625		8270 PAH		X	
RCRA5		RCRA8		PP13	
TCLP-RCRA8		NBC7		MCP-METALS (13)	
MCP-METALS (13)		MCP-METALS (13)		w/Hg	
				<b>Arsenic</b>	

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: Yes No Preservation Code: 1-NP, 2-HCl, 3-H2SO4, 4-HNO3, 5-NAOH, 6-MeOH, 7-Ascorbic Acid, 8-ZnAc2, 9-

Seals Intact: Yes No NA: Pickup [ ] Technician: [ ]  
 Comments: **Sampled by: M. Black**

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
<i>[Signature]</i>	12/10 13:30	<i>[Signature]</i>	12/10 13:30				







EA Engineering, Science, and Technology, Inc.  
 2374 Post Road, Suite 102  
 Warwick, Rhode Island 02886  
 Telephone: (401) 736-3440  
 FAX: (401) 736-3423

**LINCOLN LACE AND BRAID REMEDIATION PROJECT**  
**EA Project No. 61891.05**  
**PROVIDENCE, RHODE ISLAND**

**CONSTRUCTION SUBMITTAL APPROVAL**

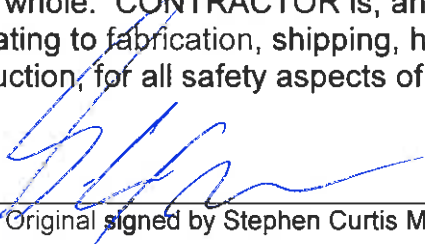
**Submittal: 1006-14**

**Description: Gravel and Topsoil Testing Results**

**Specification Section: 31 00 00**

<b>APPROVED AS NOTED</b>	<b>[ ]</b>
<b>APPROVED</b>	<b>[X]</b>
<b>REVISE AND RESUBMIT</b>	<b>[ ]</b>
<b>NOT APPROVED</b>	<b>[ ]</b>

Engineer's review and approval of this submittal are expressly limited as provided in the Contract Documents and are only to determine compliance with information given in Contract Documents and conformance with design concept of completed Project as a functioning whole. CONTRACTOR is, and ENGINEER is NOT, responsible for all matters relating to fabrication, shipping, handling, storage, assembly, and installation and construction, for all safety aspects of performing the Work, and for coordinating the Work.

Engineer:   
 Original signed by Stephen Curtis Mason, P.E.

Date: 11/15/10

The attached submittal is recommended for approval. Please ensure if soil quantities exceed the currently approved amounts (4,000 CY gravel, 2,000 CY topsoil) additional analytical tests are conducted in accordance with the contract documents.

**TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE**  
*(Read instructions on reverse side prior to initiating this form)*

**TRANSMITTAL NO:** 1006-14  
**DATE:** November 12, 2010

**SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS (This section will be initiated by the Contractor)**

**TO:** EA Engineering, Science, and Technology, Inc.  
 2350 Post Road  
 Warwick, RI 02886

**FROM:** RC&D, Inc.  
 17 Gordon Avenue, Suite 204  
 Providence, RI 02905

**CONTRACT NO:** 531451

**CHECK ONE:**  
 THIS IS A NEW TRANSMITTAL  
 THIS IS A RESUBMITTAL OF TRANSMITTAL, \_\_\_

**SPECIFICATION SECTION NO:** (Cover only one position with each transmittal)

**PROJECT TITLE AND LOCATION:** Lincoln Lace & Braid Site Remediation Project  
 Providence, RI

ITEM NO.	DESCRIPTION OF ITEM SUBMITTED (Type, size, model number, etc.)	MFG. OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction No. 8)	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT		FOR CONTRACTOR USE CODE	VARIATION (See instruction No. 6)	FOR CE USE CODE
				SPEC. PARA. NO.	DRAWING SHEET NO.			
a.			d.	e.	f.	g.	h.	i.
1	Topsoil Submittal - Analytical Results + Arsenic Results			31 00 00		A		
2	Gravel Fill Submittal - Analytical Results + Arsenic Results			31 00 00		A		

**REMARKS**  
 The attached testings results are for topsoil from Read Custom Soils out of Canton, MA and for Gravel Fill from G. Lopes out of Carver, MA. For the topsoil, RC&D grabbed (4) total samples. One sample was run for PP13, TPH, SVOC, and VOC, while the remaining samples were run for just arsenic. All samples were under RI RES DEC limits. RC&D should now be approved to haul up to 2,000 CY of loam on-site.

For the Gravel Fill, reference previously approved transmittal 1006-009 for analytical results. RC&D grabbed another (7) samples of gravel fill. One sample was run for PP13, TPH, SVOC, and VOC, while the remaining samples were run for just arsenic. All samples were under the RI RES DEC limits. RC&D should now be approved to haul up to 4,000 CY of gravel fill on-site as a total of (8) samples have been tested and passed.

I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as otherwise stated.

Michael Black  
 \_\_\_\_\_  
 NAME AND SIGNATURE OF CONTRACTOR

**SECTION II - APPROVAL ACTION**

**ENCLOSURES RETURNED (List by Item No.)** \_\_\_\_\_

**NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY** \_\_\_\_\_

**DATE** \_\_\_\_\_



**ESS Laboratory**

*Division of Thielsch Engineering, Inc.*

**BAL Laboratory**

*The Microbiology Division  
of Thielsch Engineering, Inc.*



**CERTIFICATE OF ANALYSIS**

Rob Schuster  
RC & D  
17 Gordon Avenue, Suite 204  
Providence, RI 02905-1952

**RE: Lincoln Lace (1006)**  
**ESS Laboratory Work Order Number: 1011142**

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

Laurel Stoddard  
Laboratory Director

**Analytical Summary**

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

ESS Laboratory certifies that the test results meet the requirements of NELAC and A2LA, except where noted within this project narrative.



*CERTIFICATE OF ANALYSIS*

Client Name: RC & D  
Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1011142

**SAMPLE RECEIPT**

The following samples were received on November 10, 2010 for the analyses specified on the enclosed Chain of Custody Record.

<b>Lab Number</b>	<b>SampleName</b>	<b>Matrix</b>	<b>Analysis</b>
1011142-01	1006Lopes-GFGrab01	Soil	6010B, 7471A, 7841, 8100M, 8260B, 8260B Low, 8270C
1011142-02	1006-Read-TS01	Soil	6010B, 7471A, 7841, 8100M, 8260B, 8260B Low, 8270C



**ESS Laboratory**

*Division of Thielsch Engineering, Inc.*

**BAL Laboratory**

*The Microbiology Division  
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*CERTIFICATE OF ANALYSIS*

Client Name: RC & D  
Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1011142

**PROJECT NARRATIVE**

**3050B/6000/7000 Total Metals**

CK01016-MS2 Matrix Spike recovery is below lower control limit (M-).  
Antimony (36% @ 75-125%)

**8270C Semi-Volatile Organic Compounds**

CK01023-MS1 Matrix Spike recovery is below lower control limit (M-).  
Benzoic Acid (% @ 40-140%)

CK01023-MSD1 Matrix Spike recovery is below lower control limit (M-).  
Benzoic Acid (18% @ 40-140%)

CK01023-MSD1 Relative percent difference for duplicate is outside of criteria (D+).  
2,4-Dinitrophenol (31%)

No other observations noted.

End of Project Narrative.

**DATA USABILITY LINKS**

[Definitions of Quality Control Parameters](#)

[Semivolatile Organics Internal Standard Information](#)

[Semivolatile Organics Surrogate Information](#)

[Volatile Organics Internal Standard Information](#)

[Volatile Organics Surrogate Information](#)

[EPH and VPH Alkane Lists](#)



*CERTIFICATE OF ANALYSIS*

Client Name: RC & D  
 Client Project ID: Lincoln Lace  
 Client Sample ID: 1006Lopes-GFGrab01  
 Date Sampled: 11/10/10 09:00  
 Percent Solids: 94

ESS Laboratory Work Order: 1011142  
 ESS Laboratory Sample ID: 1011142-01  
 Sample Matrix: Soil  
 Units: mg/kg dry

**3050B/6000/7000 Total Metals**

<u>Analyte</u>	<u>Results (MRL)</u>	<u>Method</u>	<u>RI - RES DEC</u>			<u>Analyst</u>	<u>Analyzed</u>	<u>I/V</u>	<u>F/V</u>	<u>Batch</u>
			<u>Limit</u>	<u>DF</u>						
Antimony	ND (4.9)	6010B	10	1	SVD	11/10/10 23:01	2.18	100	CK01016	
Arsenic	ND (2.4)	6010B	7	1	SVD	11/10/10 23:01	2.18	100	CK01016	
Beryllium	0.13 (0.10)	6010B	0.4	1	SVD	11/10/10 23:01	2.18	100	CK01016	
Cadmium	ND (0.49)	6010B	39	1	SVD	11/10/10 23:01	2.18	100	CK01016	
Chromium	2.2 (1.0)	6010B	1400	1	SVD	11/10/10 23:01	2.18	100	CK01016	
Copper	ND (2.4)	6010B	3100	1	SVD	11/10/10 23:01	2.18	100	CK01016	
Lead	ND (4.9)	6010B	150	1	SVD	11/10/10 23:01	2.18	100	CK01016	
Mercury	ND (0.032)	7471A	23	1	JP	11/10/10 19:18	0.66	40	CK01017	
Nickel	ND (2.4)	6010B	1000	1	SVD	11/10/10 23:01	2.18	100	CK01016	
Selenium	ND (4.9)	6010B	390	1	SVD	11/10/10 23:01	2.18	100	CK01016	
Silver	ND (0.49)	6010B	200	1	SVD	11/10/10 23:01	2.18	100	CK01016	
Thallium	ND (1.21)	7841	5.5	5	SVD	11/11/10 14:45	2.18	100	CK01016	
Zinc	ND (2.4)	6010B	6000	1	SVD	11/10/10 23:01	2.18	100	CK01016	



# ESS Laboratory

Division of Thielsch Engineering, Inc.

# BAL Laboratory

The Microbiology Division  
of Thielsch Engineering, Inc.



## CERTIFICATE OF ANALYSIS

Client Name: RC & D  
 Client Project ID: Lincoln Lace  
 Client Sample ID: 1006Lopes-GFGrab01  
 Date Sampled: 11/10/10 09:00  
 Percent Solids: 94  
 Initial Volume: 6.6  
 Final Volume: 10  
 Extraction Method: 5035

ESS Laboratory Work Order: 1011142  
 ESS Laboratory Sample ID: 1011142-01  
 Sample Matrix: Soil  
 Units: mg/kg dry  
 Analyst: MD

### 5035/8260B Volatile Organic Compounds / Low Level

Analyte	Results (MRL)	RI - RES DEC		Analyzed	Sequence	Batch
		Limit	DF			
1,1,1,2-Tetrachloroethane	ND (0.0040)	2.2	1	11/10/10 15:14	CTK0078	CK01013
1,1,1-Trichloroethane	ND (0.0040)	540	1	11/10/10 15:14	CTK0078	CK01013
1,1,2,2-Tetrachloroethane	ND (0.0040)	1.3	1	11/10/10 15:14	CTK0078	CK01013
1,1,2-Trichloroethane	ND (0.0040)	3.6	1	11/10/10 15:14	CTK0078	CK01013
1,1-Dichloroethane	ND (0.0040)	920	1	11/10/10 15:14	CTK0078	CK01013
1,1-Dichloroethene	ND (0.0040)	0.2	1	11/10/10 15:14	CTK0078	CK01013
1,1-Dichloropropene	ND (0.0040)		1	11/10/10 15:14	CTK0078	CK01013
1,2,3-Trichlorobenzene	ND (0.0040)		1	11/10/10 15:14	CTK0078	CK01013
1,2,3-Trichloropropane	ND (0.0040)		1	11/10/10 15:14	CTK0078	CK01013
1,2,4-Trichlorobenzene	ND (0.0040)	96	1	11/10/10 15:14	CTK0078	CK01013
1,2,4-Trimethylbenzene	ND (0.0040)		1	11/10/10 15:14	CTK0078	CK01013
1,2-Dibromo-3-Chloropropane	ND (0.0040)	0.5	1	11/10/10 15:14	CTK0078	CK01013
1,2-Dibromoethane	ND (0.0040)	0.01	1	11/10/10 15:14	CTK0078	CK01013
1,2-Dichlorobenzene	ND (0.0040)	510	1	11/10/10 15:14	CTK0078	CK01013
1,2-Dichloroethane	ND (0.0040)	0.9	1	11/10/10 15:14	CTK0078	CK01013
1,2-Dichloropropane	ND (0.0040)	1.9	1	11/10/10 15:14	CTK0078	CK01013
1,3,5-Trimethylbenzene	ND (0.0040)		1	11/10/10 15:14	CTK0078	CK01013
1,3-Dichlorobenzene	ND (0.0040)	430	1	11/10/10 15:14	CTK0078	CK01013
1,3-Dichloropropane	ND (0.0040)		1	11/10/10 15:14	CTK0078	CK01013
1,4-Dichlorobenzene	ND (0.0040)	27	1	11/10/10 15:14	CTK0078	CK01013
1,4-Dioxane	ND (0.0806)		1	11/10/10 15:14	CTK0078	CK01013
1-Chlorohexane	ND (0.0040)		1	11/10/10 15:14	CTK0078	CK01013
2,2-Dichloropropane	ND (0.0040)		1	11/10/10 15:14	CTK0078	CK01013
2-Butanone	ND (0.0403)	10000	1	11/10/10 15:14	CTK0078	CK01013
2-Chlorotoluene	ND (0.0040)		1	11/10/10 15:14	CTK0078	CK01013
2-Hexanone	ND (0.0403)		1	11/10/10 15:14	CTK0078	CK01013
4-Chlorotoluene	ND (0.0040)		1	11/10/10 15:14	CTK0078	CK01013
4-Isopropyltoluene	ND (0.0040)		1	11/10/10 15:14	CTK0078	CK01013
4-Methyl-2-Pentanone	ND (0.0403)	1200	1	11/10/10 15:14	CTK0078	CK01013
Acetone	ND (0.0403)	7800	1	11/10/10 15:14	CTK0078	CK01013
Benzene	ND (0.0040)	2.5	1	11/10/10 15:14	CTK0078	CK01013





*CERTIFICATE OF ANALYSIS*

Client Name: RC & D  
 Client Project ID: Lincoln Lace  
 Client Sample ID: 1006Lopes-GFGrab01  
 Date Sampled: 11/10/10 09:00  
 Percent Solids: 94  
 Initial Volume: 6.6  
 Final Volume: 10  
 Extraction Method: 5035

ESS Laboratory Work Order: 1011142  
 ESS Laboratory Sample ID: 1011142-01  
 Sample Matrix: Soil  
 Units: mg/kg dry  
 Analyst: MD

**5035/8260B Volatile Organic Compounds / Low Level**

<u>Analyte</u>	<u>Results (MRL)</u>	<u>RI - RES DEC</u>		<u>Analyzed</u>	<u>Sequence</u>	<u>Batch</u>
		<u>Limit</u>	<u>DF</u>			
Bromobenzene	ND (0.0040)		1	11/10/10 15:14	CTK0078	CK01013
Bromochloromethane	ND (0.0040)		1	11/10/10 15:14	CTK0078	CK01013
Bromodichloromethane	ND (0.0040)	10	1	11/10/10 15:14	CTK0078	CK01013
Bromoform	ND (0.0040)	81	1	11/10/10 15:14	CTK0078	CK01013
Bromomethane	ND (0.0081)	0.8	1	11/10/10 15:14	CTK0078	CK01013
Carbon Disulfide	ND (0.0040)		1	11/10/10 15:14	CTK0078	CK01013
Carbon Tetrachloride	ND (0.0040)	1.5	1	11/10/10 15:14	CTK0078	CK01013
Chlorobenzene	ND (0.0040)	210	1	11/10/10 15:14	CTK0078	CK01013
Chloroethane	ND (0.0081)		1	11/10/10 15:14	CTK0078	CK01013
Chloroform	ND (0.0040)	1.2	1	11/10/10 15:14	CTK0078	CK01013
Chloromethane	ND (0.0081)		1	11/10/10 15:14	CTK0078	CK01013
cis-1,2-Dichloroethene	ND (0.0040)	630	1	11/10/10 15:14	CTK0078	CK01013
cis-1,3-Dichloropropene	ND (0.0040)		1	11/10/10 15:14	CTK0078	CK01013
Dibromochloromethane	ND (0.0040)	7.6	1	11/10/10 15:14	CTK0078	CK01013
Dibromomethane	ND (0.0040)		1	11/10/10 15:14	CTK0078	CK01013
Dichlorodifluoromethane	ND (0.0081)		1	11/10/10 15:14	CTK0078	CK01013
Diethyl Ether	ND (0.0040)		1	11/10/10 15:14	CTK0078	CK01013
Di-isopropyl ether	ND (0.0040)		1	11/10/10 15:14	CTK0078	CK01013
Ethyl tertiary-butyl ether	ND (0.0040)		1	11/10/10 15:14	CTK0078	CK01013
Ethylbenzene	ND (0.0040)	71	1	11/10/10 15:14	CTK0078	CK01013
Hexachlorobutadiene	ND (0.0040)	8.2	1	11/10/10 15:14	CTK0078	CK01013
Isopropylbenzene	ND (0.0040)	27	1	11/10/10 15:14	CTK0078	CK01013
Methyl tert-Butyl Ether	ND (0.0040)	390	1	11/10/10 15:14	CTK0078	CK01013
Methylene Chloride	ND (0.0201)	45	1	11/10/10 15:14	CTK0078	CK01013
Naphthalene	ND (0.0040)	54	1	11/10/10 15:14	CTK0078	CK01013
n-Butylbenzene	ND (0.0040)		1	11/10/10 15:14	CTK0078	CK01013
n-Propylbenzene	ND (0.0040)		1	11/10/10 15:14	CTK0078	CK01013
sec-Butylbenzene	ND (0.0040)		1	11/10/10 15:14	CTK0078	CK01013
Styrene	ND (0.0040)	13	1	11/10/10 15:14	CTK0078	CK01013
tert-Butylbenzene	ND (0.0040)		1	11/10/10 15:14	CTK0078	CK01013
Tertiary-amyl methyl ether	ND (0.0040)		1	11/10/10 15:14	CTK0078	CK01013



*CERTIFICATE OF ANALYSIS*

Client Name: RC & D  
 Client Project ID: Lincoln Lace  
 Client Sample ID: 1006Lopes-GFGrab01  
 Date Sampled: 11/10/10 09:00  
 Percent Solids: 94  
 Initial Volume: 6.6  
 Final Volume: 10  
 Extraction Method: 5035

ESS Laboratory Work Order: 1011142  
 ESS Laboratory Sample ID: 1011142-01  
 Sample Matrix: Soil  
 Units: mg/kg dry  
 Analyst: MD

**5035/8260B Volatile Organic Compounds / Low Level**

<u>Analyte</u>	<u>Results (MRL)</u>	<u>RI - RES DEC</u>		<u>Analyzed</u>	<u>Sequence</u>	<u>Batch</u>
		<u>Limit</u>	<u>DF</u>			
Tetrachloroethene	ND (0.0040)	12	1	11/10/10 15:14	CTK0078	CK01013
Tetrahydrofuran	ND (0.0040)		1	11/10/10 15:14	CTK0078	CK01013
Toluene	ND (0.0040)	190	1	11/10/10 15:14	CTK0078	CK01013
trans-1,2-Dichloroethene	ND (0.0040)	1100	1	11/10/10 15:14	CTK0078	CK01013
trans-1,3-Dichloropropene	ND (0.0040)		1	11/10/10 15:14	CTK0078	CK01013
Trichloroethene	ND (0.0040)	13	1	11/10/10 15:14	CTK0078	CK01013
Trichlorofluoromethane	ND (0.0040)		1	11/10/10 15:14	CTK0078	CK01013
Vinyl Acetate	ND (0.0040)		1	11/10/10 15:14	CTK0078	CK01013
Vinyl Chloride	ND (0.0081)	0.02	1	11/10/10 15:14	CTK0078	CK01013
Xylene O	ND (0.0040)	110	1	11/10/10 15:14	CTK0078	CK01013
Xylene P,M	ND (0.0081)	110	1	11/10/10 15:14	CTK0078	CK01013
Xylenes (Total)	ND (0.0121)	110	1	11/10/10 15:14		[CALC]

	<u>%Recovery</u>	<u>Qualifier</u>	<u>Limits</u>
Surrogate: 1,2-Dichloroethane-d4	94 %		70-130
Surrogate: 4-Bromofluorobenzene	94 %		70-130
Surrogate: Dibromofluoromethane	94 %		70-130
Surrogate: Toluene-d8	97 %		70-130



**ESS Laboratory**

*Division of Thielsch Engineering, Inc.*

**BAL Laboratory**

*The Microbiology Division  
of Thielsch Engineering, Inc.*



*CERTIFICATE OF ANALYSIS*

Client Name: RC & D  
Client Project ID: Lincoln Lace  
Client Sample ID: 1006Lopes-GFGrab01  
Date Sampled: 11/10/10 09:00  
Percent Solids: 94  
Initial Volume: 19.8  
Final Volume: 1  
Extraction Method: 3546

ESS Laboratory Work Order: 1011142  
ESS Laboratory Sample ID: 1011142-01  
Sample Matrix: Soil  
Units: mg/kg dry  
Analyst: ML  
Prepared: 11/10/10 17:00

**8100M Total Petroleum Hydrocarbons**

<u>Analyte</u>	<u>Results (MRL)</u>	<u>RI - RES DEC</u>		<u>Analyzed</u>	<u>Sequence</u>	<u>Batch</u>
		<u>Limit</u>	<u>DF</u>			
Total Petroleum Hydrocarbons	ND (40.3)	500	1	11/10/10 20:37	CTK0086	CK01024
		<i>%Recovery</i>	<i>Qualifier</i>			
<i>Surrogate: O-Terphenyl</i>		77 %				
			<i>Limits</i>			
			40-140			



# ESS Laboratory

Division of Thielsch Engineering, Inc.

# BAL Laboratory

The Microbiology Division  
of Thielsch Engineering, Inc.



## CERTIFICATE OF ANALYSIS

Client Name: RC & D  
 Client Project ID: Lincoln Lace  
 Client Sample ID: 1006Lopes-GFGrab01  
 Date Sampled: 11/10/10 09:00  
 Percent Solids: 94  
 Initial Volume: 15.5  
 Final Volume: 0.5  
 Extraction Method: 3546

ESS Laboratory Work Order: 1011142  
 ESS Laboratory Sample ID: 1011142-01  
 Sample Matrix: Soil  
 Units: mg/kg dry  
 Analyst: IBM  
 Prepared: 11/10/10 18:00

### 8270C Semi-Volatile Organic Compounds

Analyte	Results (MRL)	RI - RES DEC		Analyzed	Sequence	Batch
		Limit	DF			
1,1-Biphenyl	ND (0.343)	0.8	1	11/11/10 13:11	CTK0084	CK01023
1,2,4-Trichlorobenzene	ND (0.343)	96	1	11/11/10 13:11	CTK0084	CK01023
1,2-Dichlorobenzene	ND (0.343)	510	1	11/11/10 13:11	CTK0084	CK01023
1,3-Dichlorobenzene	ND (0.343)	430	1	11/11/10 13:11	CTK0084	CK01023
1,4-Dichlorobenzene	ND (0.343)	27	1	11/11/10 13:11	CTK0084	CK01023
2,3,4,6-Tetrachlorophenol	ND (1.72)		1	11/11/10 13:11	CTK0084	CK01023
2,4,5-Trichlorophenol	ND (0.343)	330	1	11/11/10 13:11	CTK0084	CK01023
2,4,6-Trichlorophenol	ND (0.343)	58	1	11/11/10 13:11	CTK0084	CK01023
2,4-Dichlorophenol	ND (0.343)	30	1	11/11/10 13:11	CTK0084	CK01023
2,4-Dimethylphenol	ND (0.343)	1400	1	11/11/10 13:11	CTK0084	CK01023
2,4-Dinitrophenol	ND (1.72)	160	1	11/11/10 13:11	CTK0084	CK01023
2,4-Dinitrotoluene	ND (0.343)	0.9	1	11/11/10 13:11	CTK0084	CK01023
2,6-Dinitrotoluene	ND (0.343)		1	11/11/10 13:11	CTK0084	CK01023
2-Chloronaphthalene	ND (0.343)		1	11/11/10 13:11	CTK0084	CK01023
2-Chlorophenol	ND (0.343)	50	1	11/11/10 13:11	CTK0084	CK01023
2-Methylnaphthalene	ND (0.343)	123	1	11/11/10 13:11	CTK0084	CK01023
2-Methylphenol	ND (0.343)		1	11/11/10 13:11	CTK0084	CK01023
2-Nitroaniline	ND (0.343)		1	11/11/10 13:11	CTK0084	CK01023
2-Nitrophenol	ND (0.343)		1	11/11/10 13:11	CTK0084	CK01023
3,3'-Dichlorobenzidine	ND (0.687)	1.4	1	11/11/10 13:11	CTK0084	CK01023
3+4-Methylphenol	ND (0.687)		1	11/11/10 13:11	CTK0084	CK01023
3-Nitroaniline	ND (0.343)		1	11/11/10 13:11	CTK0084	CK01023
4,6-Dinitro-2-Methylphenol	ND (1.72)		1	11/11/10 13:11	CTK0084	CK01023
4-Bromophenyl-phenylether	ND (0.343)		1	11/11/10 13:11	CTK0084	CK01023
4-Chloro-3-Methylphenol	ND (0.343)		1	11/11/10 13:11	CTK0084	CK01023
4-Chloroaniline	ND (0.687)	310	1	11/11/10 13:11	CTK0084	CK01023
4-Chloro-phenyl-phenyl ether	ND (0.343)		1	11/11/10 13:11	CTK0084	CK01023
4-Nitroaniline	ND (0.343)		1	11/11/10 13:11	CTK0084	CK01023
4-Nitrophenol	ND (1.72)		1	11/11/10 13:11	CTK0084	CK01023
Acenaphthene	ND (0.343)	43	1	11/11/10 13:11	CTK0084	CK01023
Acenaphthylene	ND (0.343)	23	1	11/11/10 13:11	CTK0084	CK01023



*CERTIFICATE OF ANALYSIS*

Client Name: RC & D  
 Client Project ID: Lincoln Lace  
 Client Sample ID: 1006Lopes-GFGrab01  
 Date Sampled: 11/10/10 09:00  
 Percent Solids: 94  
 Initial Volume: 15.5  
 Final Volume: 0.5  
 Extraction Method: 3546

ESS Laboratory Work Order: 1011142  
 ESS Laboratory Sample ID: 1011142-01  
 Sample Matrix: Soil  
 Units: mg/kg dry  
 Analyst: IBM  
 Prepared: 11/10/10 18:00

**8270C Semi-Volatile Organic Compounds**

<u>Analyte</u>	<u>Results (MRL)</u>	<u>RI - RES DEC</u>		<u>Analyzed</u>	<u>Sequence</u>	<u>Batch</u>
		<u>Limit</u>	<u>DF</u>			
Acetophenone	ND (0.687)		1	11/11/10 13:11	CTK0084	CK01023
Aniline	ND (0.687)		1	11/11/10 13:11	CTK0084	CK01023
Anthracene	ND (0.343)	35	1	11/11/10 13:11	CTK0084	CK01023
Azobenzene	ND (0.343)		1	11/11/10 13:11	CTK0084	CK01023
Benzo(a)anthracene	ND (0.343)	0.9	1	11/11/10 13:11	CTK0084	CK01023
Benzo(a)pyrene	ND (0.172)	0.4	1	11/11/10 13:11	CTK0084	CK01023
Benzo(b)fluoranthene	ND (0.343)	0.9	1	11/11/10 13:11	CTK0084	CK01023
Benzo(g,h,i)perylene	ND (0.343)	0.8	1	11/11/10 13:11	CTK0084	CK01023
Benzo(k)fluoranthene	ND (0.343)	0.9	1	11/11/10 13:11	CTK0084	CK01023
Benzoic Acid	ND (1.72)		1	11/11/10 13:11	CTK0084	CK01023
Benzyl Alcohol	ND (0.343)		1	11/11/10 13:11	CTK0084	CK01023
bis(2-Chloroethoxy)methane	ND (0.343)		1	11/11/10 13:11	CTK0084	CK01023
bis(2-Chloroethyl)ether	ND (0.343)	0.6	1	11/11/10 13:11	CTK0084	CK01023
bis(2-chloroisopropyl)Ether	ND (0.343)	9.1	1	11/11/10 13:11	CTK0084	CK01023
bis(2-Ethylhexyl)phthalate	ND (0.343)	46	1	11/11/10 13:11	CTK0084	CK01023
Butylbenzylphthalate	ND (0.343)		1	11/11/10 13:11	CTK0084	CK01023
Carbazole	ND (0.343)		1	11/11/10 13:11	CTK0084	CK01023
Chrysene	ND (0.172)	0.4	1	11/11/10 13:11	CTK0084	CK01023
Dibenzo(a,h)Anthracene	ND (0.172)	0.4	1	11/11/10 13:11	CTK0084	CK01023
Dibenzofuran	ND (0.343)		1	11/11/10 13:11	CTK0084	CK01023
Diethylphthalate	ND (0.343)	340	1	11/11/10 13:11	CTK0084	CK01023
Dimethylphthalate	ND (0.343)	1900	1	11/11/10 13:11	CTK0084	CK01023
Di-n-butylphthalate	ND (0.343)		1	11/11/10 13:11	CTK0084	CK01023
Di-n-octylphthalate	ND (0.343)		1	11/11/10 13:11	CTK0084	CK01023
Fluoranthene	ND (0.343)	20	1	11/11/10 13:11	CTK0084	CK01023
Fluorene	ND (0.343)	28	1	11/11/10 13:11	CTK0084	CK01023
Hexachlorobenzene	ND (0.172)	0.4	1	11/11/10 13:11	CTK0084	CK01023
Hexachlorobutadiene	ND (0.343)	8.2	1	11/11/10 13:11	CTK0084	CK01023
Hexachlorocyclopentadiene	ND (1.72)		1	11/11/10 13:11	CTK0084	CK01023
Hexachloroethane	ND (0.343)	46	1	11/11/10 13:11	CTK0084	CK01023
Indeno(1,2,3-cd)Pyrene	ND (0.343)	0.9	1	11/11/10 13:11	CTK0084	CK01023



# ESS Laboratory

Division of Thielsch Engineering, Inc.

# BAL Laboratory

The Microbiology Division  
of Thielsch Engineering, Inc.



## CERTIFICATE OF ANALYSIS

Client Name: RC & D  
 Client Project ID: Lincoln Lace  
 Client Sample ID: 1006Lopes-GFGrab01  
 Date Sampled: 11/10/10 09:00  
 Percent Solids: 94  
 Initial Volume: 15.5  
 Final Volume: 0.5  
 Extraction Method: 3546

ESS Laboratory Work Order: 1011142  
 ESS Laboratory Sample ID: 1011142-01  
 Sample Matrix: Soil  
 Units: mg/kg dry  
 Analyst: IBM  
 Prepared: 11/10/10 18:00

### 8270C Semi-Volatile Organic Compounds

Analyte	Results (MRL)	RI - RES DEC		Analyzed	Sequence	Batch
		Limit	DF			
Isophorone	ND (0.343)		1	11/11/10 13:11	CTK0084	CK01023
Naphthalene	ND (0.343)	54	1	11/11/10 13:11	CTK0084	CK01023
Nitrobenzene	ND (0.343)		1	11/11/10 13:11	CTK0084	CK01023
N-Nitrosodimethylamine	ND (0.343)		1	11/11/10 13:11	CTK0084	CK01023
N-Nitroso-Di-n-Propylamine	ND (0.343)		1	11/11/10 13:11	CTK0084	CK01023
N-nitrosodiphenylamine	ND (0.343)		1	11/11/10 13:11	CTK0084	CK01023
Pentachlorophenol	ND (1.72)	5.3	1	11/11/10 13:11	CTK0084	CK01023
Phenanthrene	ND (0.343)	40	1	11/11/10 13:11	CTK0084	CK01023
Phenol	ND (0.343)	6000	1	11/11/10 13:11	CTK0084	CK01023
Pyrene	ND (0.343)	13	1	11/11/10 13:11	CTK0084	CK01023
Pyridine	ND (1.72)		1	11/11/10 13:11	CTK0084	CK01023

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichlorobenzene-d4	66 %		30-130
Surrogate: 2,4,6-Tribromophenol	77 %		30-130
Surrogate: 2-Chlorophenol-d4	61 %		30-130
Surrogate: 2-Fluorobiphenyl	66 %		30-130
Surrogate: 2-Fluorophenol	61 %		30-130
Surrogate: Nitrobenzene-d5	64 %		30-130
Surrogate: Phenol-d6	63 %		30-130
Surrogate: p-Terphenyl-d14	91 %		30-130



# ESS Laboratory

Division of Thielsch Engineering, Inc.

# BAL Laboratory

The Microbiology Division  
of Thielsch Engineering, Inc.



## CERTIFICATE OF ANALYSIS

Client Name: RC & D  
Client Project ID: Lincoln Lace  
Client Sample ID: 1006-Read-TS01  
Date Sampled: 11/10/10 09:00  
Percent Solids: 84

ESS Laboratory Work Order: 1011142  
ESS Laboratory Sample ID: 1011142-02  
Sample Matrix: Soil  
Units: mg/kg dry

### 3050B/6000/7000 Total Metals

<u>Analyte</u>	<u>Results (MRL)</u>	<u>Method</u>	<u>RI - RES DEC</u>		<u>Analyst</u>	<u>Analyzed</u>	<u>I/V</u>	<u>F/V</u>	<u>Batch</u>
			<u>Limit</u>	<u>DF</u>					
Antimony	ND (5.5)	6010B	10	1	SVD	11/10/10 23:05	2.15	100	CK01016
Arsenic	ND (2.8)	6010B	7	1	SVD	11/10/10 23:05	2.15	100	CK01016
Beryllium	0.32 (0.12)	6010B	0.4	1	SVD	11/10/10 23:05	2.15	100	CK01016
Cadmium	ND (0.56)	6010B	39	1	SVD	11/10/10 23:05	2.15	100	CK01016
Chromium	8.5 (1.1)	6010B	1400	1	SVD	11/10/10 23:05	2.15	100	CK01016
Copper	6.2 (2.8)	6010B	3100	1	SVD	11/10/10 23:05	2.15	100	CK01016
Lead	14.2 (5.5)	6010B	150	1	SVD	11/10/10 23:05	2.15	100	CK01016
Mercury	0.045 (0.038)	7471A	23	1	JP	11/10/10 20:23	0.62	40	CK01017
Nickel	5.8 (2.8)	6010B	1000	1	SVD	11/10/10 23:05	2.15	100	CK01016
Selenium	ND (5.5)	6010B	390	1	SVD	11/10/10 23:05	2.15	100	CK01016
Silver	ND (0.56)	6010B	200	1	SVD	11/10/10 23:05	2.15	100	CK01016
Thallium	ND (1.37)	7841	5.5	5	SVD	11/11/10 14:51	2.15	100	CK01016
Zinc	18.6 (2.8)	6010B	6000	1	SVD	11/10/10 23:05	2.15	100	CK01016



ESS Laboratory

Division of Thielsch Engineering, Inc.

BAL Laboratory

The Microbiology Division of Thielsch Engineering, Inc.



CERTIFICATE OF ANALYSIS

Client Name: RC & D
Client Project ID: Lincoln Lace
Client Sample ID: 1006-Read-TS01
Date Sampled: 11/10/10 09:00
Percent Solids: 84
Initial Volume: 11.4
Final Volume: 10
Extraction Method: 5035

ESS Laboratory Work Order: 1011142
ESS Laboratory Sample ID: 1011142-02
Sample Matrix: Soil
Units: mg/kg dry
Analyst: MD

5035/8260B Volatile Organic Compounds / Low Level

Table with columns: Analyte, Results (MRL), Limit, DF, Analyzed, Sequence, Batch. Lists various volatile organic compounds and their detection results.





*CERTIFICATE OF ANALYSIS*

Client Name: RC & D  
 Client Project ID: Lincoln Lace  
 Client Sample ID: 1006-Read-TS01  
 Date Sampled: 11/10/10 09:00  
 Percent Solids: 84  
 Initial Volume: 11.4  
 Final Volume: 10  
 Extraction Method: 5035

ESS Laboratory Work Order: 1011142  
 ESS Laboratory Sample ID: 1011142-02  
 Sample Matrix: Soil  
 Units: mg/kg dry  
 Analyst: MD

**5035/8260B Volatile Organic Compounds / Low Level**

<u>Analyte</u>	<u>Results (MRL)</u>	<u>RI - RES DEC</u>		<u>Analyzed</u>	<u>Sequence</u>	<u>Batch</u>
		<u>Limit</u>	<u>DF</u>			
Bromobenzene	ND (0.0026)		1	11/10/10 15:41	CTK0078	CK01013
Bromochloromethane	ND (0.0026)		1	11/10/10 15:41	CTK0078	CK01013
Bromodichloromethane	ND (0.0026)	10	1	11/10/10 15:41	CTK0078	CK01013
Bromoform	ND (0.0026)	81	1	11/10/10 15:41	CTK0078	CK01013
Bromomethane	ND (0.0052)	0.8	1	11/10/10 15:41	CTK0078	CK01013
Carbon Disulfide	ND (0.0026)		1	11/10/10 15:41	CTK0078	CK01013
Carbon Tetrachloride	ND (0.0026)	1.5	1	11/10/10 15:41	CTK0078	CK01013
Chlorobenzene	ND (0.0026)	210	1	11/10/10 15:41	CTK0078	CK01013
Chloroethane	ND (0.0052)		1	11/10/10 15:41	CTK0078	CK01013
Chloroform	ND (0.0026)	1.2	1	11/10/10 15:41	CTK0078	CK01013
Chloromethane	ND (0.0052)		1	11/10/10 15:41	CTK0078	CK01013
cis-1,2-Dichloroethene	ND (0.0026)	630	1	11/10/10 15:41	CTK0078	CK01013
cis-1,3-Dichloropropene	ND (0.0026)		1	11/10/10 15:41	CTK0078	CK01013
Dibromochloromethane	ND (0.0026)	7.6	1	11/10/10 15:41	CTK0078	CK01013
Dibromomethane	ND (0.0026)		1	11/10/10 15:41	CTK0078	CK01013
Dichlorodifluoromethane	ND (0.0052)		1	11/10/10 15:41	CTK0078	CK01013
Diethyl Ether	ND (0.0026)		1	11/10/10 15:41	CTK0078	CK01013
Di-isopropyl ether	ND (0.0026)		1	11/10/10 15:41	CTK0078	CK01013
Ethyl tertiary-butyl ether	ND (0.0026)		1	11/10/10 15:41	CTK0078	CK01013
Ethylbenzene	ND (0.0026)	71	1	11/10/10 15:41	CTK0078	CK01013
Hexachlorobutadiene	ND (0.0026)	8.2	1	11/10/10 15:41	CTK0078	CK01013
Isopropylbenzene	ND (0.0026)	27	1	11/10/10 15:41	CTK0078	CK01013
Methyl tert-Butyl Ether	ND (0.0026)	390	1	11/10/10 15:41	CTK0078	CK01013
Methylene Chloride	ND (0.0131)	45	1	11/10/10 15:41	CTK0078	CK01013
Naphthalene	ND (0.0026)	54	1	11/10/10 15:41	CTK0078	CK01013
n-Butylbenzene	ND (0.0026)		1	11/10/10 15:41	CTK0078	CK01013
n-Propylbenzene	ND (0.0026)		1	11/10/10 15:41	CTK0078	CK01013
sec-Butylbenzene	ND (0.0026)		1	11/10/10 15:41	CTK0078	CK01013
Styrene	ND (0.0026)	13	1	11/10/10 15:41	CTK0078	CK01013
tert-Butylbenzene	ND (0.0026)		1	11/10/10 15:41	CTK0078	CK01013
Tertiary-amyl methyl ether	ND (0.0026)		1	11/10/10 15:41	CTK0078	CK01013



# ESS Laboratory

Division of Thielsch Engineering, Inc.

# BAL Laboratory

The Microbiology Division  
of Thielsch Engineering, Inc.



## CERTIFICATE OF ANALYSIS

Client Name: RC & D  
 Client Project ID: Lincoln Lace  
 Client Sample ID: 1006-Read-TS01  
 Date Sampled: 11/10/10 09:00  
 Percent Solids: 84  
 Initial Volume: 11.4  
 Final Volume: 10  
 Extraction Method: 5035

ESS Laboratory Work Order: 1011142  
 ESS Laboratory Sample ID: 1011142-02  
 Sample Matrix: Soil  
 Units: mg/kg dry  
 Analyst: MD

### 5035/8260B Volatile Organic Compounds / Low Level

<u>Analyte</u>	<u>Results (MRL)</u>	<u>RI - RES DEC</u>		<u>Analyzed</u>	<u>Sequence</u>	<u>Batch</u>
		<u>Limit</u>	<u>DF</u>			
Tetrachloroethene	ND (0.0026)	12	1	11/10/10 15:41	CTK0078	CK01013
Tetrahydrofuran	ND (0.0026)		1	11/10/10 15:41	CTK0078	CK01013
Toluene	ND (0.0026)	190	1	11/10/10 15:41	CTK0078	CK01013
trans-1,2-Dichloroethene	ND (0.0026)	1100	1	11/10/10 15:41	CTK0078	CK01013
trans-1,3-Dichloropropene	ND (0.0026)		1	11/10/10 15:41	CTK0078	CK01013
Trichloroethene	ND (0.0026)	13	1	11/10/10 15:41	CTK0078	CK01013
Trichlorofluoromethane	ND (0.0026)		1	11/10/10 15:41	CTK0078	CK01013
Vinyl Acetate	ND (0.0026)		1	11/10/10 15:41	CTK0078	CK01013
Vinyl Chloride	ND (0.0052)	0.02	1	11/10/10 15:41	CTK0078	CK01013
Xylene O	ND (0.0026)	110	1	11/10/10 15:41	CTK0078	CK01013
Xylene P,M	ND (0.0052)	110	1	11/10/10 15:41	CTK0078	CK01013
Xylenes (Total)	ND (0.0078)	110	1	11/10/10 15:41		[CALC]

	<u>%Recovery</u>	<u>Qualifier</u>	<u>Limits</u>
Surrogate: 1,2-Dichloroethane-d4	96 %		70-130
Surrogate: 4-Bromofluorobenzene	84 %		70-130
Surrogate: Dibromofluoromethane	96 %		70-130
Surrogate: Toluene-d8	100 %		70-130



**ESS Laboratory**

*Division of Thielsch Engineering, Inc.*

**BAL Laboratory**

*The Microbiology Division  
of Thielsch Engineering, Inc.*



*CERTIFICATE OF ANALYSIS*

Client Name: RC & D  
Client Project ID: Lincoln Lace  
Client Sample ID: 1006-Read-TS01  
Date Sampled: 11/10/10 09:00  
Percent Solids: 84  
Initial Volume: 20.5  
Final Volume: 1  
Extraction Method: 3546

ESS Laboratory Work Order: 1011142  
ESS Laboratory Sample ID: 1011142-02  
Sample Matrix: Soil  
Units: mg/kg dry  
Analyst: ML  
Prepared: 11/10/10 17:00

**8100M Total Petroleum Hydrocarbons**

<u>Analyte</u>	<u>Results (MRL)</u>	<u>RI - RES DEC</u>		<u>Analyzed</u>	<u>Sequence</u>	<u>Batch</u>
		<u>Limit</u>	<u>DF</u>			
Total Petroleum Hydrocarbons	ND (43.6)	500	1	11/10/10 22:56	CTK0086	CK01024
		<i>%Recovery</i>	<i>Qualifier</i>			
<i>Surrogate: O-Terphenyl</i>		<i>81 %</i>				
			<i>Limits</i>			
			<i>40-140</i>			



*CERTIFICATE OF ANALYSIS*

Client Name: RC & D  
Client Project ID: Lincoln Lace  
Client Sample ID: 1006-Read-TS01  
Date Sampled: 11/10/10 09:00  
Percent Solids: 84  
Initial Volume: 14.7  
Final Volume: 0.5  
Extraction Method: 3546

ESS Laboratory Work Order: 1011142  
ESS Laboratory Sample ID: 1011142-02  
Sample Matrix: Soil  
Units: mg/kg dry  
Analyst: IBM  
Prepared: 11/10/10 18:00

**8270C Semi-Volatile Organic Compounds**

<u>Analyte</u>	<u>Results (MRL)</u>	<u>RI - RES DEC</u>		<u>Analyzed</u>	<u>Sequence</u>	<u>Batch</u>
		<u>Limit</u>	<u>DF</u>			
1,1-Biphenyl	ND (0.405)	0.8	1	11/11/10 14:52	CTK0084	CK01023
1,2,4-Trichlorobenzene	ND (0.405)	96	1	11/11/10 14:52	CTK0084	CK01023
1,2-Dichlorobenzene	ND (0.405)	510	1	11/11/10 14:52	CTK0084	CK01023
1,3-Dichlorobenzene	ND (0.405)	430	1	11/11/10 14:52	CTK0084	CK01023
1,4-Dichlorobenzene	ND (0.405)	27	1	11/11/10 14:52	CTK0084	CK01023
2,3,4,6-Tetrachlorophenol	ND (2.03)		1	11/11/10 14:52	CTK0084	CK01023
2,4,5-Trichlorophenol	ND (0.405)	330	1	11/11/10 14:52	CTK0084	CK01023
2,4,6-Trichlorophenol	ND (0.405)	58	1	11/11/10 14:52	CTK0084	CK01023
2,4-Dichlorophenol	ND (0.405)	30	1	11/11/10 14:52	CTK0084	CK01023
2,4-Dimethylphenol	ND (0.405)	1400	1	11/11/10 14:52	CTK0084	CK01023
2,4-Dinitrophenol	ND (2.03)	160	1	11/11/10 14:52	CTK0084	CK01023
2,4-Dinitrotoluene	ND (0.405)	0.9	1	11/11/10 14:52	CTK0084	CK01023
2,6-Dinitrotoluene	ND (0.405)		1	11/11/10 14:52	CTK0084	CK01023
2-Chloronaphthalene	ND (0.405)		1	11/11/10 14:52	CTK0084	CK01023
2-Chlorophenol	ND (0.405)	50	1	11/11/10 14:52	CTK0084	CK01023
2-Methylnaphthalene	ND (0.405)	123	1	11/11/10 14:52	CTK0084	CK01023
2-Methylphenol	ND (0.405)		1	11/11/10 14:52	CTK0084	CK01023
2-Nitroaniline	ND (0.405)		1	11/11/10 14:52	CTK0084	CK01023
2-Nitrophenol	ND (0.405)		1	11/11/10 14:52	CTK0084	CK01023
3,3'-Dichlorobenzidine	ND (0.810)	1.4	1	11/11/10 14:52	CTK0084	CK01023
3+4-Methylphenol	ND (0.810)		1	11/11/10 14:52	CTK0084	CK01023
3-Nitroaniline	ND (0.405)		1	11/11/10 14:52	CTK0084	CK01023
4,6-Dinitro-2-Methylphenol	ND (2.03)		1	11/11/10 14:52	CTK0084	CK01023
4-Bromophenyl-phenylether	ND (0.405)		1	11/11/10 14:52	CTK0084	CK01023
4-Chloro-3-Methylphenol	ND (0.405)		1	11/11/10 14:52	CTK0084	CK01023
4-Chloroaniline	ND (0.810)	310	1	11/11/10 14:52	CTK0084	CK01023
4-Chloro-phenyl-phenyl ether	ND (0.405)		1	11/11/10 14:52	CTK0084	CK01023
4-Nitroaniline	ND (0.405)		1	11/11/10 14:52	CTK0084	CK01023
4-Nitrophenol	ND (2.03)		1	11/11/10 14:52	CTK0084	CK01023
Acenaphthene	ND (0.405)	43	1	11/11/10 14:52	CTK0084	CK01023
Acenaphthylene	ND (0.405)	23	1	11/11/10 14:52	CTK0084	CK01023



## CERTIFICATE OF ANALYSIS

Client Name: RC & D  
 Client Project ID: Lincoln Lace  
 Client Sample ID: 1006-Read-TS01  
 Date Sampled: 11/10/10 09:00  
 Percent Solids: 84  
 Initial Volume: 14.7  
 Final Volume: 0.5  
 Extraction Method: 3546

ESS Laboratory Work Order: 1011142  
 ESS Laboratory Sample ID: 1011142-02  
 Sample Matrix: Soil  
 Units: mg/kg dry  
 Analyst: IBM  
 Prepared: 11/10/10 18:00

### 8270C Semi-Volatile Organic Compounds

Analyte	Results (MRL)	RI - RES DEC		Analyzed	Sequence	Batch
		Limit	DF			
Acetophenone	ND (0.810)		1	11/11/10 14:52	CTK0084	CK01023
Aniline	ND (0.810)		1	11/11/10 14:52	CTK0084	CK01023
Anthracene	ND (0.405)	35	1	11/11/10 14:52	CTK0084	CK01023
Azobenzene	ND (0.405)		1	11/11/10 14:52	CTK0084	CK01023
Benzo(a)anthracene	ND (0.405)	0.9	1	11/11/10 14:52	CTK0084	CK01023
Benzo(a)pyrene	ND (0.203)	0.4	1	11/11/10 14:52	CTK0084	CK01023
Benzo(b)fluoranthene	ND (0.405)	0.9	1	11/11/10 14:52	CTK0084	CK01023
Benzo(g,h,i)perylene	ND (0.405)	0.8	1	11/11/10 14:52	CTK0084	CK01023
Benzo(k)fluoranthene	ND (0.405)	0.9	1	11/11/10 14:52	CTK0084	CK01023
Benzoic Acid	ND (2.03)		1	11/11/10 14:52	CTK0084	CK01023
Benzyl Alcohol	ND (0.405)		1	11/11/10 14:52	CTK0084	CK01023
bis(2-Chloroethoxy)methane	ND (0.405)		1	11/11/10 14:52	CTK0084	CK01023
bis(2-Chloroethyl)ether	ND (0.405)	0.6	1	11/11/10 14:52	CTK0084	CK01023
bis(2-chloroisopropyl)Ether	ND (0.405)	9.1	1	11/11/10 14:52	CTK0084	CK01023
bis(2-Ethylhexyl)phthalate	ND (0.405)	46	1	11/11/10 14:52	CTK0084	CK01023
Butylbenzylphthalate	ND (0.405)		1	11/11/10 14:52	CTK0084	CK01023
Carbazole	ND (0.405)		1	11/11/10 14:52	CTK0084	CK01023
Chrysene	ND (0.203)	0.4	1	11/11/10 14:52	CTK0084	CK01023
Dibenzo(a,h)Anthracene	ND (0.203)	0.4	1	11/11/10 14:52	CTK0084	CK01023
Dibenzofuran	ND (0.405)		1	11/11/10 14:52	CTK0084	CK01023
Diethylphthalate	ND (0.405)	340	1	11/11/10 14:52	CTK0084	CK01023
Dimethylphthalate	ND (0.405)	1900	1	11/11/10 14:52	CTK0084	CK01023
Di-n-butylphthalate	ND (0.405)		1	11/11/10 14:52	CTK0084	CK01023
Di-n-octylphthalate	ND (0.405)		1	11/11/10 14:52	CTK0084	CK01023
Fluoranthene	ND (0.405)	20	1	11/11/10 14:52	CTK0084	CK01023
Fluorene	ND (0.405)	28	1	11/11/10 14:52	CTK0084	CK01023
Hexachlorobenzene	ND (0.203)	0.4	1	11/11/10 14:52	CTK0084	CK01023
Hexachlorobutadiene	ND (0.405)	8.2	1	11/11/10 14:52	CTK0084	CK01023
Hexachlorocyclopentadiene	ND (2.03)		1	11/11/10 14:52	CTK0084	CK01023
Hexachloroethane	ND (0.405)	46	1	11/11/10 14:52	CTK0084	CK01023
Indeno(1,2,3-cd)Pyrene	ND (0.405)	0.9	1	11/11/10 14:52	CTK0084	CK01023



**CERTIFICATE OF ANALYSIS**

Client Name: RC & D  
 Client Project ID: Lincoln Lace  
 Client Sample ID: 1006-Read-TS01  
 Date Sampled: 11/10/10 09:00  
 Percent Solids: 84  
 Initial Volume: 14.7  
 Final Volume: 0.5  
 Extraction Method: 3546

ESS Laboratory Work Order: 1011142  
 ESS Laboratory Sample ID: 1011142-02  
 Sample Matrix: Soil  
 Units: mg/kg dry  
 Analyst: IBM  
 Prepared: 11/10/10 18:00

**8270C Semi-Volatile Organic Compounds**

<u>Analyte</u>	<u>Results (MRL)</u>	<u>RI - RES DEC</u>		<u>Analyzed</u>	<u>Sequence</u>	<u>Batch</u>
		<u>Limit</u>	<u>DF</u>			
Isophorone	ND (0.405)		1	11/11/10 14:52	CTK0084	CK01023
Naphthalene	ND (0.405)	54	1	11/11/10 14:52	CTK0084	CK01023
Nitrobenzene	ND (0.405)		1	11/11/10 14:52	CTK0084	CK01023
N-Nitrosodimethylamine	ND (0.405)		1	11/11/10 14:52	CTK0084	CK01023
N-Nitroso-Di-n-Propylamine	ND (0.405)		1	11/11/10 14:52	CTK0084	CK01023
N-nitrosodiphenylamine	ND (0.405)		1	11/11/10 14:52	CTK0084	CK01023
Pentachlorophenol	ND (2.03)	5.3	1	11/11/10 14:52	CTK0084	CK01023
Phenanthrene	ND (0.405)	40	1	11/11/10 14:52	CTK0084	CK01023
Phenol	ND (0.405)	6000	1	11/11/10 14:52	CTK0084	CK01023
Pyrene	ND (0.405)	13	1	11/11/10 14:52	CTK0084	CK01023
Pyridine	ND (2.03)		1	11/11/10 14:52	CTK0084	CK01023

	<u>%Recovery</u>	<u>Qualifier</u>	<u>Limits</u>
Surrogate: 1,2-Dichlorobenzene-d4	81 %		30-130
Surrogate: 2,4,6-Tribromophenol	91 %		30-130
Surrogate: 2-Chlorophenol-d4	78 %		30-130
Surrogate: 2-Fluorobiphenyl	79 %		30-130
Surrogate: 2-Fluorophenol	78 %		30-130
Surrogate: Nitrobenzene-d5	83 %		30-130
Surrogate: Phenol-d6	82 %		30-130
Surrogate: p-Terphenyl-d14	86 %		30-130



*CERTIFICATE OF ANALYSIS*

Client Name: RC & D  
 Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1011142

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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3050B/6000/7000 Total Metals

Batch CK01016 - 3050B

**Blank**

Antimony	ND	5.0	mg/kg wet
Arsenic	ND	2.5	mg/kg wet
Beryllium	ND	0.10	mg/kg wet
Cadmium	ND	0.50	mg/kg wet
Chromium	ND	1.0	mg/kg wet
Copper	ND	2.5	mg/kg wet
Lead	ND	5.0	mg/kg wet
Nickel	ND	2.5	mg/kg wet
Selenium	ND	5.0	mg/kg wet
Silver	ND	0.50	mg/kg wet
Thallium	ND	0.25	mg/kg wet
Zinc	ND	2.5	mg/kg wet

**LCS**

Antimony	90.9	17.2	mg/kg wet	121.0	75	50-219
Arsenic	98.0	8.6	mg/kg wet	109.0	90	80-120
Beryllium	81.9	0.36	mg/kg wet	92.10	89	80-120
Cadmium	102	1.73	mg/kg wet	110.0	93	80-120
Chromium	86.0	3.4	mg/kg wet	93.40	92	80-120
Copper	69.3	8.6	mg/kg wet	74.70	93	80-120
Lead	150	17.2	mg/kg wet	152.0	99	80-120
Nickel	105	8.6	mg/kg wet	109.0	96	80-120
Selenium	201	17.2	mg/kg wet	207.0	97	80-120
Silver	49.0	1.73	mg/kg wet	51.90	94	80-120
Thallium	167	42.7	mg/kg wet	171.0	98	80-120
Zinc	259	8.6	mg/kg wet	299.0	66	80-120

**LCS Dup**

Antimony	101	17.6	mg/kg wet	121.0	83	50-219	11	20
Arsenic	101	8.8	mg/kg wet	109.0	93	80-120	3	20
Beryllium	84.2	0.37	mg/kg wet	92.10	91	80-120	3	20
Cadmium	105	1.76	mg/kg wet	110.0	95	80-120	2	20
Chromium	87.4	3.5	mg/kg wet	93.40	94	80-120	2	20
Copper	70.4	8.8	mg/kg wet	74.70	94	80-120	2	20
Lead	155	17.6	mg/kg wet	152.0	102	80-120	3	20
Nickel	106	8.8	mg/kg wet	109.0	98	80-120	2	20
Selenium	209	17.6	mg/kg wet	207.0	101	80-120	4	20
Silver	49.3	1.76	mg/kg wet	51.90	95	80-120	0.6	20
Thallium	178	43.4	mg/kg wet	171.0	104	80-120	6	20
Zinc	264	8.8	mg/kg wet	299.0	88	80-120	2	20

**Duplicate Source: 1011142-02**

Antimony	ND	5.9	mg/kg dry	ND				35
Arsenic	0.563	2.9	mg/kg dry	ND				35
Beryllium	0.313	0.12	mg/kg dry	0.316			0.9	35
Cadmium	ND	0.59	mg/kg dry	ND				35
Chromium	8.54	1.2	mg/kg dry	8.48			0.8	35



CERTIFICATE OF ANALYSIS

Client Name: RC & D  
Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1011142

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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3050B/6000/7000 Total Metals

Batch CK01016 - 3050B

Copper	6.33	2.9	mg/kg dry		6.19			2	35	
Lead	14.5	5.9	mg/kg dry		14.2			2	35	
Nickel	6.07	2.9	mg/kg dry		5.76			5	35	
Selenium	2.67	5.9	mg/kg dry		3.65			31	35	
Silver	ND	0.59	mg/kg dry		ND				35	
Thallium	ND	1.45	mg/kg dry		ND				35	
Zinc	19.5	2.9	mg/kg dry		18.6			5	35	

Matrix Spike Source: 1011142-02

Antimony	9.59	5.3	mg/kg dry	26.57	ND	36	75-125			M-
Arsenic	21.5	2.7	mg/kg dry	26.57	ND	81	75-125			
Beryllium	2.64	0.11	mg/kg dry	2.657	0.316	88	75-125			
Cadmium	11.1	0.53	mg/kg dry	13.29	ND	84	75-125			
Chromium	32.1	1.1	mg/kg dry	26.57	8.48	89	75-125			
Copper	30.4	2.7	mg/kg dry	26.57	6.19	91	75-125			
Lead	36.4	5.3	mg/kg dry	26.57	14.2	84	75-125			
Nickel	29.3	2.7	mg/kg dry	26.57	5.76	89	75-125			
Selenium	46.7	5.3	mg/kg dry	53.15	3.65	81	75-125			
Silver	11.9	0.53	mg/kg dry	13.29	ND	90	75-125			
Thallium	23.5	5.26	mg/kg dry	26.57	ND	88	75-125			
Zinc	42.4	2.7	mg/kg dry	26.57	18.6	89	75-125			

Batch CK01017 - 7471A

Blank										
Mercury	ND	0.033	mg/kg wet							
LCS										
Mercury	19.4	1.48	mg/kg wet	16.30		119	80-120			
LCS Dup										
Mercury	19.5	1.57	mg/kg wet	16.30		120	80-120	0.5	20	
Duplicate										
Mercury	0.0427	0.033	mg/kg dry		0.0453			6	35	
Matrix Spike										
Mercury	0.236	0.035	mg/kg dry	0.2132	0.0453	90	75-125			
Matrix Spike Dup										
Mercury	0.225	0.031	mg/kg dry	0.1855	0.0453	97	75-125	5	35	

5035/8260B Volatile Organic Compounds / Low Level

Batch CK01013 - 5035

Blank										
1,1,1,2-Tetrachloroethane	ND	0.0050	mg/kg wet							
1,1,1-Trichloroethane	ND	0.0050	mg/kg wet							
1,1,2,2-Tetrachloroethane	ND	0.0050	mg/kg wet							
1,1,2-Trichloroethane	ND	0.0050	mg/kg wet							
1,1-Dichloroethane	ND	0.0050	mg/kg wet							
1,1-Dichloroethene	ND	0.0050	mg/kg wet							





*CERTIFICATE OF ANALYSIS*

Client Name: RC & D  
Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1011142

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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**5035/8260B Volatile Organic Compounds / Low Level**

**Batch CK01013 - 5035**

1,1-Dichloropropene	ND	0.0050	mg/kg wet							
1,2,3-Trichlorobenzene	ND	0.0050	mg/kg wet							
1,2,3-Trichloropropane	ND	0.0050	mg/kg wet							
1,2,4-Trichlorobenzene	ND	0.0050	mg/kg wet							
1,2,4-Trimethylbenzene	ND	0.0050	mg/kg wet							
1,2-Dibromo-3-Chloropropane	ND	0.0050	mg/kg wet							
1,2-Dibromoethane	ND	0.0050	mg/kg wet							
1,2-Dichlorobenzene	ND	0.0050	mg/kg wet							
1,2-Dichloroethane	ND	0.0050	mg/kg wet							
1,2-Dichloropropane	ND	0.0050	mg/kg wet							
1,3,5-Trimethylbenzene	ND	0.0050	mg/kg wet							
1,3-Dichlorobenzene	ND	0.0050	mg/kg wet							
1,3-Dichloropropane	ND	0.0050	mg/kg wet							
1,4-Dichlorobenzene	ND	0.0050	mg/kg wet							
1,4-Dioxane	ND	0.100	mg/kg wet							
1-Chlorohexane	ND	0.0050	mg/kg wet							
2,2-Dichloropropane	ND	0.0050	mg/kg wet							
2-Butanone	ND	0.0500	mg/kg wet							
2-Chlorotoluene	ND	0.0050	mg/kg wet							
2-Hexanone	ND	0.0500	mg/kg wet							
4-Chlorotoluene	ND	0.0050	mg/kg wet							
4-Isopropyltoluene	ND	0.0050	mg/kg wet							
4-Methyl-2-Pentanone	ND	0.0500	mg/kg wet							
Acetone	ND	0.0500	mg/kg wet							
Benzene	ND	0.0050	mg/kg wet							
Bromobenzene	ND	0.0050	mg/kg wet							
Bromochloromethane	ND	0.0050	mg/kg wet							
Bromodichloromethane	ND	0.0050	mg/kg wet							
Bromoform	ND	0.0050	mg/kg wet							
Bromomethane	ND	0.0100	mg/kg wet							
Carbon Disulfide	ND	0.0050	mg/kg wet							
Carbon Tetrachloride	ND	0.0050	mg/kg wet							
Chlorobenzene	ND	0.0050	mg/kg wet							
Chloroethane	ND	0.0100	mg/kg wet							
Chloroform	ND	0.0050	mg/kg wet							
Chloromethane	ND	0.0100	mg/kg wet							
cis-1,2-Dichloroethene	ND	0.0050	mg/kg wet							
cis-1,3-Dichloropropene	ND	0.0050	mg/kg wet							
Dibromochloromethane	ND	0.0050	mg/kg wet							
Dibromomethane	ND	0.0050	mg/kg wet							
Dichlorodifluoromethane	ND	0.0100	mg/kg wet							
Diethyl Ether	ND	0.0050	mg/kg wet							
Di-Isopropyl ether	ND	0.0050	mg/kg wet							
Ethyl tertiary-butyl ether	ND	0.0050	mg/kg wet							
Ethylbenzene	ND	0.0050	mg/kg wet							



**CERTIFICATE OF ANALYSIS**

Client Name: RC & D  
Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1011142

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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**5035/8260B Volatile Organic Compounds / Low Level**

Batch CK01013 - 5035

Hexachlorobutadiene	ND	0.0050	mg/kg wet							
Isopropylbenzene	ND	0.0050	mg/kg wet							
Methyl tert-Butyl Ether	ND	0.0050	mg/kg wet							
Methylene Chloride	ND	0.0250	mg/kg wet							
Naphthalene	ND	0.0050	mg/kg wet							
n-Butylbenzene	ND	0.0050	mg/kg wet							
n-Propylbenzene	ND	0.0050	mg/kg wet							
sec-Butylbenzene	ND	0.0050	mg/kg wet							
Styrene	ND	0.0050	mg/kg wet							
tert-Butylbenzene	ND	0.0050	mg/kg wet							
Tertiary-amyli methyl ether	ND	0.0050	mg/kg wet							
Tetrachloroethene	ND	0.0050	mg/kg wet							
Tetrahydrofuran	ND	0.0050	mg/kg wet							
Toluene	ND	0.0050	mg/kg wet							
trans-1,2-Dichloroethene	ND	0.0050	mg/kg wet							
trans-1,3-Dichloropropene	ND	0.0050	mg/kg wet							
Trichloroethene	ND	0.0050	mg/kg wet							
Trichlorofluoromethane	ND	0.0050	mg/kg wet							
Vinyl Acetate	ND	0.0050	mg/kg wet							
Vinyl Chloride	ND	0.0100	mg/kg wet							
Xylene O	ND	0.0050	mg/kg wet							
Xylene P,M	ND	0.0100	mg/kg wet							
Surrogate: 1,2-Dichloroethane-d4	0.0472		mg/kg wet	0.05000		94	70-130			
Surrogate: 4-Bromofluorobenzene	0.0456		mg/kg wet	0.05000		91	70-130			
Surrogate: Dibromofluoromethane	0.0471		mg/kg wet	0.05000		94	70-130			
Surrogate: Toluene-d8	0.0469		mg/kg wet	0.05000		94	70-130			

<b>LCS</b>										
1,1,1,2-Tetrachloroethane	0.0479	0.0050	mg/kg wet	0.05000		96	70-130			
1,1,1-Trichloroethane	0.0478	0.0050	mg/kg wet	0.05000		96	70-130			
1,1,2,2-Tetrachloroethane	0.0458	0.0050	mg/kg wet	0.05000		92	70-130			
1,1,2-Trichloroethane	0.0440	0.0050	mg/kg wet	0.05000		88	70-130			
1,1-Dichloroethane	0.0438	0.0050	mg/kg wet	0.05000		88	70-130			
1,1-Dichloroethene	0.0483	0.0050	mg/kg wet	0.05000		97	70-130			
1,1-Dichloropropene	0.0474	0.0050	mg/kg wet	0.05000		95	70-130			
1,2,3-Trichlorobenzene	0.0467	0.0050	mg/kg wet	0.05000		93	70-130			
1,2,3-Trichloropropane	0.0464	0.0050	mg/kg wet	0.05000		93	70-130			
1,2,4-Trichlorobenzene	0.0452	0.0050	mg/kg wet	0.05000		90	70-130			
1,2,4-Trimethylbenzene	0.0478	0.0050	mg/kg wet	0.05000		96	70-130			
1,2-Dibromo-3-Chloropropane	0.0435	0.0050	mg/kg wet	0.05000		87	70-130			
1,2-Dibromoethane	0.0469	0.0050	mg/kg wet	0.05000		94	70-130			
1,2-Dichlorobenzene	0.0457	0.0050	mg/kg wet	0.05000		91	70-130			
1,2-Dichloroethane	0.0439	0.0050	mg/kg wet	0.05000		88	70-130			
1,2-Dichloropropane	0.0435	0.0050	mg/kg wet	0.05000		87	70-130			
1,3,5-Trimethylbenzene	0.0477	0.0050	mg/kg wet	0.05000		95	70-130			
1,3-Dichlorobenzene	0.0472	0.0050	mg/kg wet	0.05000		94	70-130			



*CERTIFICATE OF ANALYSIS*

Client Name: RC & D  
Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1011142

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
<b>5035/8260B Volatile Organic Compounds / Low Level</b>										
<b>Batch CK01013 - 5035</b>										
1,3-Dichloropropane	0.0475	0.0050	mg/kg wet	0.05000		95	70-130			
1,4-Dichlorobenzene	0.0456	0.0050	mg/kg wet	0.05000		91	70-130			
1,4-Dioxane	0.933	0.100	mg/kg wet	1.000		93	70-130			
1-Chlorohexane	0.0515	0.0050	mg/kg wet	0.05000		103	70-130			
2,2-Dichloropropane	0.0496	0.0050	mg/kg wet	0.05000		99	70-130			
2-Butanone	0.229	0.0500	mg/kg wet	0.2500		92	70-130			
2-Chlorotoluene	0.0471	0.0050	mg/kg wet	0.05000		94	70-130			
2-Hexanone	0.245	0.0500	mg/kg wet	0.2500		98	70-130			
4-Chlorotoluene	0.0467	0.0050	mg/kg wet	0.05000		93	70-130			
4-Isopropyltoluene	0.0476	0.0050	mg/kg wet	0.05000		95	70-130			
4-Methyl-2-Pentanone	0.241	0.0500	mg/kg wet	0.2500		96	70-130			
Acetone	0.244	0.0500	mg/kg wet	0.2500		98	70-130			
Benzene	0.0458	0.0050	mg/kg wet	0.05000		92	70-130			
Bromobenzene	0.0475	0.0050	mg/kg wet	0.05000		95	70-130			
Bromochloromethane	0.0434	0.0050	mg/kg wet	0.05000		87	70-130			
Bromodichloromethane	0.0498	0.0050	mg/kg wet	0.05000		100	70-130			
Bromoform	0.0498	0.0050	mg/kg wet	0.05000		100	70-130			
Bromomethane	0.0461	0.0100	mg/kg wet	0.05000		92	70-130			
Carbon Disulfide	0.0488	0.0050	mg/kg wet	0.05000		98	70-130			
Carbon Tetrachloride	0.0483	0.0050	mg/kg wet	0.05000		97	70-130			
Chlorobenzene	0.0464	0.0050	mg/kg wet	0.05000		93	70-130			
Chloroethane	0.0450	0.0100	mg/kg wet	0.05000		90	70-130			
Chloroform	0.0439	0.0050	mg/kg wet	0.05000		88	70-130			
Chloromethane	0.0386	0.0100	mg/kg wet	0.05000		77	70-130			
cis-1,2-Dichloroethene	0.0483	0.0050	mg/kg wet	0.05000		97	70-130			
cis-1,3-Dichloropropene	0.0467	0.0050	mg/kg wet	0.05000		93	70-130			
Dibromochloromethane	0.0504	0.0050	mg/kg wet	0.05000		101	70-130			
Dibromomethane	0.0436	0.0050	mg/kg wet	0.05000		87	70-130			
Dichlorodifluoromethane	0.0417	0.0100	mg/kg wet	0.05000		83	70-130			
Diethyl Ether	0.0495	0.0050	mg/kg wet	0.05000		99	70-130			
Di-Isopropyl ether	0.0463	0.0050	mg/kg wet	0.05000		93	70-130			
Ethyl tertiary-butyl ether	0.0451	0.0050	mg/kg wet	0.05000		90	70-130			
Ethylbenzene	0.0487	0.0050	mg/kg wet	0.05000		97	70-130			
Hexachlorobutadiene	0.0470	0.0050	mg/kg wet	0.05000		94	70-130			
Isopropylbenzene	0.0424	0.0050	mg/kg wet	0.05000		85	70-130			
Methyl tert-Butyl Ether	0.0490	0.0050	mg/kg wet	0.05000		98	70-130			
Methylene Chloride	0.0462	0.0250	mg/kg wet	0.05000		92	70-130			
Naphthalene	0.0475	0.0050	mg/kg wet	0.05000		95	70-130			
n-Butylbenzene	0.0498	0.0050	mg/kg wet	0.05000		100	70-130			
n-Propylbenzene	0.0505	0.0050	mg/kg wet	0.05000		101	70-130			
sec-Butylbenzene	0.0493	0.0050	mg/kg wet	0.05000		99	70-130			
Styrene	0.0485	0.0050	mg/kg wet	0.05000		97	70-130			
tert-Butylbenzene	0.0479	0.0050	mg/kg wet	0.05000		96	70-130			
Tertiary-amyl methyl ether	0.0494	0.0050	mg/kg wet	0.05000		99	70-130			
Tetrachloroethene	0.0453	0.0050	mg/kg wet	0.05000		91	70-130			



**CERTIFICATE OF ANALYSIS**

Client Name: RC & D  
Client Project ID: Lincoln Lacc

ESS Laboratory Work Order: 1011142

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
<b>5035/8260B Volatile Organic Compounds / Low Level</b>										
<b>Batch CK01013 - 5035</b>										
Tetrahydrofuran	0.0523	0.0050	mg/kg wet	0.05000		105	70-130			
Toluene	0.0462	0.0050	mg/kg wet	0.05000		92	70-130			
trans-1,2-Dichloroethene	0.0438	0.0050	mg/kg wet	0.05000		88	70-130			
trans-1,3-Dichloropropene	0.0448	0.0050	mg/kg wet	0.05000		90	70-130			
Trichloroethene	0.0458	0.0050	mg/kg wet	0.05000		92	70-130			
Vinyl Acetate	0.0570	0.0050	mg/kg wet	0.05000		114	70-130			
Vinyl Chloride	0.0441	0.0100	mg/kg wet	0.05000		88	70-130			
Xylene O	0.0454	0.0050	mg/kg wet	0.05000		91	70-130			
Xylene P,M	0.0950	0.0100	mg/kg wet	0.1000		95	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0453		mg/kg wet	0.05000		91	70-130			
Surrogate: 4-Bromofluorobenzene	0.0473		mg/kg wet	0.05000		95	70-130			
Surrogate: Dibromofluoromethane	0.0471		mg/kg wet	0.05000		94	70-130			
Surrogate: Toluene-d8	0.0477		mg/kg wet	0.05000		95	70-130			
<b>LCS Dup</b>										
1,1,1,2-Tetrachloroethane	0.0476	0.0050	mg/kg wet	0.05000		95	70-130	0.6	25	
1,1,1-Trichloroethane	0.0469	0.0050	mg/kg wet	0.05000		94	70-130	2	25	
1,1,2,2-Tetrachloroethane	0.0465	0.0050	mg/kg wet	0.05000		93	70-130	2	25	
1,1,2-Trichloroethane	0.0450	0.0050	mg/kg wet	0.05000		90	70-130	2	25	
1,1-Dichloroethane	0.0437	0.0050	mg/kg wet	0.05000		87	70-130	0.4	25	
1,1-Dichloroethene	0.0428	0.0050	mg/kg wet	0.05000		86	70-130	12	25	
1,1-Dichloropropene	0.0467	0.0050	mg/kg wet	0.05000		93	70-130	1	25	
1,2,3-Trichlorobenzene	0.0458	0.0050	mg/kg wet	0.05000		92	70-130	2	25	
1,2,3-Trichloropropene	0.0563	0.0050	mg/kg wet	0.05000		113	70-130	19	25	
1,2,4-Trichlorobenzene	0.0444	0.0050	mg/kg wet	0.05000		89	70-130	2	25	
1,2,4-Trimethylbenzene	0.0472	0.0050	mg/kg wet	0.05000		94	70-130	1	25	
1,2-Dibromo-3-Chloropropane	0.0441	0.0050	mg/kg wet	0.05000		88	70-130	1	25	
1,2-Dibromoethane	0.0473	0.0050	mg/kg wet	0.05000		95	70-130	0.8	25	
1,2-Dichlorobenzene	0.0461	0.0050	mg/kg wet	0.05000		92	70-130	0.8	25	
1,2-Dichloroethane	0.0452	0.0050	mg/kg wet	0.05000		90	70-130	3	25	
1,2-Dichloropropane	0.0444	0.0050	mg/kg wet	0.05000		89	70-130	2	25	
1,3,5-Trimethylbenzene	0.0478	0.0050	mg/kg wet	0.05000		96	70-130	0.2	25	
1,3-Dichlorobenzene	0.0468	0.0050	mg/kg wet	0.05000		94	70-130	0.7	25	
1,3-Dichloropropane	0.0467	0.0050	mg/kg wet	0.05000		93	70-130	2	25	
1,4-Dichlorobenzene	0.0454	0.0050	mg/kg wet	0.05000		91	70-130	0.6	25	
1,4-Dioxane	1.11	0.100	mg/kg wet	1.000		111	70-130	17	20	
1-Chlorohexane	0.0497	0.0050	mg/kg wet	0.05000		99	70-130	4	25	
2,2-Dichloropropane	0.0482	0.0050	mg/kg wet	0.05000		96	70-130	3	25	
2-Butanone	0.230	0.0500	mg/kg wet	0.2500		92	70-130	0.3	25	
2-Chlorotoluene	0.0478	0.0050	mg/kg wet	0.05000		96	70-130	1	25	
2-Hexanone	0.255	0.0500	mg/kg wet	0.2500		102	70-130	4	25	
4-Chlorotoluene	0.0464	0.0050	mg/kg wet	0.05000		93	70-130	0.7	25	
4-Isopropyltoluene	0.0471	0.0050	mg/kg wet	0.05000		94	70-130	1	25	
4-Methyl-2-Pentanone	0.248	0.0500	mg/kg wet	0.2500		99	70-130	3	25	
Acetone	0.231	0.0500	mg/kg wet	0.2500		92	70-130	6	25	
Benzene	0.0456	0.0050	mg/kg wet	0.05000		91	70-130	0.4	25	



CERTIFICATE OF ANALYSIS

Client Name: RC & D  
Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1011142

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
<b>5035/8260B Volatile Organic Compounds / Low Level</b>										
<b>Batch CK01013 - 5035</b>										
Bromobenzene	0.0474	0.0050	mg/kg wet	0.05000	95	70-130	0.3	25		
Bromochloromethane	0.0446	0.0050	mg/kg wet	0.05000	89	70-130	3	25		
Bromodichloromethane	0.0487	0.0050	mg/kg wet	0.05000	97	70-130	2	25		
Bromoform	0.0490	0.0050	mg/kg wet	0.05000	98	70-130	2	25		
Bromomethane	0.0458	0.0100	mg/kg wet	0.05000	92	70-130	0.7	25		
Carbon Disulfide	0.0495	0.0050	mg/kg wet	0.05000	99	70-130	1	25		
Carbon Tetrachloride	0.0475	0.0050	mg/kg wet	0.05000	95	70-130	2	25		
Chlorobenzene	0.0463	0.0050	mg/kg wet	0.05000	93	70-130	0.4	25		
Chloroethane	0.0440	0.0100	mg/kg wet	0.05000	88	70-130	2	25		
Chloroform	0.0435	0.0050	mg/kg wet	0.05000	87	70-130	1	25		
Chloromethane	0.0387	0.0100	mg/kg wet	0.05000	77	70-130	0.4	25		
cis-1,2-Dichloroethene	0.0485	0.0050	mg/kg wet	0.05000	97	70-130	0.3	25		
cis-1,3-Dichloropropene	0.0460	0.0050	mg/kg wet	0.05000	92	70-130	2	25		
Dibromochloromethane	0.0500	0.0050	mg/kg wet	0.05000	100	70-130	0.8	25		
Dibromomethane	0.0437	0.0050	mg/kg wet	0.05000	87	70-130	0.3	25		
Dichlorodifluoromethane	0.0419	0.0100	mg/kg wet	0.05000	84	70-130	0.6	25		
Diethyl Ether	0.0469	0.0050	mg/kg wet	0.05000	94	70-130	5	25		
Diisopropyl ether	0.0461	0.0050	mg/kg wet	0.05000	92	70-130	0.5	25		
Ethyl tertiary-butyl ether	0.0452	0.0050	mg/kg wet	0.05000	90	70-130	0.04	25		
Ethylbenzene	0.0479	0.0050	mg/kg wet	0.05000	96	70-130	2	25		
Hexachlorobutadiene	0.0460	0.0050	mg/kg wet	0.05000	92	70-130	2	25		
Isopropylbenzene	0.0426	0.0050	mg/kg wet	0.05000	85	70-130	0.6	25		
Methyl tert-Butyl Ether	0.0493	0.0050	mg/kg wet	0.05000	99	70-130	0.6	25		
Methylene Chloride	0.0461	0.0250	mg/kg wet	0.05000	92	70-130	0.09	25		
Naphthalene	0.0474	0.0050	mg/kg wet	0.05000	95	70-130	0.2	25		
n-Butylbenzene	0.0492	0.0050	mg/kg wet	0.05000	98	70-130	1	25		
n-Propylbenzene	0.0503	0.0050	mg/kg wet	0.05000	101	70-130	0.4	25		
sec-Butylbenzene	0.0487	0.0050	mg/kg wet	0.05000	97	70-130	1	25		
Styrene	0.0488	0.0050	mg/kg wet	0.05000	98	70-130	0.7	25		
tert-Butylbenzene	0.0478	0.0050	mg/kg wet	0.05000	96	70-130	0.3	25		
Tertiary-amyl methyl ether	0.0481	0.0050	mg/kg wet	0.05000	96	70-130	3	25		
Tetrachloroethene	0.0449	0.0050	mg/kg wet	0.05000	90	70-130	0.8	25		
Tetrahydrofuran	0.0534	0.0050	mg/kg wet	0.05000	107	70-130	2	25		
Toluene	0.0464	0.0050	mg/kg wet	0.05000	93	70-130	0.5	25		
trans-1,2-Dichloroethene	0.0438	0.0050	mg/kg wet	0.05000	88	70-130	0	25		
trans-1,3-Dichloropropene	0.0438	0.0050	mg/kg wet	0.05000	88	70-130	2	25		
Trichloroethene	0.0447	0.0050	mg/kg wet	0.05000	89	70-130	2	25		
Vinyl Acetate	0.0567	0.0050	mg/kg wet	0.05000	113	70-130	0.4	25		
Vinyl Chloride	0.0446	0.0100	mg/kg wet	0.05000	89	70-130	1	25		
Xylene O	0.0466	0.0050	mg/kg wet	0.05000	93	70-130	3	25		
Xylene P,M	0.0953	0.0100	mg/kg wet	0.1000	95	70-130	0.3	25		
Surrogate: 1,2-Dichloroethane-d4	0.0462		mg/kg wet	0.05000	92	70-130				
Surrogate: 4-Bromofluorobenzene	0.0475		mg/kg wet	0.05000	95	70-130				
Surrogate: Dibromofluoromethane	0.0468		mg/kg wet	0.05000	94	70-130				
Surrogate: Toluene-d8	0.0481		mg/kg wet	0.05000	96	70-130				



**CERTIFICATE OF ANALYSIS**

Client Name: RC & D  
 Client Project ID: Lincoln Lacc

ESS Laboratory Work Order: 1011142

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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**8100M Total Petroleum Hydrocarbons**

Batch CK01024 - 3546

Blank										
Decane (C10)	ND	0.2	mg/kg wet							
Docosane (C22)	ND	0.2	mg/kg wet							
Dodecane (C12)	ND	0.2	mg/kg wet							
Eicosane (C20)	ND	0.2	mg/kg wet							
Hexacosane (C26)	ND	0.2	mg/kg wet							
Hexadecane (C16)	ND	0.2	mg/kg wet							
Nonadecane (C19)	ND	0.2	mg/kg wet							
Nonane (C9)	ND	0.2	mg/kg wet							
Octacosane (C28)	ND	0.2	mg/kg wet							
Octadecane (C18)	ND	0.2	mg/kg wet							
Tetracosane (C24)	ND	0.2	mg/kg wet							
Tetradecane (C14)	ND	0.2	mg/kg wet							
Total Petroleum Hydrocarbons	ND	37.5	mg/kg wet							
Triacontane (C30)	ND	0.2	mg/kg wet							

Surrogate: O-Terphenyl 3.83 mg/kg wet 5.000 77 40-140

LCS										
Decane (C10)	1.7	0.2	mg/kg wet	2.500		67	40-140			
Docosane (C22)	1.9	0.2	mg/kg wet	2.500		76	40-140			
Dodecane (C12)	1.9	0.2	mg/kg wet	2.500		75	40-140			
Eicosane (C20)	2.0	0.2	mg/kg wet	2.500		79	40-140			
Hexacosane (C26)	1.9	0.2	mg/kg wet	2.500		77	40-140			
Hexadecane (C16)	2.0	0.2	mg/kg wet	2.500		78	40-140			
Nonadecane (C19)	2.0	0.2	mg/kg wet	2.500		80	40-140			
Nonane (C9)	1.4	0.2	mg/kg wet	2.500		56	30-140			
Octacosane (C28)	1.9	0.2	mg/kg wet	2.500		77	40-140			
Octadecane (C18)	2.0	0.2	mg/kg wet	2.500		79	40-140			
Tetracosane (C24)	2.0	0.2	mg/kg wet	2.500		78	40-140			
Tetradecane (C14)	1.9	0.2	mg/kg wet	2.500		76	40-140			
Total Petroleum Hydrocarbons	24.0	37.5	mg/kg wet	35.00		69	40-140			
Triacontane (C30)	1.9	0.2	mg/kg wet	2.500		76	40-140			

Surrogate: O-Terphenyl 3.72 mg/kg wet 5.000 74 40-140

LCS Dup										
Decane (C10)	1.7	0.2	mg/kg wet	2.500		69	40-140	3	50	
Docosane (C22)	2.0	0.2	mg/kg wet	2.500		80	40-140	5	50	
Dodecane (C12)	1.9	0.2	mg/kg wet	2.500		77	40-140	3	50	
Eicosane (C20)	2.1	0.2	mg/kg wet	2.500		83	40-140	5	50	
Hexacosane (C26)	2.0	0.2	mg/kg wet	2.500		82	40-140	5	50	
Hexadecane (C16)	2.0	0.2	mg/kg wet	2.500		80	40-140	2	50	
Nonadecane (C19)	2.1	0.2	mg/kg wet	2.500		83	40-140	5	50	
Nonane (C9)	1.4	0.2	mg/kg wet	2.500		56	30-140	0.004	50	
Octacosane (C28)	2.0	0.2	mg/kg wet	2.500		81	40-140	5	50	
Octadecane (C18)	2.1	0.2	mg/kg wet	2.500		82	40-140	4	50	



**CERTIFICATE OF ANALYSIS**

Client Name: RC & D  
Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1011142

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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**8100M Total Petroleum Hydrocarbons**

**Batch CK01024 - 3546**

Tetracosane (C24)	2.1	0.2	mg/kg wet	2.500		83	40-140	5	50	
Tetradecane (C14)	2.0	0.2	mg/kg wet	2.500		78	40-140	3	50	
Total Petroleum Hydrocarbons	25.1	37.5	mg/kg wet	35.00		72	40-140	5	50	
Triacotane (C30)	2.0	0.2	mg/kg wet	2.500		80	40-140	5	50	

*Surrogate: O-Terphenyl*

3.84 mg/kg wet 5.000 77 40-140

**Matrix Spike Source: 1011142-01**

Decane (C10)	1.9	0.2	mg/kg dry	2.686	ND	72	40-140			
Docosane (C22)	2.1	0.2	mg/kg dry	2.686	ND	79	40-140			
Dodecane (C12)	2.2	0.2	mg/kg dry	2.686	ND	80	40-140			
Eicosane (C20)	2.2	0.2	mg/kg dry	2.686	ND	82	40-140			
Hexacosane (C26)	2.2	0.2	mg/kg dry	2.686	ND	81	40-140			
Hexadecane (C16)	2.2	0.2	mg/kg dry	2.686	ND	83	40-140			
Nonadecane (C19)	2.2	0.2	mg/kg dry	2.686	ND	83	40-140			
Nonane (C9)	1.6	0.2	mg/kg dry	2.686	ND	60	30-140			
Octacosane (C28)	2.2	0.2	mg/kg dry	2.686	ND	80	40-140			
Octadecane (C18)	2.2	0.2	mg/kg dry	2.686	ND	82	40-140			
Tetracosane (C24)	2.2	0.2	mg/kg dry	2.686	ND	82	40-140			
Tetradecane (C14)	2.2	0.2	mg/kg dry	2.686	ND	81	40-140			
Total Petroleum Hydrocarbons	27.8	40.3	mg/kg dry	37.61	ND	74	40-140			
Triacotane (C30)	2.1	0.2	mg/kg dry	2.686	ND	79	40-140			

*Surrogate: O-Terphenyl*

4.19 mg/kg dry 5.373 78 40-140

**Matrix Spike Dup Source: 1011142-01**

Decane (C10)	1.9	0.2	mg/kg dry	2.660	ND	70	40-140	4	50	
Docosane (C22)	2.1	0.2	mg/kg dry	2.660	ND	81	40-140	1	50	
Dodecane (C12)	2.1	0.2	mg/kg dry	2.660	ND	78	40-140	4	50	
Eicosane (C20)	2.2	0.2	mg/kg dry	2.660	ND	83	40-140	0.8	50	
Hexacosane (C26)	2.2	0.2	mg/kg dry	2.660	ND	83	40-140	2	50	
Hexadecane (C16)	2.2	0.2	mg/kg dry	2.660	ND	83	40-140	0.7	50	
Nonadecane (C19)	2.2	0.2	mg/kg dry	2.660	ND	84	40-140	0.4	50	
Nonane (C9)	1.5	0.2	mg/kg dry	2.660	ND	57	30-140	6	50	
Octacosane (C28)	2.2	0.2	mg/kg dry	2.660	ND	82	40-140	1	50	
Octadecane (C18)	2.2	0.2	mg/kg dry	2.660	ND	83	40-140	0.05	50	
Tetracosane (C24)	2.2	0.2	mg/kg dry	2.660	ND	83	40-140	1	50	
Tetradecane (C14)	2.1	0.2	mg/kg dry	2.660	ND	80	40-140	2	50	
Total Petroleum Hydrocarbons	28.8	39.9	mg/kg dry	37.23	ND	77	40-140	3	50	
Triacotane (C30)	2.2	0.2	mg/kg dry	2.660	ND	82	40-140	2	50	

*Surrogate: O-Terphenyl*

4.23 mg/kg dry 5.319 80 40-140

**8270C Semi-Volatile Organic Compounds**

**Batch CK01023 - 3546**

Blank										
1,1-Biphenyl	ND	0.333	mg/kg wet							



*CERTIFICATE OF ANALYSIS*

Client Name: RC & D  
Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1011142

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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**8270C Semi-Volatile Organic Compounds**

Batch CK01023 - 3546

1,2,4-Trichlorobenzene	ND	0.333	mg/kg wet
1,2-Dichlorobenzene	ND	0.333	mg/kg wet
1,3-Dichlorobenzene	ND	0.333	mg/kg wet
1,4-Dichlorobenzene	ND	0.333	mg/kg wet
2,3,4,6-Tetrachlorophenol	ND	1.67	mg/kg wet
2,4,5-Trichlorophenol	ND	0.333	mg/kg wet
2,4,6-Trichlorophenol	ND	0.333	mg/kg wet
2,4-Dichlorophenol	ND	0.333	mg/kg wet
2,4-Dimethylphenol	ND	0.333	mg/kg wet
2,4-Dinitrophenol	ND	1.67	mg/kg wet
2,4-Dinitrotoluene	ND	0.333	mg/kg wet
2,6-Dinitrotoluene	ND	0.333	mg/kg wet
2-Chloronaphthalene	ND	0.333	mg/kg wet
2-Chlorophenol	ND	0.333	mg/kg wet
2-Methylnaphthalene	ND	0.333	mg/kg wet
2-Methylphenol	ND	0.333	mg/kg wet
2-Nitroaniline	ND	0.333	mg/kg wet
2-Nitrophenol	ND	0.333	mg/kg wet
3,3'-Dichlorobenzidine	ND	0.667	mg/kg wet
3+4-Methylphenol	ND	0.667	mg/kg wet
3-Nitroaniline	ND	0.333	mg/kg wet
4,6-Dinitro-2-Methylphenol	ND	1.67	mg/kg wet
4-Bromophenyl-phenylether	ND	0.333	mg/kg wet
4-Chloro-3-Methylphenol	ND	0.333	mg/kg wet
4-Chloroaniline	ND	0.667	mg/kg wet
4-Chloro-phenyl-phenyl ether	ND	0.333	mg/kg wet
4-Nitroaniline	ND	0.333	mg/kg wet
4-Nitrophenol	ND	1.67	mg/kg wet
Acenaphthene	ND	0.333	mg/kg wet
Acenaphthylene	ND	0.333	mg/kg wet
Acetophenone	ND	0.667	mg/kg wet
Aniline	ND	0.667	mg/kg wet
Anthracene	ND	0.333	mg/kg wet
Azobenzene	ND	0.333	mg/kg wet
Benzo(a)anthracene	ND	0.333	mg/kg wet
Benzo(a)pyrene	ND	0.167	mg/kg wet
Benzo(b)fluoranthene	ND	0.333	mg/kg wet
Benzo(g,h,i)perylene	ND	0.333	mg/kg wet
Benzo(k)fluoranthene	ND	0.333	mg/kg wet
Benzoic Acid	ND	1.67	mg/kg wet
Benzyl Alcohol	ND	0.333	mg/kg wet
bis(2-Chloroethoxy)methane	ND	0.333	mg/kg wet
bis(2-Chloroethyl)ether	ND	0.333	mg/kg wet
bis(2-chloroisopropyl)Ether	ND	0.333	mg/kg wet
bis(2-Ethylhexyl)phthalate	ND	0.333	mg/kg wet





CERTIFICATE OF ANALYSIS

Client Name: RC & D  
Client Project ID: Lincoln Lacey

ESS Laboratory Work Order: 1011142

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
<b>8270C Semi-Volatile Organic Compounds</b>										
<b>Batch CK01023 - 3546</b>										
Butylbenzylphthalate	ND	0.333	mg/kg wet							
Carbazole	ND	0.333	mg/kg wet							
Chrysene	ND	0.167	mg/kg wet							
Dibenzo(a,h)Anthracene	ND	0.167	mg/kg wet							
Dibenzofuran	ND	0.333	mg/kg wet							
Diethylphthalate	ND	0.333	mg/kg wet							
Dimethylphthalate	ND	0.333	mg/kg wet							
Di-n-butylphthalate	ND	0.333	mg/kg wet							
Di-n-octylphthalate	ND	0.333	mg/kg wet							
Fluoranthene	ND	0.333	mg/kg wet							
Fluorene	ND	0.333	mg/kg wet							
Hexachlorobenzene	ND	0.167	mg/kg wet							
Hexachlorobutadiene	ND	0.333	mg/kg wet							
Hexachlorocyclopentadiene	ND	1.67	mg/kg wet							
Hexachloroethane	ND	0.333	mg/kg wet							
Indeno(1,2,3-cd)Pyrene	ND	0.333	mg/kg wet							
Isophorone	ND	0.333	mg/kg wet							
Naphthalene	ND	0.333	mg/kg wet							
Nitrobenzene	ND	0.333	mg/kg wet							
N-Nitrosodimethylamine	ND	0.333	mg/kg wet							
N-Nitroso-Di-n-Propylamine	ND	0.333	mg/kg wet							
N-nitrosodiphenylamine	ND	0.333	mg/kg wet							
Pentachlorophenol	ND	1.67	mg/kg wet							
Phenanthrene	ND	0.333	mg/kg wet							
Phenol	ND	0.333	mg/kg wet							
Pyrene	ND	0.333	mg/kg wet							
Pyridine	ND	1.67	mg/kg wet							
Surrogate: 1,2-Dichlorobenzene-d4	2.15		mg/kg wet	3.333		65	30-130			
Surrogate: 2,4,6-Tribromophenol	3.70		mg/kg wet	5.000		74	30-130			
Surrogate: 2-Chlorophenol-d4	3.02		mg/kg wet	5.000		60	30-130			
Surrogate: 2-Fluorobiphenyl	2.20		mg/kg wet	3.333		66	30-130			
Surrogate: 2-Fluorophenol	2.96		mg/kg wet	5.000		59	30-130			
Surrogate: Nitrobenzene-d5	2.19		mg/kg wet	3.333		66	30-130			
Surrogate: Phenol-d6	3.14		mg/kg wet	5.000		63	30-130			
Surrogate: p-Terphenyl-d14	2.99		mg/kg wet	3.333		90	30-130			
<b>LCS</b>										
1,1-Biphenyl	2.81	0.333	mg/kg wet	3.333		84	40-140			
1,2,4-Trichlorobenzene	2.73	0.333	mg/kg wet	3.333		82	40-140			
1,2-Dichlorobenzene	2.62	0.333	mg/kg wet	3.333		79	40-140			
1,3-Dichlorobenzene	2.62	0.333	mg/kg wet	3.333		79	40-140			
1,4-Dichlorobenzene	2.52	0.333	mg/kg wet	3.333		76	40-140			
2,3,4,6-Tetrachlorophenol	2.84	1.67	mg/kg wet	3.333		85	30-130			
2,4,5-Trichlorophenol	2.75	0.333	mg/kg wet	3.333		83	30-130			
2,4,6-Trichlorophenol	2.84	0.333	mg/kg wet	3.333		85	30-130			
2,4-Dichlorophenol	2.88	0.333	mg/kg wet	3.333		86	30-130			



*CERTIFICATE OF ANALYSIS*

Client Name: RC & D  
Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1011142

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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**8270C Semi-Volatile Organic Compounds**

Batch CK01023 - 3546

2,4-Dimethylphenol	2.76	0.333	mg/kg wet	3.333		83	30-130			
2,4-Dinitrophenol	2.78	1.67	mg/kg wet	3.333		83	30-130			
2,4-Dinitrotoluene	2.88	0.333	mg/kg wet	3.333		87	40-140			
2,6-Dinitrotoluene	2.85	0.333	mg/kg wet	3.333		85	40-140			
2-Chloronaphthalene	2.58	0.333	mg/kg wet	3.333		77	40-140			
2-Chlorophenol	2.59	0.333	mg/kg wet	3.333		78	30-130			
2-Methylnaphthalene	2.87	0.333	mg/kg wet	3.333		86	40-140			
2-Methylphenol	2.59	0.333	mg/kg wet	3.333		78	30-130			
2-Nitroaniline	2.75	0.333	mg/kg wet	3.333		82	40-140			
2-Nitrophenol	2.86	0.333	mg/kg wet	3.333		86	30-130			
3,3'-Dichlorobenzidine	2.69	0.667	mg/kg wet	3.333		81	40-140			
3+4-Methylphenol	6.50	0.667	mg/kg wet	6.667		98	30-130			
3-Nitroaniline	2.71	0.333	mg/kg wet	3.333		81	40-140			
4,6-Dinitro-2-Methylphenol	3.06	1.67	mg/kg wet	3.333		92	30-130			
4-Bromophenyl-phenylether	3.07	0.333	mg/kg wet	3.333		92	40-140			
4-Chloro-3-Methylphenol	2.92	0.333	mg/kg wet	3.333		87	30-130			
4-Chloroaniline	2.33	0.667	mg/kg wet	3.333		70	40-140			
4-Chloro-phenyl-phenyl ether	2.91	0.333	mg/kg wet	3.333		87	40-140			
4-Nitroaniline	2.77	0.333	mg/kg wet	3.333		83	40-140			
4-Nitrophenol	2.52	1.67	mg/kg wet	3.333		75	30-130			
Acenaphthene	2.92	0.333	mg/kg wet	3.333		88	40-140			
Acenaphthylene	2.66	0.333	mg/kg wet	3.333		80	40-140			
Acetophenone	2.60	0.667	mg/kg wet	3.333		78	40-140			
Aniline	2.00	0.667	mg/kg wet	3.333		60	40-140			
Anthracene	3.07	0.333	mg/kg wet	3.333		92	40-140			
Azobenzene	2.62	0.333	mg/kg wet	3.333		79	40-140			
Benzo(a)anthracene	3.16	0.333	mg/kg wet	3.333		95	40-140			
Benzo(a)pyrene	3.19	0.167	mg/kg wet	3.333		96	40-140			
Benzo(b)fluoranthene	3.06	0.333	mg/kg wet	3.333		92	40-140			
Benzo(g,h,i)perylene	3.34	0.333	mg/kg wet	3.333		100	40-140			
Benzo(k)fluoranthene	3.24	0.333	mg/kg wet	3.333		97	40-140			
Benzoic Acid	2.20	1.67	mg/kg wet	3.333		66	40-140			
Benzyl Alcohol	2.67	0.333	mg/kg wet	3.333		80	40-140			
bis(2-Chloroethoxy)methane	2.55	0.333	mg/kg wet	3.333		76	40-140			
bis(2-Chloroethyl)ether	2.29	0.333	mg/kg wet	3.333		69	40-140			
bis(2-chloroisopropyl)Ether	2.59	0.333	mg/kg wet	3.333		78	40-140			
bis(2-Ethylhexyl)phthalate	3.06	0.333	mg/kg wet	3.333		92	40-140			
Butylbenzylphthalate	2.99	0.333	mg/kg wet	3.333		90	40-140			
Carbazole	2.89	0.333	mg/kg wet	3.333		87	40-140			
Chrysene	3.21	0.167	mg/kg wet	3.333		96	40-140			
Dibenzo(a,h)Anthracene	3.41	0.167	mg/kg wet	3.333		102	40-140			
Dibenzofuran	2.68	0.333	mg/kg wet	3.333		80	40-140			
Diethylphthalate	2.85	0.333	mg/kg wet	3.333		85	40-140			
Dimethylphthalate	2.89	0.333	mg/kg wet	3.333		87	40-140			
Di-n-butylphthalate	2.90	0.333	mg/kg wet	3.333		87	40-140			



**CERTIFICATE OF ANALYSIS**

Client Name: RC & D  
Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1011142

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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**8270C Semi-Volatile Organic Compounds**

Batch CK01023 - 3546

Di-n-octylphthalate	3.19	0.333	mg/kg wet	3.333		96	40-140			
Fluoranthene	3.08	0.333	mg/kg wet	3.333		92	40-140			
Fluorene	2.98	0.333	mg/kg wet	3.333		89	40-140			
Hexachlorobenzene	2.98	0.167	mg/kg wet	3.333		89	40-140			
Hexachlorobutadiene	2.79	0.333	mg/kg wet	3.333		84	40-140			
Hexachlorocyclopentadiene	2.50	1.67	mg/kg wet	3.333		75	40-140			
Hexachloroethane	2.27	0.333	mg/kg wet	3.333		68	40-140			
Indeno(1,2,3-cd)Pyrene	3.38	0.333	mg/kg wet	3.333		101	40-140			
Isophorone	2.14	0.333	mg/kg wet	3.333		64	40-140			
Naphthalene	2.73	0.333	mg/kg wet	3.333		82	40-140			
Nitrobenzene	2.62	0.333	mg/kg wet	3.333		79	40-140			
N-Nitrosodimethylamine	1.81	0.333	mg/kg wet	3.333		54	40-140			
N-Nitroso-Di-n-Propylamine	2.30	0.333	mg/kg wet	3.333		69	40-140			
N-nitrosodiphenylamine	3.11	0.333	mg/kg wet	3.333		93	40-140			
Pentachlorophenol	2.98	1.67	mg/kg wet	3.333		89	30-130			
Phenanthrene	2.91	0.333	mg/kg wet	3.333		87	40-140			
Phenol	2.34	0.333	mg/kg wet	3.333		70	30-130			
Pyrene	3.09	0.333	mg/kg wet	3.333		93	40-140			
Pyridine	1.93	1.67	mg/kg wet	3.333		58	40-140			
Surrogate: 1,2-Dichlorobenzene-d4	2.59		mg/kg wet	3.333		78	30-130			
Surrogate: 2,4,6-Tribromophenol	4.69		mg/kg wet	5.000		94	30-130			
Surrogate: 2-Chlorophenol-d4	3.78		mg/kg wet	5.000		76	30-130			
Surrogate: 2-Fluorobiphenyl	2.76		mg/kg wet	3.333		83	30-130			
Surrogate: 2-Fluorophenol	3.67		mg/kg wet	5.000		73	30-130			
Surrogate: Nitrobenzene-d5	2.75		mg/kg wet	3.333		82	30-130			
Surrogate: Phenol-d6	3.95		mg/kg wet	5.000		79	30-130			
Surrogate: p-Terphenyl-d14	3.08		mg/kg wet	3.333		92	30-130			

LCS Dup

1,1-Biphenyl	2.85	0.333	mg/kg wet	3.333		86	40-140	1	30	
1,2,4-Trichlorobenzene	2.81	0.333	mg/kg wet	3.333		84	40-140	3	30	
1,2-Dichlorobenzene	2.71	0.333	mg/kg wet	3.333		81	40-140	3	30	
1,3-Dichlorobenzene	2.72	0.333	mg/kg wet	3.333		82	40-140	4	30	
1,4-Dichlorobenzene	2.60	0.333	mg/kg wet	3.333		78	40-140	3	30	
2,3,4,6-Tetrachlorophenol	3.01	1.67	mg/kg wet	3.333		90	30-130	6	30	
2,4,5-Trichlorophenol	2.85	0.333	mg/kg wet	3.333		85	30-130	3	30	
2,4,6-Trichlorophenol	2.93	0.333	mg/kg wet	3.333		88	30-130	3	30	
2,4-Dichlorophenol	2.91	0.333	mg/kg wet	3.333		87	30-130	1	30	
2,4-Dimethylphenol	2.77	0.333	mg/kg wet	3.333		83	30-130	0.7	30	
2,4-Dinitrophenol	2.93	1.67	mg/kg wet	3.333		88	30-130	5	30	
2,4-Dinitrotoluene	3.06	0.333	mg/kg wet	3.333		92	40-140	6	30	
2,6-Dinitrotoluene	2.95	0.333	mg/kg wet	3.333		89	40-140	4	30	
2-Chloronaphthalene	2.62	0.333	mg/kg wet	3.333		79	40-140	2	30	
2-Chlorophenol	2.62	0.333	mg/kg wet	3.333		79	30-130	0.9	30	
2-Methylnaphthalene	2.84	0.333	mg/kg wet	3.333		85	40-140	0.9	30	
2-Methylphenol	2.58	0.333	mg/kg wet	3.333		78	30-130	0.3	30	



*CERTIFICATE OF ANALYSIS*

Client Name: RC & D  
Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1011142

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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**8270C Semi-Volatile Organic Compounds**

Batch CK01023 - 3546

2-Nitroaniline	2.84	0.333	mg/kg wet	3.333		85	40-140	3	30	
2-Nitrophenol	2.94	0.333	mg/kg wet	3.333		88	30-130	2	30	
3,3'-Dichlorobenzidine	2.52	0.667	mg/kg wet	3.333		76	40-140	6	30	
3+4-Methylphenol	6.40	0.667	mg/kg wet	6.667		96	30-130	2	30	
3-Nitroaniline	2.70	0.333	mg/kg wet	3.333		81	40-140	0.5	30	
4,6-Dinitro-2-Methylphenol	3.13	1.67	mg/kg wet	3.333		94	30-130	2	30	
4-Bromophenyl-phenylether	3.04	0.333	mg/kg wet	3.333		91	40-140	0.8	30	
4-Chloro-3-Methylphenol	2.88	0.333	mg/kg wet	3.333		86	30-130	1	30	
4-Chloroaniline	2.15	0.667	mg/kg wet	3.333		65	40-140	8	30	
4-Chloro-phenyl-phenyl ether	2.99	0.333	mg/kg wet	3.333		90	40-140	3	30	
4-Nitroaniline	2.67	0.333	mg/kg wet	3.333		80	40-140	4	30	
4-Nitrophenol	2.77	1.67	mg/kg wet	3.333		83	30-130	10	30	
Acenaphthene	2.96	0.333	mg/kg wet	3.333		89	40-140	2	30	
Acenaphthylene	2.71	0.333	mg/kg wet	3.333		81	40-140	2	30	
Acetophenone	2.63	0.667	mg/kg wet	3.333		79	40-140	1	30	
Aniline	2.14	0.667	mg/kg wet	3.333		64	40-140	6	30	
Anthracene	3.12	0.333	mg/kg wet	3.333		94	40-140	2	30	
Azobenzene	2.63	0.333	mg/kg wet	3.333		79	40-140	0.6	30	
Benzo(a)anthracene	3.30	0.333	mg/kg wet	3.333		99	40-140	4	30	
Benzo(a)pyrene	3.28	0.167	mg/kg wet	3.333		99	40-140	3	30	
Benzo(b)fluoranthene	3.52	0.333	mg/kg wet	3.333		106	40-140	14	30	
Benzo(g,h,i)perylene	3.44	0.333	mg/kg wet	3.333		103	40-140	3	30	
Benzo(k)fluoranthene	2.93	0.333	mg/kg wet	3.333		88	40-140	10	30	
Benzoic Acid	2.47	1.67	mg/kg wet	3.333		74	40-140	11	30	
Benzyl Alcohol	2.54	0.333	mg/kg wet	3.333		76	40-140	5	30	
bis(2-Chloroethoxy)methane	2.56	0.333	mg/kg wet	3.333		77	40-140	0.6	30	
bis(2-Chloroethyl)ether	2.37	0.333	mg/kg wet	3.333		71	40-140	3	30	
bis(2-chloroisopropyl)Ether	2.63	0.333	mg/kg wet	3.333		79	40-140	2	30	
bis(2-Ethylhexyl)phthalate	3.20	0.333	mg/kg wet	3.333		96	40-140	5	30	
Butylbenzylphthalate	3.14	0.333	mg/kg wet	3.333		94	40-140	5	30	
Carbazole	3.01	0.333	mg/kg wet	3.333		90	40-140	4	30	
Chrysene	3.27	0.167	mg/kg wet	3.333		98	40-140	2	30	
Dibenzo(a,h)Anthracene	3.42	0.167	mg/kg wet	3.333		103	40-140	0.08	30	
Dibenzofuran	2.75	0.333	mg/kg wet	3.333		82	40-140	3	30	
Diethylphthalate	2.99	0.333	mg/kg wet	3.333		90	40-140	5	30	
Dimethylphthalate	2.94	0.333	mg/kg wet	3.333		88	40-140	2	30	
Di-n-butylphthalate	3.03	0.333	mg/kg wet	3.333		91	40-140	4	30	
Di-n-octylphthalate	3.34	0.333	mg/kg wet	3.333		100	40-140	4	30	
Fluoranthene	3.21	0.333	mg/kg wet	3.333		96	40-140	4	30	
Fluorene	3.10	0.333	mg/kg wet	3.333		93	40-140	4	30	
Hexachlorobenzene	3.00	0.167	mg/kg wet	3.333		90	40-140	0.8	30	
Hexachlorobutadiene	2.92	0.333	mg/kg wet	3.333		88	40-140	5	30	
Hexachlorocyclopentadiene	2.71	1.67	mg/kg wet	3.333		81	40-140	8	30	
Hexachloroethane	2.40	0.333	mg/kg wet	3.333		72	40-140	5	30	
Indeno(1,2,3-cd)Pyrene	3.48	0.333	mg/kg wet	3.333		104	40-140	3	30	



CERTIFICATE OF ANALYSIS

Client Name: RC & D  
 Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1011142

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
<b>8270C Semi-Volatile Organic Compounds</b>										
<b>Batch CK01023 - 3546</b>										
Isophorone	2.15	0.333	mg/kg wet	3.333		65	40-140	0.5	30	
Naphthalene	2.83	0.333	mg/kg wet	3.333		85	40-140	4	30	
Nitrobenzene	2.65	0.333	mg/kg wet	3.333		79	40-140	1	30	
N-Nitrosodimethylamine	1.94	0.333	mg/kg wet	3.333		58	40-140	7	30	
N-Nitroso-Di-n-Propylamine	2.34	0.333	mg/kg wet	3.333		70	40-140	2	30	
N-nitrosodiphenylamine	3.13	0.333	mg/kg wet	3.333		94	40-140	0.4	30	
Pentachlorophenol	3.13	1.67	mg/kg wet	3.333		94	30-130	5	30	
Phenanthrene	2.98	0.333	mg/kg wet	3.333		89	40-140	2	30	
Phenol	2.32	0.333	mg/kg wet	3.333		70	30-130	1	30	
Pyrene	3.25	0.333	mg/kg wet	3.333		97	40-140	5	30	
Pyridine	2.04	1.67	mg/kg wet	3.333		61	40-140	5	30	
Surrogate: 1,2-Dichlorobenzene-d4	2.65		mg/kg wet	3.333		79	30-130			
Surrogate: 2,4,6-Tribromophenol	4.72		mg/kg wet	5.000		94	30-130			
Surrogate: 2-Chlorophenol-d4	3.81		mg/kg wet	5.000		76	30-130			
Surrogate: 2-Fluorobiphenyl	2.79		mg/kg wet	3.333		84	30-130			
Surrogate: 2-Fluorophenol	3.83		mg/kg wet	5.000		77	30-130			
Surrogate: Nitrobenzene-d5	2.77		mg/kg wet	3.333		83	30-130			
Surrogate: Phenol-d6	3.91		mg/kg wet	5.000		78	30-130			
Surrogate: p-Terphenyl-d14	3.18		mg/kg wet	3.333		95	30-130			
<b>Matrix Spike Source: 1011142-01</b>										
1,1-Biphenyl	2.93	0.338	mg/kg dry	3.388	ND	86	40-140			
1,2,4-Trichlorobenzene	2.81	0.338	mg/kg dry	3.388	ND	83	40-140			
1,2-Dichlorobenzene	2.82	0.338	mg/kg dry	3.388	ND	83	40-140			
1,3-Dichlorobenzene	2.69	0.338	mg/kg dry	3.388	ND	79	40-140			
1,4-Dichlorobenzene	2.72	0.338	mg/kg dry	3.388	ND	80	40-140			
2,3,4,6-Tetrachlorophenol	2.83	1.70	mg/kg dry	3.388	ND	84	30-130			
2,4,5-Trichlorophenol	2.80	0.338	mg/kg dry	3.388	ND	83	30-130			
2,4,6-Trichlorophenol	2.79	0.338	mg/kg dry	3.388	ND	82	30-130			
2,4-Dichlorophenol	2.86	0.338	mg/kg dry	3.388	ND	84	30-130			
2,4-Dimethylphenol	2.76	0.338	mg/kg dry	3.388	ND	81	30-130			
2,4-Dinitrophenol	1.97	1.70	mg/kg dry	3.388	ND	58	30-130			
2,4-Dinitrotoluene	2.89	0.338	mg/kg dry	3.388	ND	85	40-140			
2,6-Dinitrotoluene	2.87	0.338	mg/kg dry	3.388	ND	85	40-140			
2-Chloronaphthalene	2.61	0.338	mg/kg dry	3.388	ND	77	40-140			
2-Chlorophenol	2.71	0.338	mg/kg dry	3.388	ND	80	30-130			
2-Methylnaphthalene	2.90	0.338	mg/kg dry	3.388	ND	86	40-140			
2-Methylphenol	2.67	0.338	mg/kg dry	3.388	ND	79	30-130			
2-Nitroaniline	2.74	0.338	mg/kg dry	3.388	ND	81	40-140			
2-Nitrophenol	2.85	0.338	mg/kg dry	3.388	ND	84	30-130			
3,3'-Dichlorobenzidine	2.55	0.678	mg/kg dry	3.388	ND	75	40-140			
3+4-Methylphenol	7.02	1.36	mg/kg dry	6.776	ND	104	30-130			
3-Nitroaniline	2.63	0.338	mg/kg dry	3.388	ND	78	40-140			
4,6-Dinitro-2-Methylphenol	2.82	1.70	mg/kg dry	3.388	ND	83	30-130			
4-Bromophenyl-phenylether	3.02	0.338	mg/kg dry	3.388	ND	89	40-140			
4-Chloro-3-Methylphenol	2.88	0.338	mg/kg dry	3.388	ND	85	30-130			



*CERTIFICATE OF ANALYSIS*

Client Name: RC & D  
 Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1011142

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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**8270C Semi-Volatile Organic Compounds**

Batch CK01023 - 3546

4-Chloroaniline	2.18	0.678	mg/kg dry	3.388	ND	64	40-140			
4-Chloro-phenyl-phenyl ether	2.94	0.338	mg/kg dry	3.388	ND	87	40-140			
4-Nitroaniline	2.72	0.338	mg/kg dry	3.388	ND	80	40-140			
4-Nitrophenol	2.58	1.70	mg/kg dry	3.388	ND	76	30-130			
Acenaphthene	2.96	0.338	mg/kg dry	3.388	ND	87	40-140			
Acenaphthylene	2.65	0.338	mg/kg dry	3.388	ND	78	40-140			
Acetophenone	2.72	0.678	mg/kg dry	3.388	ND	80	40-140			
Aniline	2.11	0.678	mg/kg dry	3.388	ND	62	40-140			
Anthracene	3.10	0.338	mg/kg dry	3.388	ND	91	40-140			
Azobenzene	2.64	0.338	mg/kg dry	3.388	ND	78	40-140			
Benzo(a)anthracene	3.18	0.338	mg/kg dry	3.388	ND	94	40-140			
Benzo(a)pyrene	3.22	0.170	mg/kg dry	3.388	ND	95	40-140			
Benzo(b)fluoranthene	3.00	0.338	mg/kg dry	3.388	ND	88	40-140			
Benzo(g,h,i)perylene	3.28	0.338	mg/kg dry	3.388	ND	97	40-140			
Benzo(k)fluoranthene	3.45	0.338	mg/kg dry	3.388	ND	102	40-140			
Benzoic Acid	ND	1.70	mg/kg dry	3.388	ND		40-140			M-
Benzyl Alcohol	2.84	0.338	mg/kg dry	3.388	ND	84	40-140			
bis(2-Chloroethoxy)methane	2.49	0.338	mg/kg dry	3.388	ND	74	40-140			
bis(2-Chloroethyl)ether	2.32	0.338	mg/kg dry	3.388	ND	68	40-140			
bis(2-chloroisopropyl)Ether	2.70	0.338	mg/kg dry	3.388	ND	80	40-140			
bis(2-Ethylhexyl)phthalate	3.19	0.338	mg/kg dry	3.388	ND	94	40-140			
Butylbenzylphthalate	3.03	0.338	mg/kg dry	3.388	ND	89	40-140			
Carbazole	2.88	0.338	mg/kg dry	3.388	ND	85	40-140			
Chrysene	3.18	0.170	mg/kg dry	3.388	ND	94	40-140			
Dibenzo(a,h)Anthracene	3.37	0.170	mg/kg dry	3.388	ND	99	40-140			
Dibenzofuran	2.74	0.338	mg/kg dry	3.388	ND	81	40-140			
Diethylphthalate	2.93	0.338	mg/kg dry	3.388	ND	87	40-140			
Dimethylphthalate	2.90	0.338	mg/kg dry	3.388	ND	86	40-140			
Di-n-butylphthalate	2.96	0.338	mg/kg dry	3.388	ND	87	40-140			
Di-n-octylphthalate	3.42	0.338	mg/kg dry	3.388	ND	101	40-140			
Fluoranthene	3.11	0.338	mg/kg dry	3.388	ND	92	40-140			
Fluorene	3.07	0.338	mg/kg dry	3.388	ND	91	40-140			
Hexachlorobenzene	2.94	0.170	mg/kg dry	3.388	ND	87	40-140			
Hexachlorobutadiene	2.90	0.338	mg/kg dry	3.388	ND	86	40-140			
Hexachlorocyclopentadiene	2.43	1.70	mg/kg dry	3.388	ND	72	40-140			
Hexachloroethane	2.62	0.338	mg/kg dry	3.388	ND	77	40-140			
Indeno(1,2,3-cd)Pyrene	3.34	0.338	mg/kg dry	3.388	ND	99	40-140			
Isophorone	2.13	0.338	mg/kg dry	3.388	ND	63	40-140			
Naphthalene	2.75	0.338	mg/kg dry	3.388	ND	81	40-140			
Nitrobenzene	2.65	0.338	mg/kg dry	3.388	ND	78	40-140			
N-Nitrosodimethylamine	1.92	0.338	mg/kg dry	3.388	ND	57	40-140			
N-Nitroso-Di-n-Propylamine	2.58	0.338	mg/kg dry	3.388	ND	76	40-140			
N-nitrosodiphenylamine	3.08	0.338	mg/kg dry	3.388	ND	91	40-140			
Pentachlorophenol	2.74	1.70	mg/kg dry	3.388	ND	81	30-130			
Phenanthrene	2.90	0.338	mg/kg dry	3.388	ND	86	40-140			



**CERTIFICATE OF ANALYSIS**

Client Name: RC & D  
Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1011142

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
<b>8270C Semi-Volatile Organic Compounds</b>										
<b>Batch CK01023 - 3546</b>										
Phenol	2.53	0.338	mg/kg dry	3.388	ND	75	30-130			
Pyrene	3.13	0.338	mg/kg dry	3.388	ND	92	40-140			
Pyridine	1.75	1.70	mg/kg dry	3.388	ND	52	40-140			
Surrogate: 1,2-Dichlorobenzene-d4	2.74		mg/kg dry	3.388		81	30-130			
Surrogate: 2,4,6-Tribromophenol	4.53		mg/kg dry	5.082		89	30-130			
Surrogate: 2-Chlorophenol-d4	3.95		mg/kg dry	5.082		78	30-130			
Surrogate: 2-Fluorobiphenyl	2.76		mg/kg dry	3.388		81	30-130			
Surrogate: 2-Fluorophenol	3.80		mg/kg dry	5.082		75	30-130			
Surrogate: Nitrobenzene-d5	2.69		mg/kg dry	3.388		79	30-130			
Surrogate: Phenol-d6	4.02		mg/kg dry	5.082		79	30-130			
Surrogate: p-Terphenyl-d14	3.04		mg/kg dry	3.388		90	30-130			
<b>Matrix Spike Dup Source: 1011142-01</b>										
1,1-Biphenyl	2.97	0.345	mg/kg dry	3.454	ND	86	40-140	1	30	
1,2,4-Trichlorobenzene	2.82	0.345	mg/kg dry	3.454	ND	82	40-140	0.5	30	
1,2-Dichlorobenzene	2.70	0.345	mg/kg dry	3.454	ND	78	40-140	5	30	
1,3-Dichlorobenzene	2.60	0.345	mg/kg dry	3.454	ND	75	40-140	3	30	
1,4-Dichlorobenzene	2.66	0.345	mg/kg dry	3.454	ND	77	40-140	2	30	
2,3,4,6-Tetrachlorophenol	3.07	1.73	mg/kg dry	3.454	ND	89	30-130	8	30	
2,4,5-Trichlorophenol	2.95	0.345	mg/kg dry	3.454	ND	85	30-130	5	30	
2,4,6-Trichlorophenol	2.91	0.345	mg/kg dry	3.454	ND	84	30-130	4	30	
2,4-Dichlorophenol	2.95	0.345	mg/kg dry	3.454	ND	85	30-130	3	30	
2,4-Dimethylphenol	2.85	0.345	mg/kg dry	3.454	ND	82	30-130	3	30	
2,4-Dinitrophenol	2.70	1.73	mg/kg dry	3.454	ND	78	30-130	31	30	D+
2,4-Dinitrotoluene	3.05	0.345	mg/kg dry	3.454	ND	88	40-140	5	30	
2,6-Dinitrotoluene	3.03	0.345	mg/kg dry	3.454	ND	88	40-140	6	30	
2-Chloronaphthalene	2.76	0.345	mg/kg dry	3.454	ND	80	40-140	5	30	
2-Chlorophenol	2.67	0.345	mg/kg dry	3.454	ND	77	30-130	1	30	
2-Methylnaphthalene	2.90	0.345	mg/kg dry	3.454	ND	84	40-140	0.01	30	
2-Methylphenol	2.64	0.345	mg/kg dry	3.454	ND	76	30-130	1	30	
2-Nitroaniline	2.93	0.345	mg/kg dry	3.454	ND	85	40-140	7	30	
2-Nitrophenol	2.96	0.345	mg/kg dry	3.454	ND	86	30-130	4	30	
3,3'-Dichlorobenzidine	2.72	0.691	mg/kg dry	3.454	ND	79	40-140	6	30	
3+4-Methylphenol	6.71	0.691	mg/kg dry	6.908	ND	97	30-130	5	30	
3-Nitroaniline	2.86	0.345	mg/kg dry	3.454	ND	83	40-140	9	30	
4,6-Dinitro-2-Methylphenol	3.27	1.73	mg/kg dry	3.454	ND	95	30-130	15	30	
4-Bromophenyl-phenylether	3.17	0.345	mg/kg dry	3.454	ND	92	40-140	5	30	
4-Chloro-3-Methylphenol	2.96	0.345	mg/kg dry	3.454	ND	86	30-130	3	30	
4-Chloroaniline	2.27	0.691	mg/kg dry	3.454	ND	66	40-140	4	30	
4-Chloro-phenyl-phenyl ether	3.07	0.345	mg/kg dry	3.454	ND	89	40-140	4	30	
4-Nitroaniline	2.98	0.345	mg/kg dry	3.454	ND	86	40-140	9	30	
4-Nitrophenol	2.95	1.73	mg/kg dry	3.454	ND	85	30-130	13	30	
Acenaphthene	3.03	0.345	mg/kg dry	3.454	ND	88	40-140	2	30	
Acenaphthylene	2.79	0.345	mg/kg dry	3.454	ND	81	40-140	5	30	
Acetophenone	2.65	0.691	mg/kg dry	3.454	ND	77	40-140	3	30	
Aniline	2.07	0.691	mg/kg dry	3.454	ND	60	40-140	2	30	



CERTIFICATE OF ANALYSIS

Client Name: RC & D  
Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1011142

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
<b>8270C Semi-Volatile Organic Compounds</b>										
<i>Batch CK01023 - 3546</i>										
Anthracene	3.27	0.345	mg/kg dry	3.454	ND	95	40-140	5	30	
Azobenzene	2.76	0.345	mg/kg dry	3.454	ND	80	40-140	4	30	
Benzo(a)anthracene	3.38	0.345	mg/kg dry	3.454	ND	98	40-140	6	30	
Benzo(a)pyrene	3.36	0.173	mg/kg dry	3.454	ND	97	40-140	4	30	
Benzo(b)fluoranthene	3.38	0.345	mg/kg dry	3.454	ND	98	40-140	12	30	
Benzo(g,h,i)perylene	3.52	0.345	mg/kg dry	3.454	ND	102	40-140	7	30	
Benzo(k)fluoranthene	3.32	0.345	mg/kg dry	3.454	ND	96	40-140	4	30	
Benzoic Acid	0.614	1.73	mg/kg dry	3.454	ND	18	40-140		30	M-
Benzyl Alcohol	2.71	0.345	mg/kg dry	3.454	ND	79	40-140	5	30	
bis(2-Chloroethoxy)methane	2.61	0.345	mg/kg dry	3.454	ND	76	40-140	5	30	
bis(2-Chloroethyl)ether	2.21	0.345	mg/kg dry	3.454	ND	64	40-140	5	30	
bis(2-chloroisopropyl)Ether	2.65	0.345	mg/kg dry	3.454	ND	77	40-140	2	30	
bis(2-Ethylhexyl)phthalate	3.29	0.345	mg/kg dry	3.454	ND	95	40-140	3	30	
Butylbenzylphthalate	3.23	0.345	mg/kg dry	3.454	ND	93	40-140	6	30	
Carbazole	3.19	0.345	mg/kg dry	3.454	ND	92	40-140	10	30	
Chrysene	3.42	0.173	mg/kg dry	3.454	ND	99	40-140	7	30	
Dibenzo(a,h)Anthracene	3.61	0.173	mg/kg dry	3.454	ND	105	40-140	7	30	
Dibenzofuran	2.85	0.345	mg/kg dry	3.454	ND	82	40-140	4	30	
Diethylphthalate	3.10	0.345	mg/kg dry	3.454	ND	90	40-140	5	30	
Dimethylphthalate	3.05	0.345	mg/kg dry	3.454	ND	88	40-140	5	30	
Di-n-butylphthalate	3.19	0.345	mg/kg dry	3.454	ND	92	40-140	7	30	
Di-n-octylphthalate	3.52	0.345	mg/kg dry	3.454	ND	102	40-140	3	30	
Fluoranthene	3.42	0.345	mg/kg dry	3.454	ND	99	40-140	10	30	
Fluorene	3.20	0.345	mg/kg dry	3.454	ND	93	40-140	4	30	
Hexachlorobenzene	3.11	0.173	mg/kg dry	3.454	ND	90	40-140	6	30	
Hexachlorobutadiene	2.95	0.345	mg/kg dry	3.454	ND	85	40-140	1	30	
Hexachlorocyclopentadiene	2.51	1.73	mg/kg dry	3.454	ND	73	40-140	3	30	
Hexachloroethane	2.50	0.345	mg/kg dry	3.454	ND	72	40-140	5	30	
Indeno(1,2,3-cd)Pyrene	3.58	0.345	mg/kg dry	3.454	ND	104	40-140	7	30	
Isophorone	2.19	0.345	mg/kg dry	3.454	ND	63	40-140	3	30	
Naphthalene	2.83	0.345	mg/kg dry	3.454	ND	82	40-140	3	30	
Nitrobenzene	2.73	0.345	mg/kg dry	3.454	ND	79	40-140	3	30	
N-Nitrosodimethylamine	1.77	0.345	mg/kg dry	3.454	ND	51	40-140	8	30	
N-Nitroso-Di-n-Propylamine	2.49	0.345	mg/kg dry	3.454	ND	72	40-140	4	30	
N-nitrosodiphenylamine	3.23	0.345	mg/kg dry	3.454	ND	94	40-140	5	30	
Pentachlorophenol	3.18	1.73	mg/kg dry	3.454	ND	92	30-130	15	30	
Phenanthrene	3.11	0.345	mg/kg dry	3.454	ND	90	40-140	7	30	
Phenol	2.53	0.345	mg/kg dry	3.454	ND	73	30-130	0.07	30	
Pyrene	3.23	0.345	mg/kg dry	3.454	ND	94	40-140	3	30	
Pyridine	1.72	1.73	mg/kg dry	3.454	ND	50	40-140	2	30	
Surrogate: 1,2-Dichlorobenzene-d4	2.64		mg/kg dry	3.454		76	30-130			
Surrogate: 2,4,6-Tribromophenol	4.85		mg/kg dry	5.181		94	30-130			
Surrogate: 2-Chlorophenol-d4	3.84		mg/kg dry	5.181		74	30-130			
Surrogate: 2-Fluorobiphenyl	2.90		mg/kg dry	3.454		84	30-130			
Surrogate: 2-Fluorophenol	3.73		mg/kg dry	5.181		72	30-130			
Surrogate: Nitrobenzene-d5	2.82		mg/kg dry	3.454		82	30-130			





*CERTIFICATE OF ANALYSIS*

Client Name: RC & D  
 Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1011142

**Quality Control Data**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
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8270C Semi-Volatile Organic Compounds

Batch CK01023 - 3546

Surrogate: Phenol-d6	4.02		mg/kg dry	5.181		78	30-130			
Surrogate: p-Terphenyl-d14	3.20		mg/kg dry	3.454		93	30-130			



*CERTIFICATE OF ANALYSIS*

Client Name: RC & D  
Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1011142

**Notes and Definitions**

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



**CERTIFICATE OF ANALYSIS**

Client Name: RC & D  
Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1011142

**ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS**

**ENVIRONMENTAL**

Department of Defense (DoD) Environmental Laboratory Accreditation Program (ELAP)

A2LA Accredited: Testing Cert# 2864.01

<http://www.a2la.org/scopepdf/2864-01.pdf>

Rhode Island Potable and Non Potable Water: LAI00179

<http://www.health.ri.gov/labs/waterlabs-instate.php>

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750

[http://www.ct.gov/dph/lib/dph/environmental\\_health/environmental\\_laboratories/pdf/out\\_state.pdf](http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/out_state.pdf)

Maine Potable and Non Potable Water: RI0002

[http://www.maine.gov/dep/blwq/topic/vessel/lab\\_list.pdf](http://www.maine.gov/dep/blwq/topic/vessel/lab_list.pdf)

Massachusetts Potable and Non Potable Water: M-RI002

<http://public.dep.state.ma.us/labcert/labcert.aspx>

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424

<http://www4.egov.nh.gov/des/nhelap/namesearch.asp>

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

<http://www.wadsworth.org/labcert/elap/comm.html>

United States Department of Agriculture Soil Permit: S-54210

Maryland Potable Water: 301

[http://www.mde.state.md.us/assets/document/WSP\\_labs-2009apr20.pdf](http://www.mde.state.md.us/assets/document/WSP_labs-2009apr20.pdf)

South Carolina Volatile Organic Compounds in Potable Water: 78003

New Jersey Potable (VOA) and Non Potable Water (RCRA), Solids and Hazardous Waste: RI002

<http://www.nj.gov/dep/oqa/certlabs.htm>

Pennsylvania Potable and Non Potable Water, Solid and Hazardous Waste: 68-01752

[http://files.dep.state.pa.us/RegionalResources/Labs/LabsPortalFiles/2009-0911\\_accrued\\_laboratories.pdf](http://files.dep.state.pa.us/RegionalResources/Labs/LabsPortalFiles/2009-0911_accrued_laboratories.pdf)

**CHEMISTRY**

A2LA Accredited: Testing Cert # 2864.01

Lead in Paint, Phthalates, Lead in Children's Metals Products (Including Jewelry)

<http://www.A2LA.org/dirsearchnew/newsearch.cfm>

CPSC ID# 1141

Lead Paint, Lead in Children's Metals Jewelry

<http://www.cpsc.gov/cgi-bin/labapplist.aspx>

**Sample and Cooler Receipt Checklist**

Client: RC and D  
Client Project ID: \_\_\_\_\_  
Shipped/Delivered Via: Client

ESS Project ID: 10110142  
Date Project Due: 11/12/10  
Days For Project: 2 Day

**Items to be checked upon receipt:**

- |  |                               |   |   |
|--|-------------------------------|---|---|
| 1. Air Bill Manifest Present?          | <input type="checkbox"/> * No | 10. Are the samples properly preserved?   | <input type="checkbox"/> Yes  |
| Air No.:                               |                               | 11. Proper sample containers used?        | <input type="checkbox"/> Yes  |
| 2. Were Custody Seals Present?         | <input type="checkbox"/> No   | 12. Any air bubbles in the VOA vials?     | <input type="checkbox"/> N/A  |
| 3. Were Custody Seals Intact?          | <input type="checkbox"/> N/A  | 13. Holding times exceeded?               | <input type="checkbox"/> No   |
| 4. Is Radiation count < 100 CPM?       | <input type="checkbox"/> Yes  | 14. Sufficient sample volumes?            | <input type="checkbox"/> Yes  |
| 5. Is a cooler present?                | <input type="checkbox"/> Yes  | 15. Any Subcontracting needed?            | <input type="checkbox"/> No   |
| Cooler Temp: <u>N/A</u>                |                               | 16. Are ESS labels on correct containers? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| Iced With: <u>None</u>                 |                               | 17. Were samples received intact?         | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| 6. Was COC included with samples?      | <input type="checkbox"/> Yes  | ESS Sample IDs: _____                     |   |
| 7. Was COC signed and dated by client? | <input type="checkbox"/> Yes  | Sub Lab: _____                            |   |
| 8. Does the COC match the sample       | <input type="checkbox"/> Yes  | Analysis: _____                           |   |
| 9. Is COC complete and correct?        | <input type="checkbox"/> Yes  | TAT: _____                                |   |

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

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Who was called?: \_\_\_\_\_ By whom? \_\_\_\_\_

Sample Number	Properly Preserved	Container Type	# of Containers	Preservative
1	Yes	40 ml - VOA	1	MeOH
1	Yes	40 ml - VOA	2	NP
1	Yes	40 ml - VOA	2	other
2	Yes	40 ml - VOA	1	MeOH
2	Yes	40 ml - VOA	2	NP
2	Yes	40 ml - VOA	2	other

Completed By: ED  
Reviewed By: ED

Date/Time: 12/10/10  
Date/Time: 12/10/10

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

# CHAIN OF CUSTODY

Page 1 of 1

Turn Time: Standard Other 2  
 If faster than 5 days, prior approval by laboratory is required # \_\_\_\_\_  
 State where samples were collected from:  
 MA RI CT NH NJ NY ME Other \_\_\_\_\_  
 Is this project for any of the following: USACE Other \_\_\_\_\_  
 MA-MCP Navy

Reporting Limits: RES DEC  
 Electronic Deliverable: Yes X No \_\_\_\_\_  
 Format: Excel \_\_\_\_\_ Access \_\_\_\_\_ PDA X Other \_\_\_\_\_

Co. Name	Project #	Project Name (20 Char. or less)	Type of Containers	Number of Containers	Sample Identification (20 Char. or less)	Matrix	Grab	Comp	Collection Time	Date	ESS LAB Sample #	City	State	Fax #	Telephone #	Contact Person	Address	Zip	PO#	Email Address	
RC+D	1006	LINCOLN LACE	6	5	1006 LOPES - GFGRAB01	X			0900	11/10/10	01	Providence	RI	401-270-5483	401-270-5486	ROB SCHUSTER	17 Gordon Ave., Suite 204	02905	1006	mschuster@esslab.com	
			6	5	1006 - READ - TS01	X			0900	11/10/10	02										

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:  Yes  No NA:   Pickup  
 Seals Intact:  Yes  No NA:   Technicians: \_\_\_\_\_  
 Cooler Temp: N/A NO ICE  
 Preservation Code: 1-NR, 2-HCl, 3-H<sub>2</sub>SO<sub>4</sub>, 4-HNO<sub>3</sub>, 5-NaOH, 6-MeOH, 7-Asorbic Acid, 8-ZnAc<sub>2</sub>, 9-LL  
 Sampled by: Michael Black  
 Comments: \_\_\_\_\_

Relinquished by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
<u>Michael Black</u>	11/10/10	<u>[Signature]</u>	11/10/10	<u>[Signature]</u>	
<u>[Signature]</u>		<u>[Signature]</u>		<u>[Signature]</u>	



**ESS Laboratory**

*Division of Thielsch Engineering, Inc.*

**BAL Laboratory**

*The Microbiology Division  
of Thielsch Engineering, Inc.*



*CERTIFICATE OF ANALYSIS*

Rob Schuster  
RC & D  
17 Gordon Avenue, Suite 204  
Providence, RI 02905-1952

**RE: Lincoln Lace (1006)**  
**ESS Laboratory Work Order Number: 1011141**

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

Laurel Stoddard  
Laboratory Director

**Analytical Summary**

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

ESS Laboratory certifies that the test results meet the requirements of NELAC and A2LA, except where noted within this project narrative.



**ESS Laboratory**

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**BAL Laboratory**

*The Microbiology Division  
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*CERTIFICATE OF ANALYSIS*

Client Name: RC & D  
Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1011141

**SAMPLE RECEIPT**

The following samples were received on November 10, 2010 for the analyses specified on the enclosed Chain of Custody Record.

<b>Lab Number</b>	<b>SampleName</b>	<b>Matrix</b>	<b>Analysis</b>
1011141-01	1006Lopes-GFGrab02	Soil	6010B
1011141-02	1006Lopes-GFGrab03	Soil	6010B
1011141-03	1006Lopes-GFGrab04	Soil	6010B
1011141-04	1006Lopes-GFGrab05	Soil	6010B
1011141-05	1006Lopes-GFGrab06	Soil	6010B
1011141-06	1006Lopes-GFGrab07	Soil	6010B
1011141-07	1006-Read-TS02	Soil	6010B
1011141-08	1006-Read-TS03	Soil	6010B
1011141-09	1006-Read-TS04	Soil	6010B



**ESS Laboratory**

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*CERTIFICATE OF ANALYSIS*

Client Name: RC & D  
Client Project ID: Lincoln Lacc

ESS Laboratory Work Order: 1011141

**PROJECT NARRATIVE**

**No unusual observations noted.**

**End of Project Narrative.**

**DATA USABILITY LINKS**

[Definitions of Quality Control Parameters](#)

[Semivolatile Organics Internal Standard Information](#)

[Semivolatile Organics Surrogate Information](#)

[Volatile Organics Internal Standard Information](#)

[Volatile Organics Surrogate Information](#)

[EPH and VPH Alkane Lists](#)





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*CERTIFICATE OF ANALYSIS*

Client Name: RC & D  
Client Project ID: Lincoln Lace  
Client Sample ID: 1006Lopes-GFGrab02  
Date Sampled: 11/10/10 09:00  
Percent Solids: 95

ESS Laboratory Work Order: 1011141  
ESS Laboratory Sample ID: 1011141-01  
Sample Matrix: Soil  
Units: mg/kg dry

**3050B/6000/7000 Total Metals**

**RI - RES DEC**

<u>Analyte</u>	<u>Results (MRL)</u>	<u>Method</u>	<u>Limit</u>	<u>DF</u>	<u>Analyst</u>	<u>Analyzed</u>	<u>I/V</u>	<u>F/V</u>	<u>Batch</u>
Arsenic	ND (2.3)	6010B	7	1	SVD	11/10/10 21:54	2.29	100	CK01016



# ESS Laboratory

Division of Thielsch Engineering, Inc.

# BAL Laboratory

The Microbiology Division  
of Thielsch Engineering, Inc.



## CERTIFICATE OF ANALYSIS

Client Name: RC & D  
Client Project ID: Lincoln Lace  
Client Sample ID: 1006Lopes-GFGrab03  
Date Sampled: 11/10/10 09:00  
Percent Solids: 93

ESS Laboratory Work Order: 1011141  
ESS Laboratory Sample ID: 1011141-02  
Sample Matrix: Soil  
Units: mg/kg dry

### 3050B/6000/7000 Total Metals

#### RI - RES DEC

<u>Analyte</u>	<u>Results (MRL)</u>	<u>Method</u>	<u>Limit</u>	<u>DF</u>	<u>Analyst</u>	<u>Analyzed</u>	<u>I/V</u>	<u>F/V</u>	<u>Batch</u>
Arsenic	ND (2.4)	6010B	7	1	SVD	11/10/10 21:59	2.28	100	CK01016



**ESS Laboratory**

*Division of Thielsch Engineering, Inc.*

**BAL Laboratory**

*The Microbiology Division  
of Thielsch Engineering, Inc.*



*CERTIFICATE OF ANALYSIS*

Client Name: RC & D  
Client Project ID: Lincoln Lace  
Client Sample ID: 1006Lopes-GFGrab04  
Date Sampled: 11/10/10 09:00  
Percent Solids: 95

ESS Laboratory Work Order: 1011141  
ESS Laboratory Sample ID: 1011141-03  
Sample Matrix: Soil  
Units: mg/kg dry

**3050B/6000/7000 Total Metals**

<u>Analyte</u>	<u>Results (MRL)</u>	<u>Method</u>	<u>Limit</u>	<u>DF</u>	<u>Analyst</u>	<u>Analyzed</u>	<u>I/V</u>	<u>F/V</u>	<u>Batch</u>
Arsenic	ND (2.4)	6010B	7	1	SVD	11/10/10 22:03	2.22	100	CK01016

RI - RES DEC



**ESS Laboratory**

*Division of Tbielsch Engineering, Inc.*

**BAL Laboratory**

*The Microbiology Division  
of Tbielsch Engineering, Inc.*



*CERTIFICATE OF ANALYSIS*

Client Name: RC & D  
Client Project ID: Lincoln Lace  
Client Sample ID: 1006Lopes-GFGGrab05  
Date Sampled: 11/10/10 09:00  
Percent Solids: 95

ESS Laboratory Work Order: 1011141  
ESS Laboratory Sample ID: 1011141-04  
Sample Matrix: Soil  
Units: mg/kg dry

**3050B/6000/7000 Total Metals**

<u>Analyte</u>	<u>Results (MRL)</u>	<u>Method</u>	<u>Limit</u>	<u>DF</u>	<u>Analyst</u>	<u>Analyzed</u>	<u>I/V</u>	<u>F/V</u>	<u>Batch</u>
Arsenic	ND (2.1)	6010B	7	1	SVD	11/10/10 22:07	2.45	100	CK01016

RI - RES DEC



**ESS Laboratory**

*Division of Thielsch Engineering, Inc.*

**BAL Laboratory**

*The Microbiology Division  
of Thielsch Engineering, Inc.*



*CERTIFICATE OF ANALYSIS*

Client Name: RC & D  
Client Project ID: Lincoln Lace  
Client Sample ID: 1006Lopes-GFGrab06  
Date Sampled: 11/10/10 09:00  
Percent Solids: 95

ESS Laboratory Work Order: 1011141  
ESS Laboratory Sample ID: 1011141-05  
Sample Matrix: Soil  
Units: mg/kg dry

**3050B/6000/7000 Total Metals**

<u>Analyte</u>	<u>Results (MRL)</u>	<u>Method</u>	<u>Limit</u>	<u>DF</u>	<u>Analyst</u>	<u>Analyzed</u>	<u>I/V</u>	<u>F/V</u>	<u>Batch</u>
Arsenic	ND (2.2)	6010B	7	1	SVD	11/10/10 22:12	2.35	100	CK01016

RI - RES DEC



**ESS Laboratory**

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*CERTIFICATE OF ANALYSIS*

Client Name: RC & D  
Client Project ID: Lincoln Lace  
Client Sample ID: 1006Lopes-GFGrab07  
Date Sampled: 11/10/10 09:00  
Percent Solids: 94

ESS Laboratory Work Order: 1011141  
ESS Laboratory Sample ID: 1011141-06  
Sample Matrix: Soil  
Units: mg/kg dry

**3050B/6000/7000 Total Metals**

<u>Analyte</u>	<u>Results (MRL)</u>	<u>Method</u>	<u>RI - RES DEC</u>			<u>Analyst</u>	<u>Analyzed</u>	<u>I/V</u>	<u>F/V</u>	<u>Batch</u>
			<u>Limit</u>	<u>DF</u>						
Arsenic	ND (2.3)	6010B	7	1	SVD	11/10/10 22:16	2.36	100	CK01016	



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*CERTIFICATE OF ANALYSIS*

Client Name: RC & D  
Client Project ID: Lincoln Lace  
Client Sample ID: 1006-Read-TS02  
Date Sampled: 11/10/10 09:00  
Percent Solids: 83

ESS Laboratory Work Order: 1011141  
ESS Laboratory Sample ID: 1011141-07  
Sample Matrix: Soil  
Units: mg/kg dry

**3050B/6000/7000 Total Metals**

**RI - RES DEC**

<u>Analyte</u>	<u>Results (MRL)</u>	<u>Method</u>	<u>Limit</u>	<u>DF</u>	<u>Analyst</u>	<u>Analyzed</u>	<u>I/V</u>	<u>F/V</u>	<u>Batch</u>
Arsenic	ND (2.8)	6010B	7	1	SVD	11/10/10 22:29	2.12	100	CK01016



**ESS Laboratory**

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**BAL Laboratory**

*The Microbiology Division  
of Thielsch Engineering, Inc.*



*CERTIFICATE OF ANALYSIS*

Client Name: RC & D  
Client Project ID: Lincoln Lace  
Client Sample ID: 1006-Read-TS03  
Date Sampled: 11/10/10 09:00  
Percent Solids: 85

ESS Laboratory Work Order: 1011141  
ESS Laboratory Sample ID: 1011141-08  
Sample Matrix: Soil  
Units: mg/kg dry

**3050B/6000/7000 Total Metals**

**RI - RES DEC**

<u>Analyte</u>	<u>Results (MRL)</u>	<u>Method</u>	<u>Limit</u>	<u>DF</u>	<u>Analyst</u>	<u>Analyzed</u>	<u>I/V</u>	<u>F/V</u>	<u>Batch</u>
Arsenic	ND (2.5)	6010B	7	1	SVD	11/10/10 22:33	2.35	100	CK01016





**ESS Laboratory**

*Division of Thielsch Engineering, Inc.*

**BAL Laboratory**

*The Microbiology Division  
of Thielsch Engineering, Inc.*



**CERTIFICATE OF ANALYSIS**

Client Name: RC & D  
Client Project ID: Lincoln Lace  
Client Sample ID: 1006-Read-TS04  
Date Sampled: 11/10/10 09:00  
Percent Solids: 85

ESS Laboratory Work Order: 1011141  
ESS Laboratory Sample ID: 1011141-09  
Sample Matrix: Soil  
Units: mg/kg dry

**3050B/6000/7000 Total Metals**

<u>Analyte</u>	<u>Results (MRL)</u>	<u>Method</u>	<u>RI - RES DEC</u>			<u>Analyst</u>	<u>Analyzed</u>	<u>I/V</u>	<u>F/V</u>	<u>Batch</u>
			<u>Limit</u>	<u>DF</u>						
Arsenic	ND (2.6)	6010B	7	1	SVD	11/10/10 22:38	2.25	100	CK01016	



# ESS Laboratory

Division of Thielsch Engineering, Inc.

# BAL Laboratory

The Microbiology Division  
of Thielsch Engineering, Inc.



## CERTIFICATE OF ANALYSIS

Client Name: RC & D  
Client Project ID: Lincoln Lacey

ESS Laboratory Work Order: 1011141

### Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
<b>3050B/6000/7000 Total Metals</b>										
<b>Batch CK01016 - 3050B</b>										
<b>Blank</b>										
Arsenic	ND	2.5	mg/kg wet							
<b>LCS</b>										
Arsenic	98.0	8.6	mg/kg wet	109.0		90	80-120			
<b>LCS Dup</b>										
Arsenic	101	8.8	mg/kg wet	109.0		93	80-120	3	20	
<b>Duplicate</b>	<b>Source: 1011141-09</b>									
Arsenic	ND	2.4	mg/kg dry		ND				35	
<b>Matrix Spike</b>	<b>Source: 1011141-09</b>									
Arsenic	23.3	2.8	mg/kg dry	27.75	ND	84	75-125			



**ESS Laboratory**

*Division of Thielsch Engineering, Inc.*

**BAL Laboratory**

*The Microbiology Division  
of Thielsch Engineering, Inc.*



*CERTIFICATE OF ANALYSIS*

Client Name: RC & D

Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1011141

**Notes and Definitions**

U	Analyte included in the analysis, but not detected
ND	Analyte NOT DETECTED above the detection limit (LOD for DoD Reports)
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
LOD	Limit of Detection
[CALC]	Calculated Analyte
LOQ	Limit of Quantitation
DL	Detection Limit



**ESS Laboratory**

*Division of Thielsch Engineering, Inc.*

**BAL Laboratory**

*The Microbiology Division  
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**CERTIFICATE OF ANALYSIS**

Client Name: RC & D  
Client Project ID: Lincoln Lace

ESS Laboratory Work Order: 1011141

**ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS**

**ENVIRONMENTAL**

Department of Defense (DoD) Environmental Laboratory Accreditation Program (ELAP)  
A2LA Accredited: Testing Cert# 2864.01  
<http://www.a2la.org/scopepdf/2864-01.pdf>

Rhode Island Potable and Non Potable Water: LAI00179  
<http://www.health.ri.gov/labs/waterlabs-instate.php>

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750  
[http://www.ct.gov/dph/lib/dph/environmental\\_health/environmental\\_laboratories/pdf/out\\_state.pdf](http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/out_state.pdf)

Maine Potable and Non Potable Water: RI0002  
[http://www.maine.gov/dep/blwq/topic/vessel/lab\\_list.pdf](http://www.maine.gov/dep/blwq/topic/vessel/lab_list.pdf)

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

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424  
<http://www4.egov.nh.gov/des/nhelap/namesearch.asp>

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

United States Department of Agriculture Soil Permit: S-54210

Maryland Potable Water: 301  
[http://www.mde.state.md.us/assets/document/WSP\\_labs-2009apr20.pdf](http://www.mde.state.md.us/assets/document/WSP_labs-2009apr20.pdf)

South Carolina Volatile Organic Compounds in Potable Water: 78003

New Jersey Potable (VOA) and Non Potable Water (RCRA), Solids and Hazardous Waste: RI002  
<http://www.nj.gov/dep/oqa/certlabs.htm>

Pennsylvania Potable and Non Potable Water, Solid and Hazardous Waste: 68-01752  
[http://files.dep.state.pa.us/RegionalResources/Labs/LabsPortalFiles/2009-0911\\_accredited\\_laboratories.pdf](http://files.dep.state.pa.us/RegionalResources/Labs/LabsPortalFiles/2009-0911_accredited_laboratories.pdf)

**CHEMISTRY**

A2LA Accredited: Testing Cert # 2864.01  
Lead in Paint, Phthalates, Lead in Children's Metals Products (Including Jewelry)  
<http://www.A2LA.org/dirsearchnew/newsearch.cfm>

CPSC ID# 1141  
Lead Paint, Lead in Children's Metals Jewelry  
<http://www.cpsc.gov/cgi-bin/labapplist.aspx>

**Sample and Cooler Receipt Checklist**

Client: RC and D  
Client Project ID: \_\_\_\_\_  
Shipped/Delivered Via: Client

ESS Project ID: 10110141  
Date Project Due: 11/11/10  
Days For Project: 1 Day

**Items to be checked upon receipt:**

- |  |                              |   |  |
|--|------------------------------|---|--|
| 1. Air Bill Manifest Present?          | <input type="checkbox"/> *No | 10. Are the samples properly preserved?   | <input type="checkbox"/> Yes                               |
| Air No.:                               |                              | 11. Proper sample containers used?        | <input type="checkbox"/> Yes                               |
| 2. Were Custody Seals Present?         | <input type="checkbox"/> No  | 12. Any air bubbles in the VOA vials?     | <input type="checkbox"/> N/A                               |
| 3. Were Custody Seals Intact?          | <input type="checkbox"/> N/A | 13. Holding times exceeded?               | <input type="checkbox"/> No                                |
| 4. Is Radiation count < 100 CPM?       | <input type="checkbox"/> Yes | 14. Sufficient sample volumes?            | <input type="checkbox"/> Yes                               |
| 5. Is a cooler present?                | <input type="checkbox"/> Yes | 15. Any Subcontracting needed?            | <input type="checkbox"/> No                                |
| Cooler Temp: <u>N/A</u>                |                              | 16. Are ESS labels on correct containers? | <input type="checkbox"/> Yes   <input type="checkbox"/> No |
| Iced With: <u>None</u>                 |                              | 17. Were samples received intact?         | <input type="checkbox"/> Yes   <input type="checkbox"/> No |
| 6. Was COC included with samples?      | <input type="checkbox"/> Yes | ESS Sample IDs: _____                     |  |
| 7. Was COC signed and dated by client? | <input type="checkbox"/> Yes | Sub Lab: _____                            |  |
| 8. Does the COC match the sample       | <input type="checkbox"/> Yes | Analysis: _____                           |  |
| 9. Is COC complete and correct?        | <input type="checkbox"/> Yes | TAT: _____                                |  |

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

Who was called?: \_\_\_\_\_ By whom? \_\_\_\_\_

Sample Number	Properly Preserved	Container Type	# of Containers	Preservative
1	Yes	4 oz Soil Jar	1	NP
2	Yes	4 oz Soil Jar	1	NP
3	Yes	4 oz Soil Jar	1	NP
4	Yes	4 oz Soil Jar	1	NP
5	Yes	4 oz Soil Jar	1	NP
6	Yes	4 oz Soil Jar	1	NP
7	Yes	4 oz Soil Jar	1	NP
8	Yes	4 oz Soil Jar	1	NP
9	Yes	4 oz Soil Jar	1	NP

Completed By: EO  
Reviewed By: CLD

Date/Time: 11/10/10  
Date/Time: 11/10/10

# CHAIN OF CUSTODY

**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

Turn Time: Standard Other 1 day  
 Reporting Limits: RES DEC  
 Electronic Deliverable: Yes 2 No ---  
 Format: Excel --- Access --- PD/PS --- Other ---

ESS LAB PROJECT ID: 1011141

Project # 1006 Project Name (20 Char. or less) Lincoln Lacc  
 Address 17 Gordon Ave., Suite 204  
 City Providence State RI Zip 02905 PO# 1006  
 Contact Person Rob Schuster Fax # 401-270-5486  
 Email Address rschuster@erending.com

ESS LAB Sample #	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Pre Code	Type of Containers	Number of Containers	Type of Containers
01	11/10/10	0900	X			1006 LOPES - GF GRAB 02	NP16		1	6
02						1006 LOPES - GF GRAB 03				
03						1006 LOPES - GF GRAB 04				
04						1006 LOPES - GF GRAB 05				
05						1006 LOPES - GF GRAB 06				
06						1006 LOPES - GF GRAB 07				
07						1006-READ-T502				
08						1006-READ-T503				
09						1006-READ-T504				

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 No NA:   Pickup  
 Seals Intact  Yes  No No NA:   Technicians

Cooler Temp: 74.1 °C

Relinquished by (Signature) Michael Black Date/Time 11/10/10 01:20  
 Received by (Signature) [Signature] Date/Time 11/10/10 11:20

Relinquished by (Signature) [Signature] Date/Time ---  
 Received by (Signature) [Signature] Date/Time ---

Sampled by: Michael Black  
 Comments: ---

Circle and/or Write Required Analysis

8250 624 5242	8021 8015 VPH	8100 8015 DRO	8081 8082 608 608 PCBs	8270 625 PAH SVOA 6270	RGRAS RGRAS PPI3 TAL23	TCLP-RGRAS NBC7	MCP-METALS (13)	METALS (13) WHg
								<u>ARSENIC</u>

\*By circling MA-MCB, client acknowledges samples were collected in accordance with MADEP CAM VII A

Please fax all changes to Chain of Custody in writing.

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



EA Engineering, Science, and Technology, Inc.  
2374 Post Road, Suite 102  
Warwick, Rhode Island 02886  
Telephone: (401) 736-3440  
FAX: (401) 736-3423

**LINCOLN LACE AND BRAID REMEDIATION PROJECT**  
**EA Project No. 61891.05**  
**PROVIDENCE, RHODE ISLAND**

**CONSTRUCTION SUBMITTAL APPROVAL**

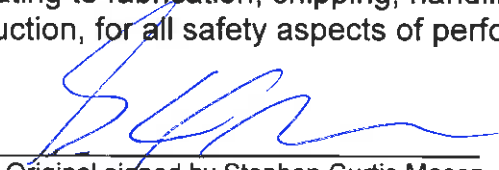
**Submittal: 1006-09**

**Description: Gravel Testing Results**

**Specification Section: 31 00 00**

<b>APPROVED AS NOTED</b>	<b>[ ]</b>
<b>APPROVED</b>	<b>[X]</b>
<b>REVISE AND RESUBMIT</b>	<b>[ ]</b>
<b>NOT APPROVED</b>	<b>[ ]</b>

Engineer's review and approval of this submittal are expressly limited as provided in the Contract Documents and are only to determine compliance with information given in Contract Documents and conformance with design concept of completed Project as a functioning whole. CONTRACTOR is, and ENGINEER is NOT, responsible for all matters relating to fabrication, shipping, handling, storage, assembly, and installation and construction, for all safety aspects of performing the Work, and for coordinating the Work.

Engineer:   
Original signed by Stephen Curtis Mason, P.E.

Date: 10/29/10

The attached submittal is recommended for approval.

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR  
 MANUFACTURER'S CERTIFICATES OF COMPLIANCE  
 DATE: October 29, 2010  
 TRANSMITTAL NO: 1006-09

*(Read instructions on reverse side prior to initiating this form)*

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS (This section will be initiated by the Contractor)

TO: EA Engineering, Science, and Technology, Inc.  
 2350 Post Road  
 Warwick, RI 02886

FROM: RC&D, Inc.  
 17 Gordon Avenue, Suite 204  
 Providence, RI 02905

CONTRACT NO: \_\_\_\_\_

CHECK ONE:  
 THIS IS A NEW TRANSMITTAL  
 THIS IS A RESUBMITTAL OF TRANSMITTAL \_\_\_\_\_

SPECIFICATION SECTION NO: (Cover only one section with each transmittal)  
**31 00 00**

PROJECT TITLE AND LOCATION: Lincoln Lane & Braldi Site Remediation Project  
 Providence, RI

ITEM NO.	DESCRIPTION OF ITEM SUBMITTED (Type, size, model number, etc.)	MFG. OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction No. 8)	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT		FOR CONTRACTOR USE CODE	VARIATION (See instruction No. 6)	FOR CE USE CODE
				SPEC. PARA. NO.	DRAWING SHEET NO.			
1	Environmental Analysis of Borrow Materials (Gravel Fill)		1	2.3.1		B		

REMARKS

Submitting gravel fill material as alternate material. Material passed analytical, did not pass the 1 inch sieve. Per speculation 85 - 100% passing 1 inch sieve, test results for material was 79.4% passing for 1 inch.

I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as otherwise stated.

Matthew R Pion  
 NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by Item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

DATE





**CERTIFICATE OF ANALYSIS**

Client Name: RC & D  
Client Project ID: Lincoln Lace  
Client Sample ID: GF-1  
Date Sampled: 10/06/10 15:00  
Percent Solids: 99

ESS Laboratory Work Order: 1010106  
ESS Laboratory Sample ID: 1010106-01  
Sample Matrix: Soil  
Units: mg/kg dry

**3050B/6000/7000 Total Metals**

**RI - RES DEC**

<u>Analyte</u>	<u>Results (MRL)</u>	<u>Method</u>	<u>Limit</u>	<u>DF</u>	<u>Analyst</u>	<u>Analyzed</u>	<u>I/V</u>	<u>F/V</u>	<u>Batch</u>
Antimony	ND (4.9)	6010B	10	1	SVD	10/12/10 17:25	2.07	100	CJ01217
Arsenic	ND (2.4)	6010B	7	1	SVD	10/12/10 17:25	2.07	100	CJ01217
Beryllium	0.13 (0.10)	6010B	0.4	1	SVD	10/12/10 17:25	2.07	100	CJ01217
Cadmium	ND (0.49)	6010B	39	1	SVD	10/12/10 17:25	2.07	100	CJ01217
Chromium	3.0 (1.0)	6010B	1400	1	SVD	10/12/10 17:25	2.07	100	CJ01217
Copper	2.8 (2.4)	6010B	3100	1	SVD	10/12/10 17:25	2.07	100	CJ01217
Lead	ND (4.9)	6010B	150	1	SVD	10/12/10 17:25	2.07	100	CJ01217
Mercury	ND (0.029)	7471A	23	1	SVD	10/13/10 11:47	0.7	40	CJ01218
Nickel	ND (2.4)	6010B	1000	1	SVD	10/12/10 17:25	2.07	100	CJ01217
Selenium	ND (4.9)	6010B	390	1	SVD	10/12/10 17:25	2.07	100	CJ01217
Silver	ND (0.49)	6010B	200	1	SVD	10/12/10 17:25	2.07	100	CJ01217
Thallium	ND (1.21)	7841	5.5	5	SVD	10/14/10 0:57	2.07	100	CJ01217
Zinc	6.8 (2.4)	6010B	6000	1	SVD	10/12/10 17:25	2.07	100	CJ01217



**CERTIFICATE OF ANALYSIS**

Client Name: RC & D  
 Client Project ID: Lincoln Lace  
 Client Sample ID: GF-1  
 Date Sampled: 10/06/10 15:00  
 Percent Solids: 99  
 Initial Volume: 20.2  
 Final Volume: 15  
 Extraction Method: 5035

ESS Laboratory Work Order: 1010106  
 ESS Laboratory Sample ID: 1010106-01  
 Sample Matrix: Soil  
 Units: mg/kg dry  
 Analyst: MD

**5035/8260B Volatile Organic Compounds / Methanol**

Analyte	Results (MRL)	MDL	RI - RES DEC		Analyzed	Sequence	Batch
			Limit	DF			
1,1,1,2-Tetrachloroethane	ND (0.0760)	0.0066	2.2	1	10/12/10 17:27	CTJ0075	CJ01224
1,1,1-Trichloroethane	ND (0.0380)	0.0067	540	1	10/12/10 17:27	CTJ0075	CJ01224
1,1,2,2-Tetrachloroethane	ND (0.0380)	0.0103	1.3	1	10/12/10 17:27	CTJ0075	CJ01224
1,1,2-Trichloroethane	ND (0.0380)	0.0095	3.6	1	10/12/10 17:27	CTJ0075	CJ01224
1,1-Dichloroethane	ND (0.0380)	0.0061	920	1	10/12/10 17:27	CTJ0075	CJ01224
1,1-Dichloroethene	ND (0.0380)	0.0094	0.2	1	10/12/10 17:27	CTJ0075	CJ01224
1,1-Dichloropropene	ND (0.0380)	0.0059		1	10/12/10 17:27	CTJ0075	CJ01224
1,2,3-Trichlorobenzene	ND (0.0380)	0.0127		1	10/12/10 17:27	CTJ0075	CJ01224
1,2,3-Trichloropropane	ND (0.0380)	0.0094		1	10/12/10 17:27	CTJ0075	CJ01224
1,2,4-Trichlorobenzene	ND (0.0380)	0.0084	96	1	10/12/10 17:27	CTJ0075	CJ01224
1,2,4-Trimethylbenzene	ND (0.0380)	0.0073		1	10/12/10 17:27	CTJ0075	CJ01224
1,2-Dibromo-3-Chloropropane	ND (0.228)	0.0760	0.5	1	10/12/10 17:27	CTJ0075	CJ01224
1,2-Dibromoethane	ND (0.0380)	0.0097	0.01	1	10/12/10 17:27	CTJ0075	CJ01224
1,2-Dichlorobenzene	ND (0.0380)	0.0054	510	1	10/12/10 17:27	CTJ0075	CJ01224
1,2-Dichloroethane	ND (0.0380)	0.0102	0.9	1	10/12/10 17:27	CTJ0075	CJ01224
1,2-Dichloropropane	ND (0.0380)	0.0100	1.9	1	10/12/10 17:27	CTJ0075	CJ01224
1,3,5-Trimethylbenzene	ND (0.0380)	0.0067		1	10/12/10 17:27	CTJ0075	CJ01224
1,3-Dichlorobenzene	ND (0.0380)	0.0048	430	1	10/12/10 17:27	CTJ0075	CJ01224
1,3-Dichloropropane	ND (0.0380)	0.0085		1	10/12/10 17:27	CTJ0075	CJ01224
1,4-Dichlorobenzene	ND (0.0380)	0.0101	27	1	10/12/10 17:27	CTJ0075	CJ01224
1,4-Dioxane - Screen	ND (3.80)	1.27		1	10/12/10 17:27	CTJ0075	CJ01224
1-Chlorohexane	ND (0.0380)	0.0072		1	10/12/10 17:27	CTJ0075	CJ01224
2,2-Dichloropropane	ND (0.0760)	0.0130		1	10/12/10 17:27	CTJ0075	CJ01224
2-Butanone	ND (0.950)	0.220	10000	1	10/12/10 17:27	CTJ0075	CJ01224
2-Chlorotoluene	ND (0.0380)	0.0107		1	10/12/10 17:27	CTJ0075	CJ01224
2-Hexanone	ND (0.380)	0.0655		1	10/12/10 17:27	CTJ0075	CJ01224
4-Chlorotoluene	ND (0.0380)	0.0049		1	10/12/10 17:27	CTJ0075	CJ01224
4-Isopropyltoluene	ND (0.0380)	0.0068		1	10/12/10 17:27	CTJ0075	CJ01224
4-Methyl-2-Pentanone	ND (0.380)	0.0458	1200	1	10/12/10 17:27	CTJ0075	CJ01224
Acetone	ND (0.950)	0.281	7800	1	10/12/10 17:27	CTJ0075	CJ01224
Benzene	ND (0.0380)	0.0062	2.5	1	10/12/10 17:27	CTJ0075	CJ01224



# ESS Laboratory

Division of Thielsch Engineering, Inc.

# BAL Laboratory

The Microbiology Division  
of Thielsch Engineering, Inc.



## CERTIFICATE OF ANALYSIS

Client Name: RC & D  
Client Project ID: Lincoln Lace  
Client Sample ID: GF-1  
Date Sampled: 10/06/10 15:00  
Percent Solids: 99  
Initial Volume: 20.2  
Final Volume: 15  
Extraction Method: 5035

ESS Laboratory Work Order: 1010106  
ESS Laboratory Sample ID: 1010106-01  
Sample Matrix: Soil  
Units: mg/kg dry  
Analyst: MD

### 5035/8260B Volatile Organic Compounds / Methanol

Analyte	Results (MRL)	MDL	RI - RES DEC		Analyzed	Sequence	Batch
			Limit	DF			
Bromobenzene	ND (0.0380)	0.0104		1	10/12/10 17:27	CTJ0075	CJ01224
Bromochloromethane	ND (0.0380)	0.0123		1	10/12/10 17:27	CTJ0075	CJ01224
Bromodichloromethane	ND (0.0380)	0.0052	10	1	10/12/10 17:27	CTJ0075	CJ01224
Bromoform	ND (0.0380)	0.0109	81	1	10/12/10 17:27	CTJ0075	CJ01224
Bromomethane	ND (0.0760)	0.0254	0.8	1	10/12/10 17:27	CTJ0075	CJ01224
Carbon Disulfide	ND (0.0380)	0.0056		1	10/12/10 17:27	CTJ0075	CJ01224
Carbon Tetrachloride	ND (0.0380)	0.0066	1.5	1	10/12/10 17:27	CTJ0075	CJ01224
Chlorobenzene	ND (0.0380)	0.0060	210	1	10/12/10 17:27	CTJ0075	CJ01224
Chloroethane	ND (0.0760)	0.0253		1	10/12/10 17:27	CTJ0075	CJ01224
Chloroform	ND (0.0380)	0.0078	1.2	1	10/12/10 17:27	CTJ0075	CJ01224
Chloromethane	ND (0.0760)	0.0097		1	10/12/10 17:27	CTJ0075	CJ01224
cis-1,2-Dichloroethene	ND (0.0380)	0.0094	630	1	10/12/10 17:27	CTJ0075	CJ01224
cis-1,3-Dichloropropene	ND (0.0380)	0.0086		1	10/12/10 17:27	CTJ0075	CJ01224
Dibromochloromethane	ND (0.0380)	0.0096	7.6	1	10/12/10 17:27	CTJ0075	CJ01224
Dibromomethane	ND (0.0380)	0.0120		1	10/12/10 17:27	CTJ0075	CJ01224
Dichlorodifluoromethane	ND (0.0380)	0.0066		1	10/12/10 17:27	CTJ0075	CJ01224
Diethyl Ether	ND (0.0380)	0.0097		1	10/12/10 17:27	CTJ0075	CJ01224
Di-isopropyl ether	ND (0.0380)	0.0071		1	10/12/10 17:27	CTJ0075	CJ01224
Ethyl tertiary-butyl ether	ND (0.0380)	0.0096		1	10/12/10 17:27	CTJ0075	CJ01224
Ethylbenzene	ND (0.0380)	0.0049	71	1	10/12/10 17:27	CTJ0075	CJ01224
Hexachlorobutadiene	ND (0.0380)	0.0127	8.2	1	10/12/10 17:27	CTJ0075	CJ01224
Isopropylbenzene	ND (0.0380)	0.0067	27	1	10/12/10 17:27	CTJ0075	CJ01224
Methyl tert-Butyl Ether	ND (0.0380)	0.0061	390	1	10/12/10 17:27	CTJ0075	CJ01224
Methylene Chloride	ND (0.190)	0.0100	45	1	10/12/10 17:27	CTJ0075	CJ01224
Naphthalene	ND (0.0380)	0.0100	54	1	10/12/10 17:27	CTJ0075	CJ01224
n-Butylbenzene	ND (0.0380)	0.0094		1	10/12/10 17:27	CTJ0075	CJ01224
n-Propylbenzene	ND (0.0380)	0.0093		1	10/12/10 17:27	CTJ0075	CJ01224
sec-Butylbenzene	ND (0.0380)	0.0051		1	10/12/10 17:27	CTJ0075	CJ01224
Styrene	ND (0.0380)	0.0050	13	1	10/12/10 17:27	CTJ0075	CJ01224
tert-Butylbenzene	ND (0.0380)	0.0089		1	10/12/10 17:27	CTJ0075	CJ01224
Tertiary-amyl methyl ether	ND (0.0380)	0.0055		1	10/12/10 17:27	CTJ0075	CJ01224



# ESS Laboratory

Division of Thielsch Engineering, Inc.

# BAL Laboratory

The Microbiology Division  
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## CERTIFICATE OF ANALYSIS

Client Name: RC & D  
 Client Project ID: Lincoln Lace  
 Client Sample ID: GF-1  
 Date Sampled: 10/06/10 15:00  
 Percent Solids: 99  
 Initial Volume: 20.2  
 Final Volume: 15  
 Extraction Method: 5035

ESS Laboratory Work Order: 1010106  
 ESS Laboratory Sample ID: 1010106-01  
 Sample Matrix: Soil  
 Units: mg/kg dry  
 Analyst: MD

### 5035/8260B Volatile Organic Compounds / Methanol

Analyte	Results (MRL)	MDL	RI - RES DEC		Analyzed	Sequence	Batch
			Limit	DF			
Tetrachloroethene	ND (0.0380)	0.0127	12	1	10/12/10 17:27	CTJ0075	CJ01224
Tetrahydrofuran	ND (0.380)	0.0981		1	10/12/10 17:27	CTJ0075	CJ01224
Toluene	ND (0.0380)	0.0097	190	1	10/12/10 17:27	CTJ0075	CJ01224
trans-1,2-Dichloroethene	ND (0.0380)	0.0125	1100	1	10/12/10 17:27	CTJ0075	CJ01224
trans-1,3-Dichloropropene	ND (0.0380)	0.0117		1	10/12/10 17:27	CTJ0075	CJ01224
Trichloroethene	ND (0.0380)	0.0078	13	1	10/12/10 17:27	CTJ0075	CJ01224
Trichlorofluoromethane	ND (0.0380)	0.0100		1	10/12/10 17:27	CTJ0075	CJ01224
Vinyl Acetate	ND (0.190)	0.0078		1	10/12/10 17:27	CTJ0075	CJ01224
Vinyl Chloride	ND (0.0380)	0.0125	0.02	1	10/12/10 17:27	CTJ0075	CJ01224
Xylene O	ND (0.0380)	0.0073	110	1	10/12/10 17:27	CTJ0075	CJ01224
Xylene P,M	ND (0.0760)	0.0147	110	1	10/12/10 17:27	CTJ0075	CJ01224
Xylenes (Total)	ND (0.114)		110	1	10/12/10 17:27		[CALC]

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichloroethane-d4	91 %		70-130
Surrogate: 4-Bromofluorobenzene	88 %		70-130
Surrogate: Dibromofluoromethane	107 %		70-130
Surrogate: Toluene-d8	84 %		70-130



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## CERTIFICATE OF ANALYSIS

Client Name: RC & D  
Client Project ID: Lincoln Lace  
Client Sample ID: GF-1  
Date Sampled: 10/06/10 15:00  
Percent Solids: 99  
Initial Volume: 19.9  
Final Volume: 1  
Extraction Method: 3546

ESS Laboratory Work Order: 1010106  
ESS Laboratory Sample ID: 1010106-01  
Sample Matrix: Soil  
Units: mg/kg dry  
Analyst: ML  
Prepared: 10/13/10 15:45

### 8100M Total Petroleum Hydrocarbons

<u>Analyte</u>	<u>Results (MRL)</u>	<u>RI - RES DEC</u>		<u>Analyzed</u>	<u>Sequence</u>	<u>Batch</u>
		<u>Limit</u>	<u>DF</u>			
Total Petroleum Hydrocarbons	ND (38.1)	500	1	10/13/10 19:00	CTJ0094	CJ01225
		<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>		
<i>Surrogate: O-Terphenyl</i>		124 %		40-140		



**CERTIFICATE OF ANALYSIS**

Client Name: RC & D  
 Client Project ID: Lincoln Lace  
 Client Sample ID: GF-1  
 Date Sampled: 10/06/10 15:00  
 Percent Solids: 99  
 Initial Volume: 15  
 Final Volume: 0.5  
 Extraction Method: 3546

ESS Laboratory Work Order: 1010106  
 ESS Laboratory Sample ID: 1010106-01  
 Sample Matrix: Soil  
 Units: mg/kg dry  
 Analyst: IBM  
 Prepared: 10/13/10 15:45

**8270C Semi-Volatile Organic Compounds**

<u>Analyte</u>	<u>Results (MRL)</u>	<u>RI - RES DEC</u>		<u>Analyzed</u>	<u>Sequence</u>	<u>Batch</u>
		<u>Limit</u>	<u>DF</u>			
1,1-Biphenyl	ND (0.336)	0.8	1	10/19/10 3:40	CTJ0127	CJ01322
1,2,4-Trichlorobenzene	ND (0.336)	96	1	10/19/10 3:40	CTJ0127	CJ01322
1,2-Dichlorobenzene	ND (0.336)	510	1	10/19/10 3:40	CTJ0127	CJ01322
1,3-Dichlorobenzene	ND (0.336)	430	1	10/19/10 3:40	CTJ0127	CJ01322
1,4-Dichlorobenzene	ND (0.336)	27	1	10/19/10 3:40	CTJ0127	CJ01322
2,3,4,6-Tetrachlorophenol	ND (1.69)		1	10/19/10 3:40	CTJ0127	CJ01322
2,4,5-Trichlorophenol	ND (0.336)	330	1	10/19/10 3:40	CTJ0127	CJ01322
2,4,6-Trichlorophenol	ND (0.336)	58	1	10/19/10 3:40	CTJ0127	CJ01322
2,4-Dichlorophenol	ND (0.336)	30	1	10/19/10 3:40	CTJ0127	CJ01322
2,4-Dimethylphenol	ND (0.336)	1400	1	10/19/10 3:40	CTJ0127	CJ01322
2,4-Dinitrophenol	ND (1.69)	160	1	10/19/10 3:40	CTJ0127	CJ01322
2,4-Dinitrotoluene	ND (0.336)	0.9	1	10/19/10 3:40	CTJ0127	CJ01322
2,6-Dinitrotoluene	ND (0.336)		1	10/19/10 3:40	CTJ0127	CJ01322
2-Chloronaphthalene	ND (0.336)		1	10/19/10 3:40	CTJ0127	CJ01322
2-Chlorophenol	ND (0.336)	50	1	10/19/10 3:40	CTJ0127	CJ01322
2-Methylnaphthalene	ND (0.336)	123	1	10/19/10 3:40	CTJ0127	CJ01322
2-Methylphenol	ND (0.336)		1	10/19/10 3:40	CTJ0127	CJ01322
2-Nitroaniline	ND (0.336)		1	10/19/10 3:40	CTJ0127	CJ01322
2-Nitrophenol	ND (0.336)		1	10/19/10 3:40	CTJ0127	CJ01322
3,3'-Dichlorobenzidine	ND (0.674)	1.4	1	10/19/10 3:40	CTJ0127	CJ01322
3+4-Methylphenol	ND (0.674)		1	10/19/10 3:40	CTJ0127	CJ01322
3-Nitroaniline	ND (0.336)		1	10/19/10 3:40	CTJ0127	CJ01322
4,6-Dinitro-2-Methylphenol	ND (1.69)		1	10/19/10 3:40	CTJ0127	CJ01322
4-Bromophenyl-phenylether	ND (0.336)		1	10/19/10 3:40	CTJ0127	CJ01322
4-Chloro-3-Methylphenol	ND (0.336)		1	10/19/10 3:40	CTJ0127	CJ01322
4-Chloroaniline	ND (0.674)	310	1	10/19/10 3:40	CTJ0127	CJ01322
4-Chloro-phenyl-phenyl ether	ND (0.336)		1	10/19/10 3:40	CTJ0127	CJ01322
4-Nitroaniline	ND (0.336)		1	10/19/10 3:40	CTJ0127	CJ01322
4-Nitrophenol	ND (1.69)		1	10/19/10 3:40	CTJ0127	CJ01322
Acenaphthene	ND (0.336)	43	1	10/19/10 3:40	CTJ0127	CJ01322
Acenaphthylene	ND (0.336)	23	1	10/19/10 3:40	CTJ0127	CJ01322



# ESS Laboratory

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## CERTIFICATE OF ANALYSIS

Client Name: RC & D  
Client Project ID: Lincoln Lace  
Client Sample ID: GF-1  
Date Sampled: 10/06/10 15:00  
Percent Solids: 99  
Initial Volume: 15  
Final Volume: 0.5  
Extraction Method: 3546

ESS Laboratory Work Order: 1010106  
ESS Laboratory Sample ID: 1010106-01  
Sample Matrix: Soil  
Units: mg/kg dry  
Analyst: IBM  
Prepared: 10/13/10 15:45

### 8270C Semi-Volatile Organic Compounds

<u>Analyte</u>	<u>Results (MRL)</u>	<u>RI - RES DEC</u>		<u>Analyzed</u>	<u>Sequence</u>	<u>Batch</u>
		<u>Limit</u>	<u>DF</u>			
Acetophenone	ND (0.674)		1	10/19/10 3:40	CTJ0127	CJ01322
Aniline	ND (0.674)		1	10/19/10 3:40	CTJ0127	CJ01322
Anthracene	ND (0.336)	35	1	10/19/10 3:40	CTJ0127	CJ01322
Azobenzene	ND (0.336)		1	10/19/10 3:40	CTJ0127	CJ01322
Benzo(a)anthracene	ND (0.336)	0.9	1	10/19/10 3:40	CTJ0127	CJ01322
Benzo(a)pyrene	ND (0.169)	0.4	1	10/19/10 3:40	CTJ0127	CJ01322
Benzo(b)fluoranthene	ND (0.336)	0.9	1	10/19/10 3:40	CTJ0127	CJ01322
Benzo(g,h,i)perylene	ND (0.336)	0.8	1	10/19/10 3:40	CTJ0127	CJ01322
Benzo(k)fluoranthene	ND (0.336)	0.9	1	10/19/10 3:40	CTJ0127	CJ01322
Benzoic Acid	ND (1.69)		1	10/19/10 3:40	CTJ0127	CJ01322
Benzyl Alcohol	ND (0.336)		1	10/19/10 3:40	CTJ0127	CJ01322
bis(2-Chloroethoxy)methane	ND (0.336)		1	10/19/10 3:40	CTJ0127	CJ01322
bis(2-Chloroethyl)ether	ND (0.336)	0.6	1	10/19/10 3:40	CTJ0127	CJ01322
bis(2-chloroisopropyl)Ether	ND (0.336)	9.1	1	10/19/10 3:40	CTJ0127	CJ01322
bis(2-Ethylhexyl)phthalate	ND (0.336)	46	1	10/19/10 3:40	CTJ0127	CJ01322
Butylbenzylphthalate	ND (0.336)		1	10/19/10 3:40	CTJ0127	CJ01322
Carbazole	ND (0.336)		1	10/19/10 3:40	CTJ0127	CJ01322
Chrysene	ND (0.169)	0.4	1	10/19/10 3:40	CTJ0127	CJ01322
Dibenzo(a,h)Anthracene	ND (0.169)	0.4	1	10/19/10 3:40	CTJ0127	CJ01322
Dibenzofuran	ND (0.336)		1	10/19/10 3:40	CTJ0127	CJ01322
Diethylphthalate	ND (0.336)	340	1	10/19/10 3:40	CTJ0127	CJ01322
Dimethylphthalate	ND (0.336)	1900	1	10/19/10 3:40	CTJ0127	CJ01322
Di-n-butylphthalate	ND (0.336)		1	10/19/10 3:40	CTJ0127	CJ01322
Di-n-octylphthalate	ND (0.336)		1	10/19/10 3:40	CTJ0127	CJ01322
Fluoranthene	ND (0.336)	20	1	10/19/10 3:40	CTJ0127	CJ01322
Fluorene	ND (0.336)	28	1	10/19/10 3:40	CTJ0127	CJ01322
Hexachlorobenzene	ND (0.169)	0.4	1	10/19/10 3:40	CTJ0127	CJ01322
Hexachlorobutadiene	ND (0.336)	8.2	1	10/19/10 3:40	CTJ0127	CJ01322
Hexachlorocyclopentadiene	ND (1.69)		1	10/19/10 3:40	CTJ0127	CJ01322
Hexachloroethane	ND (0.336)	46	1	10/19/10 3:40	CTJ0127	CJ01322
Indeno(1,2,3-cd)Pyrene	ND (0.336)	0.9	1	10/19/10 3:40	CTJ0127	CJ01322



ESS Laboratory

Division of Thielsch Engineering, Inc.

BAL Laboratory

The Microbiology Division of Thielsch Engineering, Inc.



CERTIFICATE OF ANALYSIS

Client Name: RC & D
Client Project ID: Lincoln Lace
Client Sample ID: GF-1
Date Sampled: 10/06/10 15:00
Percent Solids: 99
Initial Volume: 15
Final Volume: 0.5
Extraction Method: 3546

ESS Laboratory Work Order: 1010106
ESS Laboratory Sample ID: 1010106-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: IBM
Prepared: 10/13/10 15:45

8270C Semi-Volatile Organic Compounds

Table with columns: Analyte, Results (MRL), RI - RES DEC (Limit, DF), Analyzed, Sequence, Batch. Lists various compounds like Isophorone, Naphthalene, Nitrobenzene, etc.

Table with columns: Surrogate, %Recovery, Qualifier, Limits. Lists surrogates like 1,2-Dichlorobenzene-d4, 2,4,6-Tribromophenol, etc.



# THIELSCH ENGINEERING, INC

## Sieve Analysis Test Report

Client: ESS Laboratory  
Project: 1010368  
ESS Sample # 1010368-01  
Client I.D.: 1010368-01

Date: 10/27/2010  
T.E.I. Project # 74-10-0002-1  
ESS Project # 1010368  
TEI Report # 1010368-01  
Lab Tech: JR

Total Moisture Content by Drying (D2216)		Materials Finer than 75 µm Sieve by Washing (C117)	
Wet Mass (W):	1046.0	Dry Mass after wash (Dw):	
Original Dry Mass (D):	1018.5	Mass of fines lost by wash (D - Dw):	0.0
Moisture Loss (W - D):	27.5	% -75 µm Sieve (100 x (D - Dw)/D):	
% Moisture (100 x (W - D) / D):	2.7		

Sieve Analysis of Fine and Coarse Aggregates ( C136 /C117 )								
Sieve	Mass per Sieve		% Retained per Sieve		% Passing		Specification %	
	Unwashed	Washed	Unwashed	Washed	Unwashed	Washed	PR	PP
2 1/2"	0.0		0.0		100.0			
2"	0.0		0.0		100.0			
1"	210.0		20.6		79.4			
1/2"	335.5		32.9		67.1			
#4	433.5		42.6		57.4			
#10	506.5		49.7		50.3			
#40	716.0		70.3		29.7			
#200	960.0		94.3		5.7			
Pan	1018.5		100.0				No	
Sub Total	1018.5							
Loss on Wash (D - Dw)		0.0						
Total	1018.5							

Comments: USCS Classification: (SP-SM) Poorly Graded Sand w/Silt & Gravel

Verity Wendy Kerkhoff

Reviewed by: Henry J. Soares III, P.E.

NICET Level II Cert. # 123706

QA/QC Manager

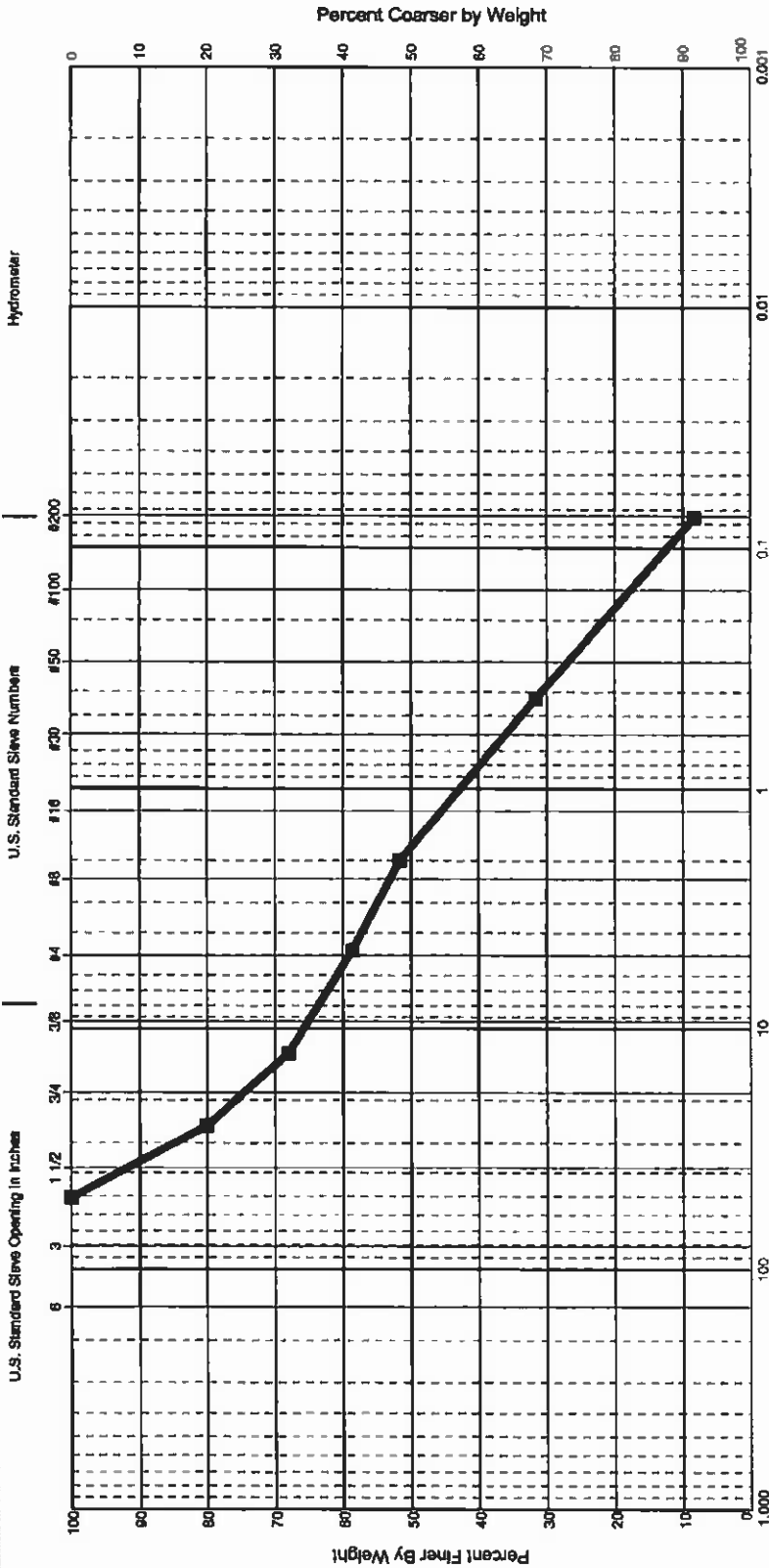
Date: 10/27/2010

Date: 10/27/2010

Results Within Specification Limits:

Results Outside Specification Limits:

# GRAIN-SIZE DISTRIBUTION TEST REPORT



U.S. Standard Sieve Numbers		Grain Size (mm)		Unified Soil Classification System	
% Coarse	42.6%	% Sand	51.7%	% Silt	5.7%
				% Clay	0.0%

Soil Counter	Borehole ID	Sample ID	Depth Upper	Depth Lower	Date Sampled	Texture	Soil Description	PL	LL	PI
854082054	1010368	1010368-01	ft	ft		SP-SM	Poorny Graded Sand w/Silt & Gravel			

NP=No plastic limit

<b>Company:</b> Thielsch Engineering <b>Address:</b> 195 Frances Ave. Cranston United States <b>Telephone:</b> 401-467-6454 <b>Fax:</b> 401-467-2398	<b>Project No.:</b> 10-0002-1 <b>Borehole:</b> 1010368 <b>Project Name:</b> ESS <b>Location:</b> Cranston RI 02910 <b>Soil Counter:</b> 854082054 <b>Sample ID:</b> 1010368-01 <b>Depth:</b> ft
<b>USCS GRAIN-SIZE DISTRIBUTION</b> Tested By: Jason Rapose Test Date: 27-Oct-10	

*Appendix F*

*Inspection Log Forms*

**Lincoln Lace and Braid  
Providence, Rhode Island  
Construction Oversight  
Engineered Cap Inspection Checklist**

EA Representative RUN

Signature [Signature]

Date 11/3/10

Weather/Temperature 55°F CLEAR

Items to Check		Items to Check	
Hard Hats & Steel Toe Boots	←	Engineered cap conditions	N/A
Contractor Equipment (leaks, etc)	←	Exposed Excavations	S
Erosion Control Conditions	U	Stockpile Conditions	S
All Stabilized Construction Entrances	←	Storage Areas	S
Vegetation and Field Conditions	S	Dust Controls	N/A
Quantities of Materials in Use	←	Condition of Materials Delivered	S

\*S = Satisfactory

U = Unsatisfactory

N/A = Not Applicable

Work Day Observations (attach additional sheets as needed):

- NOISES FROM ROAD TRAFFIC - 100 YD FROM SITE
- NOISE FROM EAST OF 'LOCKST' AS OF 2:00 PM IS HEARD
- ZCUTS WILL PROVIDE PROTECTION FOR FENCING
- TREES IN AREA OF BICE PATH - WILL PROVIDE PROTECTION BEFORE TO REMOVE
- EROSION CONTROLS NOT YET INSTALLED (PROTECTORS)
- EXTRACT OF SLEICERANT INSTALLED UPON (2ND) PROTECT
- SPREAD BONES ON SITE FOR CATERDAM
- FIND STORMWATER BASIN - WILL BE ALLOW FOR REVIEW OF PLO. BEFORE REMOVING
- COINTEGRATED STONE, BASTARD, (SAND), (MIST) JEWEL ON SITE

**Lincoln Lace and Braid  
Providence, Rhode Island  
Construction Oversight  
Engineered Cap Inspection Checklist**

EA Representative RGW + FBP

Signature *[Handwritten Signature]*

Date 11/5/10

Weather/Temperature OVERCAST - 50°F

Items to Check		Items to Check	
Hard Hats & Steel Toe Boots	S	Engineered cap conditions	N/A
Contractor Equipment (leaks, etc)	S	Exposed Excavations	S
Erosion Control Conditions	S	Stockpile Conditions	S
All Stabilized Construction Entrances	S	Storage Areas	S
Vegetation and Field Conditions	S	Dust Controls	S
Quantities of Materials in Use	S	Condition of Materials Delivered	S

\*S = Satisfactory                      U = Unsatisfactory                      N/A = Not Applicable

Work Day Observations (attach additional sheets as needed):

- RC+D WORKING IN SWICWAY
- GEOGRID + GEOTEXTILE INSTALLED, SHINGLED CORRECTLY
- INSTALLING CRUSHED STONE ON TOP OF FABRIC
- EXCAVATING IN AREA OF POKE IN EASTERN PORTION
- FENCE REMOVED IN NW AREA ALONG RIVER
- SHOULD FINISH GAP IN SWICWAY TODAY

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**Lincoln Lace and Braid  
Providence, Rhode Island  
Construction Oversight  
Engineered Cap Inspection Checklist**

EA Representative RAM

Signature *[Handwritten Signature]*

Date ~~11/9/10~~ <sup>8am</sup> 11/8/10

Weather/Temperature RAW - 50°F

Items to Check		Items to Check	
Hard Hats & Steel Toe Boots	S	Engineered cap conditions	<del>N/A</del> S
Contractor Equipment (leaks, etc)	S	Exposed Excavations	S
Erosion Control Conditions	S	Stockpile Conditions	S
All Stabilized Construction Entrances	S	Storage Areas	S
Vegetation and Field Conditions	S	Dust Controls	S
Quantities of Materials in Use	S	Condition of Materials Delivered	S

\*S = Satisfactory

U = Unsatisfactory

N/A = Not Applicable

Work Day Observations (attach additional sheets as needed):

- DCAD EXCAVATING BIKE PATH
- " UNCOVERED FOUNDATION ALONG
- SWICEWAY, R McMAHON INSTRUCTED TO LEAVE
- FOOTING + GRADE AND PLANT AROUND IT.
- FENCE MESH + VEGETATION REMOVED
- NATIVE FILL BEING INSTALLED IN CS 2

**Lincoln Lace and Braid  
Providence, Rhode Island  
Construction Oversight  
Engineered Cap Inspection Checklist**

EA Representative REM + SCM

Signature [Handwritten Signature]

Date 11/10/10

Weather/Temperature 100°F

Items to Check		Items to Check	
Hard Hats & Steel Toe Boots	S	Engineered cap conditions	S
Contractor Equipment (leaks, etc)	S	Exposed Excavations	S
Erosion Control Conditions	S	Stockpile Conditions	S
All Stabilized Construction Entrances	S	Storage Areas	S
Vegetation and Field Conditions	S	Dust Controls	S
Quantities of Materials in Use	S	Condition of Materials Delivered	S

\*S = Satisfactory

U = Unsatisfactory

N/A = Not Applicable

Work Day Observations (attach additional sheets as needed):

→ RCD INSTALLING GEOTEXTILE + SOIL IN  
WETLAND PLANTING AREAS ALONG SWICEMAN  
→ BEGAN DEWATERING INTO FRAC TANK  
→ INSTALLED FIRST CHECK DAM (UPSTREAM)

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**Lincoln Lace and Braid  
Providence, Rhode Island  
Construction Oversight  
Engineered Cap Inspection Checklist**

EA Representative RGW

Signature [Handwritten Signature]

Date 11/15/10

Weather/Temperature OVERCAST

Items to Check		Items to Check	
Hard Hats & Steel Toe Boots	S	Engineered cap conditions	S
Contractor Equipment (leaks, etc)	S	Exposed Excavations	S
Erosion Control Conditions	S	Stockpile Conditions	S
All Stabilized Construction Entrances	S	Storage Areas	S
Vegetation and Field Conditions	S	Dust Controls	S
Quantities of Materials in Use	S	Condition of Materials Delivered	S

\*S = Satisfactory

U = Unsatisfactory

N/A = Not Applicable

Work Day Observations (attach additional sheets as needed):

→ SWICENAY COMPLETED - VERY LITTLE FLOW  
 → WATER FLOWING THROUGH GAPS IN EACH DAM  
 → TREES IN WAY OF BIKE PATH REMOVED

**Lincoln Lace and Braid  
Providence, Rhode Island  
Construction Oversight  
Engineered Cap Inspection Checklist**

EA Representative EGM

Signature [Handwritten Signature]

Date 11/17/10

Weather/Temperature CLEAR-

Items to Check		Items to Check	
Hard Hats & Steel Toe Boots		Engineered cap conditions	
Contractor Equipment (leaks, etc)		Exposed Excavations	
Erosion Control Conditions		Stockpile Conditions	
All Stabilized Construction Entrances		Storage Areas	
Vegetation and Field Conditions		Dust Controls	
Quantities of Materials in Use		Condition of Materials Delivered	

\*S = Satisfactory                      U = Unsatisfactory                      N/A = Not Applicable

Work Day Observations (attach additional sheets as needed):

→ SOIL STOCKPILED ON ADJACENT LOT  
(TPL) - INSTRUCTED RCTD TO REMOVE  
W/O CUTTING INTO CAP + MUST RESEED.

→ <sup>CAPPING</sup> ~~FILLING~~ BILE PATH + CENTER PORTION  
OF SITE

~~[Scribbled out text]~~

[Empty lines for additional observations]

**Lincoln Lace and Braid  
Providence, Rhode Island  
Construction Oversight  
Engineered Cap Inspection Checklist**

EA Representative REAR

Signature [Handwritten Signature]

Date 11/19/10

Weather/Temperature CLEAR -

Items to Check		Items to Check	
Hard Hats & Steel Toe Boots	S	Engineered cap conditions	S
Contractor Equipment (leaks, etc)	S	Exposed Excavations	S
Erosion Control Conditions	S	Stockpile Conditions	S
All Stabilized Construction Entrances	S	Storage Areas	S
Vegetation and Field Conditions	S	Dust Controls	S
Quantities of Materials in Use	S	Condition of Materials Delivered	S

\*S = Satisfactory

U = Unsatisfactory

N/A = Not Applicable

Work Day Observations (attach additional sheets as needed):

→ RIDER ON SITE - NO COMMENTS ON  
REMEDIATION EFFORTS

→ CONTINUANCE OF CAPPING CENTRAL PORTION  
OF SITE w/ FABRIC + SUBBASE

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**Lincoln Lace and Braid  
Providence, Rhode Island  
Construction Oversight  
Engineered Cap Inspection Checklist**

EA Representative RCM

Signature [Handwritten Signature]

Date 11/22/10

Weather/Temperature OVERCAST -

Items to Check		Items to Check	
Hard Hats & Steel Toe Boots	S	Engineered cap conditions	S
Contractor Equipment (leaks, etc)	S	Exposed Excavations	S
Erosion Control Conditions	S	Stockpile Conditions	S
All Stabilized Construction Entrances	S	Storage Areas	S
Vegetation and Field Conditions	S	Dust Controls	S
Quantities of Materials in Use	S	Condition of Materials Delivered	S

\*S = Satisfactory

U = Unsatisfactory

N/A = Not Applicable

Work Day Observations (attach additional sheets as needed):

→ INSTRUCTED RC+D TO INSTALL SAND INTO CHECK TO INCREASE RETAINAGE OF EACH CHECK DAM

→ INSTALLING TOPSOIL ALONG SIDEWALK  
→ COMPOST BEING MIXED INTO TOPSOIL ON SITE

**Lincoln Lace and Braid  
Providence, Rhode Island  
Construction Oversight  
Engineered Cap Inspection Checklist**

EA Representative RAW

Signature [Handwritten Signature]

Date 11/23/10

Weather/Temperature OVERCAST -

Items to Check		Items to Check	
Hard Hats & Steel Toe Boots	S	Engineered cap conditions	S
Contractor Equipment (leaks, etc)	S	Exposed Excavations	S
Erosion Control Conditions	S	Stockpile Conditions	S
All Stabilized Construction Entrances	S	Storage Areas	S
Vegetation and Field Conditions	S	Dust Controls	S
Quantities of Materials in Use	S	Condition of Materials Delivered	S

\*S = Satisfactory

U = Unsatisfactory

N/A = Not Applicable

Work Day Observations (attach additional sheets as needed):

- CONTINUING CAPPING
  - GRADED ALONG EASTERN EXTENT OF SLUICeway
  - INSTALLING TOPSOIL IN CENTER OF SITE
- 
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**Lincoln Lace and Braid  
Providence, Rhode Island  
Construction Oversight  
Engineered Cap Inspection Checklist**

EA Representative RCW

Signature [Handwritten Signature]

Date 12/3/10

Weather/Temperature Cloudy -

Items to Check		Items to Check	
Hard Hats & Steel Toe Boots	S	Engineered cap conditions	S
Contractor Equipment (leaks, etc)	S	Exposed Excavations	S
Erosion Control Conditions	S	Stockpile Conditions	S
All Stabilized Construction Entrances	S	Storage Areas	S
Vegetation and Field Conditions	S	Dust Controls	S
Quantities of Materials in Use	S	Condition of Materials Delivered	S

\*S = Satisfactory

U = Unsatisfactory

N/A = Not Applicable

Work Day Observations (attach additional sheets as needed):

- EASTERN PORTION OF HYDROSEEDING/BINDER INSTALLED
- INSTALLING TORSOL ALONG WONASQUATTUCKET
- CHECK DAMS APPEAR TO BE FUNCTIONING CORRECTLY
- VANDALISM TO MACHINERY OCCURED LAST NIGHT - PROVIDENCE PD ON SITE.

**Lincoln Lace and Braid  
Providence, Rhode Island  
Construction Oversight  
Engineered Cap Inspection Checklist**

EA Representative RAM

Signature [Signature]

Date 4/28/11

Weather/Temperature RAIN / 60°F

Items to Check		Items to Check	
Hard Hats & Steel Toe Boots	N/A	Engineered cap conditions	U
Contractor Equipment (leaks, etc)	S	Exposed Excavations	N/A
Erosion Control Conditions	S	Stockpile Conditions	N/A
All Stabilized Construction Entrances	S	Storage Areas	S
Vegetation and Field Conditions	S	Dust Controls	N/A
Quantities of Materials in Use	S	Condition of Materials Delivered	S

\*S = Satisfactory

U = Unsatisfactory

N/A = Not Applicable

Work Day Observations (attach additional sheets as needed):

- MEET RC&D AND RIDEM ON SITE
- INITIATING PLANTINGS TODAY
- OBSERVED WASHOUTS RESULTANT FROM DRAW PIPE ON UP LANDS AREA
- EA RECOMMENDED RIPRAP, RIDEM AGREED.
- OBSERVED OTHER WASHOUTS ACROSS SITE
- OBSERVED KNOT WEED GROWING AROUND TREES IN GRAVELLED AREAS
- RC&D STATED WOULD PROVIDE COST FOR MATERIALS ONLY FOR RIPRAP INSTALLATION.



**Lincoln Lace and Braid  
Providence, Rhode Island  
Construction Oversight  
Engineered Cap Inspection Checklist**

EA Representative P. Chase Bernier

Signature *P. C. Bernier*

Date 29 Apr 2011

Weather/Temperature Sunny, 70°F

Items to Check		Items to Check	
Hard Hats & Steel Toe Boots		Engineered cap conditions	
Contractor Equipment (leaks, etc)		Exposed Excavations	
Erosion Control Conditions		Stockpile Conditions	
All Stabilized Construction Entrances		Storage Areas	
Vegetation and Field Conditions		Dust Controls	
Quantities of Materials in Use		Condition of Materials Delivered	

\*S = Satisfactory

U = Unsatisfactory

N/A = Not Applicable

Work Day Observations (attach additional sheets as needed):

PLANTS ARE CORRECT SPP. & ARE IN GOOD HEALTH FOR THE MOST PART. NORTH SIDE PLANTINGS APPEAR TO BE MOSTLY FINISHED. SOUTH SIDE PLANTINGS ARE APPROX. 2/3 COMPLETED. WASHINGTON HAWTHORN SAPLINGS CAME IN AS BARE ROOT. THEY LOOK A BIT SHABBY, BUT SHOULD DO OKAY GIVEN THERE'S ENOUGH PRECIPITATION TO ENCOURAGE ROOT GROWTH. TOLD FOREMAN TO "MAKE IT LOOK NATURAL" INSTEAD OF PLANNED LINEAR ROWS OF PLANTS.

# *Appendix G*

## *Photograph Log*



**Photograph No. 1**

Clearing/grubbing along the former sluiceway in the southern portion of the site (10/22/10).



**Photograph No. 2**

Removal of debris for offsite disposal during clearing/grubbing phase (10/25/10).



**Photograph No. 3**

Erosion control along the Woonasquatucket River in the eastern portion of the site (10/25/10).



**Photograph No. 4**

Clearing/grubbing the central portion of the site (10/25/10).



**Photograph No. 5**  
Northeasterly view of the site with clearing of a concrete slab (10/29/10).



**Photograph No. 6**  
Clearing the site adjacent to the sluiceway in the southern portion of the site (11/3/10).



**Photograph No. 7**  
Installation of geotextile over geogrid in the sluiceway (11/5/10).



**Photograph No. 8**  
Installation of crushed stone over the geotextile in the sluiceway (11/5/10).



**Photograph No. 9**

Excavation for the proposed bike path along the Woonasquatucket River in the northeastern portion of the site (11/5/10).



**Photograph No. 10**

Excavation for the proposed bike path along the Woonasquatucket River in the northern portion of the site (11/8/10).



**Photograph No. 11**  
Installation of geotextile fabric in the southern portion of the site (11/10/10).



**Photograph No. 12**  
Installation of fill material over geotextile in the southern portion of the site (11/10/10).





**Photograph No. 13**  
Engineered barrier around mature trees left in place (11/10/10).



**Photograph No. 14**  
Installation of stone check-dams in the downstream portion of the sluiceway (11/10/10).



**Photograph No. 15**  
Installation of check-dams in the downstream portion of the sluiceway (11/15/10).



**Photograph No. 16**  
Installation of fill material over geotextile in the northern portion of the site (11/17/10).



**Photograph No. 17**

Fill material over geotextile in the southeastern portion of the site adjacent to the sluceway (11/17/10).



**Photograph No. 18**

Installation of fill material over geotextile in the central portion of the site (11/19/10).



**Photograph No. 19**  
Northeasterly view of the site (11/22/10).



**Photograph No. 20**  
Installation of loam over fill material (11/22/10).



**Photograph No. 21**  
Engineered barrier in eastern portion of the site (11/23/10).



**Photograph No. 22**  
Installation of loam and fill material (11/23/10).



**Photograph No. 23**  
Installation of geotextile in the western-central portion of the site (12/3/10).



**Photograph No. 24**  
Hydroseeded eastern portion of the site (12/3/10).



**Photograph No. 25**  
Hydroseeding the central portion of the site (12/8/10).



**Photograph No. 26**  
Landscaping the site (4/28/11).



**Photograph No. 27**  
Plantings in southeasterly portion of the site adjacent to the sluceway (5/2/11).



**Photograph No. 28**  
The upstream extent of the sluceway in the southern portion of the site (5/5/11).





**Photograph No. 29**  
Plantings in the northern portion of the site along the Woonasquatucket River (5/5/11).



**Photograph No. 30**  
Mulched landscaping along the proposed bike path (5/6/11).



**Photograph No. 31**  
Easterly view of the site (4/26/12).



Aerial photograph courtesy of DigitalGlobe 2012

**Photograph No. 32**  
Aerial view of the site (north oriented toward top of page).

*Appendix H*

*Environmental Land Usage Restriction/  
Soil Management Plan*

## ENVIRONMENTAL LAND USAGE RESTRICTION

This Declaration of Environmental Land Usage Restriction (.Restriction.) is made on this \_\_\_\_ day of \_\_\_\_\_, 20\_\_ by the City of Providence, and its successors and/or assigns (hereinafter, the “Grantor”).

### WITNESSETH:

WHEREAS, the Grantor, The City of Providence, is the owner in fee simple of certain real property identified as Plat 113, Lots 305 and 429 Rhode Island (the “Property”), more particularly described in Exhibit A (Legal Description) which is attached hereto and made a part hereof;

WHEREAS, the Property (or portion thereof identified in the Class I survey which is attached hereto as Exhibit 2A and is made a part hereof) has been determined to contain soil and/or groundwater which is contaminated with certain hazardous materials and petroleum in excess of applicable residential direct exposure criteria pursuant to the Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases (“Remediation Regulations”);

WHEREAS, the Grantor and the Department have determined that the environmental land use restrictions set forth below are consistent with the regulations adopted by the Rhode Island Department of Environmental Management (“Department”) pursuant to R.I.G.L. § 23-19.14-1 and that this restriction shall be a Conservation Restriction pursuant to R.I.G.L. § 34-39-1 et. seq. and shall not be subject to the 30 year limitation provided in R.I.G.L. § 34-4-21;

WHEREAS, the Department's written approval of this Restriction is contained in the document entitled: Remedial Approval Letter issued pursuant to the Remediation Regulations;

WHEREAS, to prevent exposure to or migration of hazardous materials and petroleum and to abate hazards to human health and/or the environment, and in accordance with the Remedial Approval Letter, the Grantor desires to impose certain restrictions upon the use, occupancy, and activities of and at the Property;

WHEREAS, the Grantor believes that this Restriction will effectively protect public health and the environment from such contamination; and

WHEREAS, the Grantor intends that such restrictions shall run with the land and be binding upon and enforceable against the Grantor and the Grantor’s successors and assigns.

NOW, THEREFORE, Grantor agrees as follows:

**A. Restrictions Applicable to the Property:** In accordance with the Remedial Approval Letter, the use, occupancy and activity of and at the Property is restricted as follows:

- i No residential use of the Property shall be permitted that is contrary to Department approvals and restrictions contained herein;
- ii No soil at the Property shall be disturbed in any manner without written permission of the Department's Office of Waste Management, except as permitted in the Soil Management Plan (SMP) approved by the Department in a written approval letter dated October 7, 2010 Exhibit B and attached hereto;
- iii Humans engaged in activities at the Property shall not be exposed to soils containing hazardous materials or petroleum in concentrations exceeding the applicable Department approved direct exposure criteria set forth in the Remediation Regulations;
- iv The engineered controls at the Property described in the SMP contained in Exhibit B attached hereto shall not be disturbed and shall be properly maintained to prevent humans engaged in recreational activity from being exposed to soils containing hazardous materials and/or petroleum in concentrations exceeding the applicable Department-approved residential direct exposure criteria in accordance with the Remediation Regulations]; and

**B. No action shall be taken, allowed, suffered, or omitted** at the Property if such action or omission is reasonably likely to:

- i Create a risk of migration of hazardous materials and/or petroleum;
- ii Create a potential hazard to human health or the environment; or
- iii Result in the disturbance of any engineered controls utilized at the Property, except as permitted in the Department-approved SMP contained in Exhibit B.

**C. Emergencies:** In the event of any emergency which presents a significant risk to human health or to the environment, including but not limited to, maintenance and repair of utility lines or a response to emergencies such as fire or flood, the application of Paragraphs A (iii.-viii.) and B above may be suspended, provided such risk cannot be abated without suspending such Paragraphs and the Grantor complies with the following:

- i Grantor shall notify the Department's Office of Waste Management in writing of the emergency as soon as possible but no more than three (3) business days after Grantor's having learned of the emergency. (This does not remove Grantor's obligation to notify any other necessary state, local or federal agencies.);

- ii Grantor shall limit both the extent and duration of the suspension to the minimum period reasonable and necessary to adequately respond to the emergency;
- iii Grantor shall implement reasonable measures necessary to prevent actual, potential, present and future risk to human health and the environment resulting from such suspension;
- iv Grantor shall communicate at the time of written notification to the Department its intention to conduct the emergency response actions and provide a schedule to complete the emergency response actions;
- v Grantor shall continue to implement the emergency response actions, on the schedule submitted to the Department, to ensure that the Property is remediated in accordance with the Remediation Regulations (or applicable variance) or restored to its condition prior to such emergency. Based upon information submitted to the Department at the time the ELUR was recorded pertaining to known environmental conditions at the Property, emergency maintenance and repair of utility lines shall only require restoration of the Property to its condition prior to the maintenance and repair of the utility lines; and
- vi Grantor shall submit to the Department, within ten (10) days after the completion of the emergency response action, a status report describing the emergency activities that have been completed.

**D. Release of Restriction; Alterations of Subject Area:** The Grantor shall not make, or allow or suffer to be made, any alteration of any kind in, to, or about any portion of the Property inconsistent with this Restriction unless the Grantor has received the Department's prior written approval for such alteration. If the Department determines that the proposed alteration is significant, the Department may require the amendment of this Restriction. Alterations deemed insignificant by the Department will be approved via a letter from the Department. The Department shall not approve any such alteration and shall not release the Property from the provisions of this Restriction unless the Grantor demonstrates to the Department's satisfaction that Grantor has managed the Property in accordance with applicable regulations.

**E. Notice of Lessees and Other Holders of Interests in the Property:** The Grantor, or any future holder of any interest in the Property, shall cause any lease, grant, or other transfer of any interest in the Property to include a provision expressly requiring the lessee, grantee, or transferee to comply with this Restriction. The failure to include such provision shall not affect the validity or applicability of this Restriction to the Property.

**F. Enforceability:** If any court of competent jurisdiction determines that any provision of this Restriction is invalid or unenforceable, the Grantor shall notify the Department in writing within fourteen (14) days of such determination.

**G. Binding Effect:** All of the terms, covenants, and conditions of this Restriction shall run with the land and shall be binding on the Grantor, its successors and assigns, and each owner and any other party entitled to control, possession or use of the Property during such period of ownership or possession.

**H. Inspection & Non-Compliance:** It shall be the obligation of the Grantor, or any future holder of any interest in the Property, to provide for annual inspections of the Property for compliance with the ELUR in accordance with Department requirements.

An officer or director of the City with direct knowledge of past and present conditions of the Property (the “City Representative”), or a qualified environmental professional will, on behalf of the Grantor or future holder of any interest in the Property, evaluate the compliance status of the Property on an annual basis. Upon completion of the evaluation, the City Representative or environmental professional will prepare and simultaneously submit to the Department and to the Grantor or future holder of any interest in the Property an evaluation report detailing the findings of the inspection, and noting any compliance violations at the Property. If the Property is determined to be out of compliance with the terms of the ELUR, the Grantor or future holder of any interest in the Property shall submit a corrective action plan in writing to the Department within ten (10) days of receipt of the evaluation report, indicating the plans to bring the Property into compliance with the ELUR, including, at a minimum, a schedule for implementation of the plan.

A qualified representative of the City will conduct semiannual inspections of the existing trees at the Site to determine if the trees are dying. If a tree is determined to be dying by the qualified professional the tree shall be removed to minimize damage to the engineered cap. The City will notify the Department a minimum of two (2) days prior to initiation of the work. The engineered cap will be repaired to ensure a minimum of one foot of vegetated, certified clean fill underlain with a geotextile of equal or greater quality than the one specified is installed.

In the event of any violation of the terms of this Restriction, which remains uncured more than ninety (90) days after written notice of violation, all Department approvals and agreements relating to the Property may be voided at the sole discretion of the Department.

**I. Terms Used Herein:** The definitions of terms used herein shall be the same as the definitions contained in Section 3 (DEFINITIONS) of the Remediation Regulations.

IN WITNESS WHEREOF, the Grantor has hereunto set (his/her) hand and seal on the day and year set forth above.

**City of Providence**

By: \_\_\_\_\_  
Grantor (signature)

\_\_\_\_\_  
Grantor (typed name)

STATE OF RHODE ISLAND

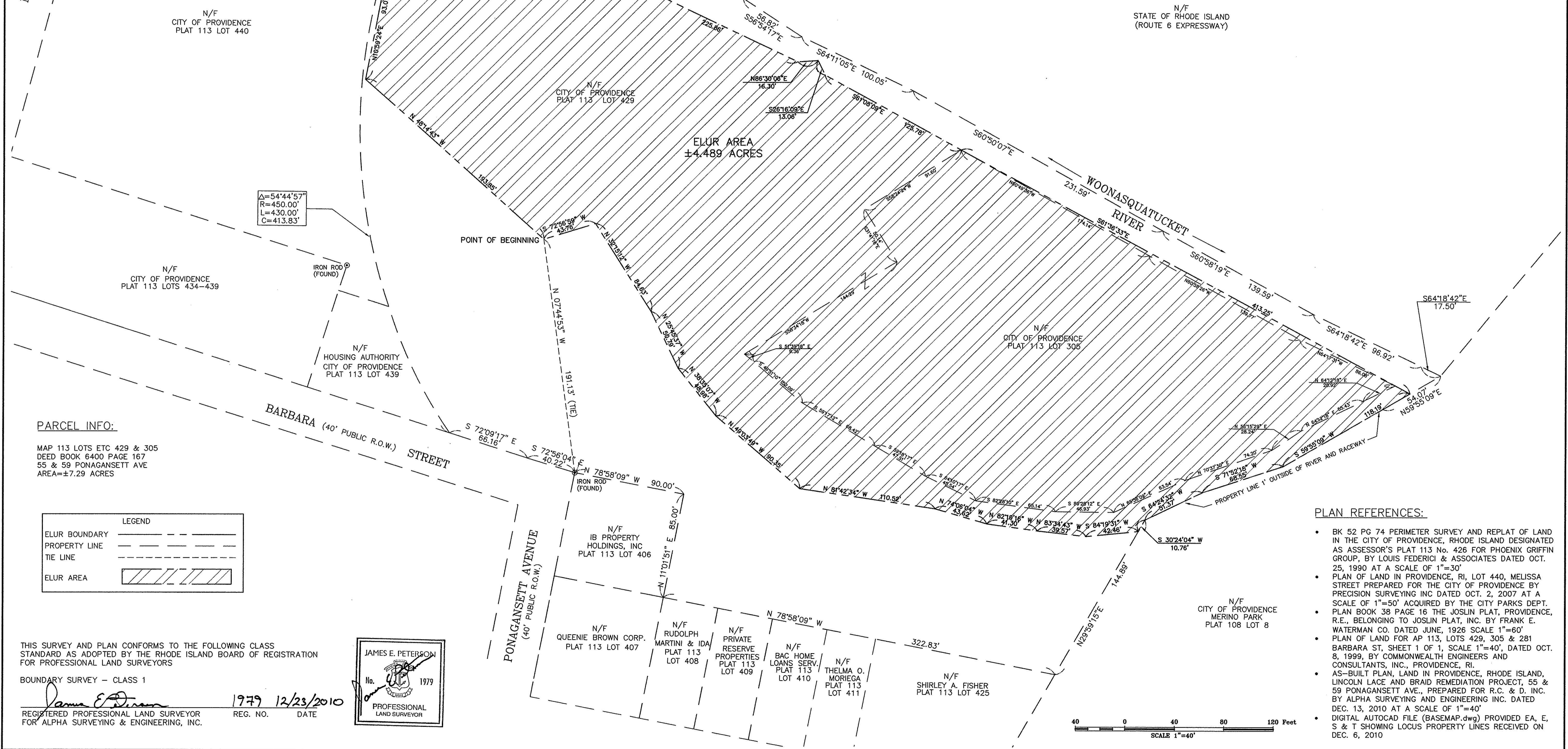
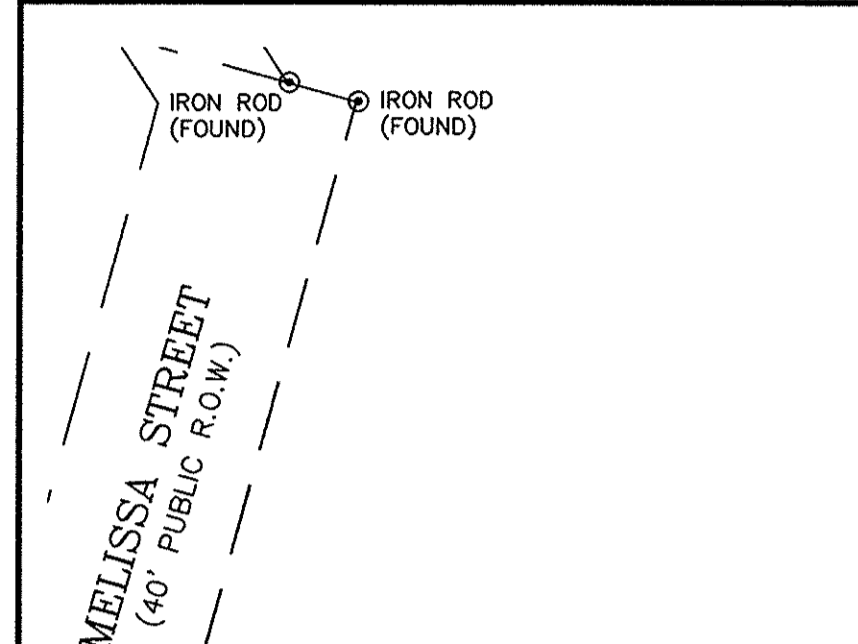
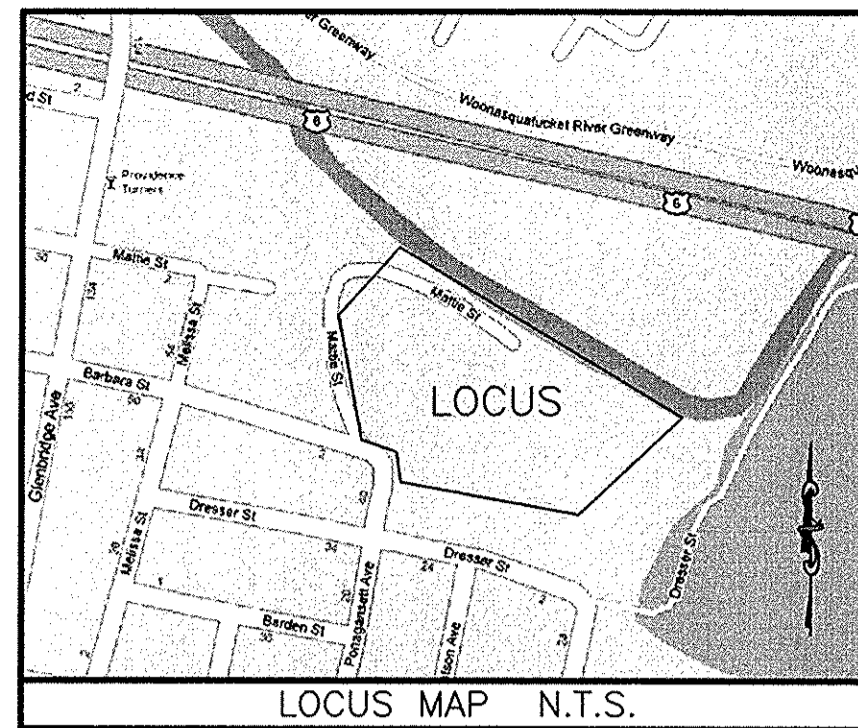
COUNTY OF PROVIDENCE

In Providence, in said County and State, on the \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me personally appeared \_\_\_\_\_, to me known and known by me to be the party executing the foregoing instrument and he acknowledged said instrument by him executed to be his free act and deed.

Notary Public: \_\_\_\_\_

My Comm. Expires: \_\_\_\_\_



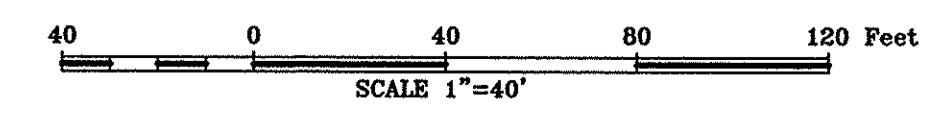
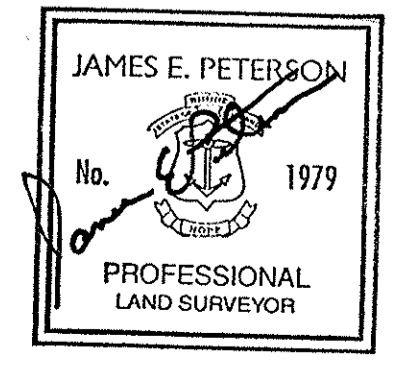


$\Delta = 54^{\circ}44'57''$   
 $R = 450.00'$   
 $L = 430.00'$   
 $C = 413.83'$

**PARCEL INFO:**  
 MAP 113 LOTS ETC 429 & 305  
 DEED BOOK 6400 PAGE 167  
 55 & 59 PONAGANSETT AVE  
 AREA = ±7.29 ACRES

LEGEND	
ELUR BOUNDARY	—————
PROPERTY LINE	—————
TIE LINE	—————
ELUR AREA	

THIS SURVEY AND PLAN CONFORMS TO THE FOLLOWING CLASS  
 STANDARD AS ADOPTED BY THE RHODE ISLAND BOARD OF REGISTRATION  
 FOR PROFESSIONAL LAND SURVEYORS  
 BOUNDARY SURVEY — CLASS 1  
 1979 12/23/2010  
 REGISTERED PROFESSIONAL LAND SURVEYOR FOR ALPHA SURVEYING & ENGINEERING, INC.



**PLAN REFERENCES:**

- BK 52 PG 74 PERIMETER SURVEY AND REPLAT OF LAND IN THE CITY OF PROVIDENCE, RHODE ISLAND DESIGNATED AS ASSESSOR'S PLAT 113 No. 426 FOR PHOENIX GRIFFIN GROUP, BY LOUIS FEDERICI & ASSOCIATES DATED OCT. 25, 1990 AT A SCALE OF 1"=30'
- PLAN OF LAND IN PROVIDENCE, RI, LOT 440, MELISSA STREET PREPARED FOR THE CITY OF PROVIDENCE BY PRECISION SURVEYING INC DATED OCT. 2, 2007 AT A SCALE OF 1"=50' ACQUIRED BY THE CITY PARKS DEPT.
- PLAN BOOK 38 PAGE 16 THE JOSLIN PLAT, PROVIDENCE, R.I., BELONGING TO JOSLIN PLAT, INC. BY FRANK E. WATERMAN CO. DATED JUNE, 1926 SCALE 1"=60'
- PLAN OF LAND FOR AP 113, LOTS 429, 305 & 281 BARBARA ST. SHEET 1 OF 1, SCALE 1"=40', DATED OCT. 8, 1999, BY COMMONWEALTH ENGINEERS AND CONSULTANTS, INC., PROVIDENCE, RI.
- AS-BUILT PLAN, LAND IN PROVIDENCE, RHODE ISLAND, LINCOLN LACE AND BRAID REMEDIATION PROJECT, 55 & 59 PONAGANSETT AVE., PREPARED FOR R.C. & D. INC. BY ALPHA SURVEYING AND ENGINEERING INC. DATED DEC. 13, 2010 AT A SCALE OF 1"=40'
- DIGITAL AUTOCAD FILE (BASEMAP.dwg) PROVIDED EA, E, S & T SHOWING LOCUS PROPERTY LINES RECEIVED ON DEC. 6, 2010

PREPARED FOR  
**R.C. & D. INC.**  
 17 GORDON AVE., SUITE 204  
 PROVIDENCE, RI 02905

JOB NO. 10154  
 SHEET NO. 1 OF 1  
 DATE 12-23-10  
 DRAWN BY RSP/AMC  
 CHECKED BY RSP/AMC  
 JOB NO. 10154

**ALPHA SURVEYING AND ENGINEERING INC.**  
 695 WAREHAM STREET  
 MIDDLEBOROUGH, MASSACHUSETTS 02346  
 (508) 295-5505

**ELUR LOCATION PLAN**  
**LAND IN PROVIDENCE, RHODE ISLAND**  
**LINCOLN LACE AND BRAID REMEDIATION PROJECT**  
**A.P. 113 LOTS 429 & 305 — 55 & 59 PONAGANSETT AVENUE**

**Boundary Description**  
**Environmental Land Use Restriction**  
**55 and 59 Ponagansett Avenue, Providence, RI**

Beginning at a point, said point being N 07°55'53" W of the intersection of the northerly line of Barbara Street with the easterly line of Ponagansett Avenue, a distance of one hundred ninety-one and thirteen hundredths (191.13') feet; thence

N 48°14'43" W a distance of one hundred ninety-three and eighty-five hundredths (193.85') feet; thence

N 10°59'24" E a distance of ninety-three and one hundredth (93.01') feet; thence

N 18°13'29" E a distance of one hundred thirty and five hundredths (130.05') feet; thence

S 70°10'34" E a distance of thirty-six and seventy-two hundredths (36.72') feet; thence

S 30°16'24" E a distance of one hundred four and fifty-eight hundredths (104.58') feet; thence

S 64°37'34" E a distance of two hundred twenty-five and eighty-six hundredths (225.86') feet; thence

N 86°30'06" E a distance of sixteen and thirty hundredths (16.30') feet; thence

S 26°16'09" E a distance of thirteen and six hundredths (13.06') feet; thence

S 61°08'09" E a distance of one hundred twenty-five and seventy-eight hundredths (125.78') feet; thence

S 61°36'33" E a distance of four hundred thirteen and twenty-five hundredths (413.25') feet; thence

S 59°55'09" W a distance of one hundred eighteen and nineteen hundredths (118.19') feet; thence

S 71°52'15" W a distance of sixty-eight and fifty-five hundredths (68.55') feet; thence

S 64°24'32" W a distance of fifty-one and thirty-seven hundredths (51.37') feet; thence

S 30°24'04" W a distance of ten and seventy-six hundredths (10.76') feet, the previous four courses by land now or formerly City of Providence ('Merino Park'); thence

S 84°19'31" W a distance of forty-two and forty-six hundredths (42.46') feet; thence

N 83°34'43" W a distance of thirty-nine and fifty-seven hundredths (39.57') feet; thence

N 82°19'16" W a distance of forty-one and thirty hundredths (41.30') feet; thence

N 74°06'04" W a distance of forty-three and sixty-two hundredths (43.62') feet; thence

N 81°42'34" W a distance of one hundred ten and fifty-two hundredths (110.52') feet; thence

N 49°03'49" W a distance of ninety and thirty-five hundredths (90.35') feet; thence

N 38°35'07" W a distance of forty-eight and ninety-eight hundredths (48.98') feet; thence

N 25°45'37" W a distance of fifty and seventy-nine hundredths (50.79') feet; thence

N 32°15'12" W a distance of eighty-four and sixty-three hundredths (84.63') feet; thence

S 72°56'59" W a distance of forty-three and seventy-six hundredths (43.76') feet to the Point of Beginning.

The above parcel of land contains an area of 4.490 acres, more or less.



**Soil Management Plan  
Lincoln Lace & Braid Remediation Project  
55-61 Ponagansett Street  
Providence, Rhode Island**

*Prepared for*

Providence Parks Department  
Dalrymple Boathouse – Roger Williams Park  
Providence, Rhode Island 02905

*Prepared by*

EA Engineering, Science, and Technology  
2350 Post Road  
Warwick, Rhode Island 02886  
(401) 736-3440

June 2010  
REVISED  
EA Project No.: 61891.05

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## SOIL MANAGEMENT PLAN

### B.1 PURPOSE

The purpose of this Soil Management Plan (SMP) is to develop a strategy for managing the contaminated soil encountered during potential future construction activities at the Lincoln Lace & Braid site at 55-61 Ponagansett Street (Plat 113, Lots 305 and 429) in Providence, Rhode Island. It is important that all personnel responsible for working with soil on the site, including equipment operators, are familiar with this SMP.

### B.2 GOAL

The goal of this SMP is to ensure that soil excavated, temporarily stockpiled, graded, or moved during and after construction activities is managed properly and handled in a safe manner. All contaminated soil at the site has been capped beneath the geosynthetic fabric layer and 4 to 12 in. of certified clean soil.

This SMP is included as an attachment to the final Environmental Land Usage Restriction (ELUR) for the site. Future intrusive activities conducted at the site will be subject to the procedures contained in this SMP.

### B.3 SITE DESCRIPTION AND BACKGROUND

The Lincoln Lace & Braid site was established in 1812 as Merino Mill. By 1870, there were mill villages on the Johnston and North Providence sides of the river at Olneyville, Dyerville, Manton Village, Lyman's Mill, Allendale, Centerdale, and Graniteville. Within Providence, mills included Union Cotton, Delaine, Lyman Manufacturing, and the Valley Bleachery. By that time, nearly every foot of the river's drop was being used to turn a factory waterwheel. In order to keep the mill wheels turning throughout the year, the local manufacturers formed a company to build reservoirs upstream to store water for use during the dry months, such as the reservoir formerly located on the abutting site, the Ponagansett Avenue Landfill.

In 1994, the main building of the mill complex was destroyed by fire. Subsequent remediation efforts have removed the building debris as well as petroleum and petroleum-contaminated soil from the site. Only portions of the ruins of the former Merino Mill and its associated waterpower infrastructure are currently visible.

The primary contaminants of concern (COC) at the site include volatile organic compounds (VOCs), metals, and polycyclic aromatic hydrocarbons (PAHs) at concentrations exceeding the Rhode Island Department of Environmental Management (RIDEM) Residential Direct Exposure Criteria (RDEC) for soil. Exceedances of the RDEC for arsenic, lead, and total petroleum hydrocarbons (TPH) were found in some sediment samples.

#### **B.4. ENGINEERED CAP**

The designed engineered cap components at the site consist of the following layers:

- Closure cap subgrade
- Geosynthetic fabric filter layer
- Protective cover soil
- Vegetative cover
- Site improvements.

A closure cap subgrade has been prepared from the existing site grade that will create adequate stormwater drainage for the site and serve as a suitable base for the components of the closure cap system.

A geosynthetic fabric filter layer (with a puncture strength of 120 lbs and a burst strength of 400 psi) has been placed above the closure cap subgrade and below a one ft protective soil cover for all landscaped areas of the Site to prevent human exposure to impacted soil. The fabric filter has been installed so that the seams overlap to prevent the underlying impacted soil from mixing with the clean soil.

The protective cover soil layer of the closure cap system, also commonly termed the vegetative support soil layer, consists of 1 ft of certified clean fill material across the site. This layer is designed to provide for root growth while buffering the underlying layers from damage due to the effects of frost penetration, root penetration, and loading of the finished surface of the landfill closure cap. The upper 4 in. of this soil layer is an organic topsoil having characteristics to promote adequate vegetation, stability, and erosion resistance in the landscaped areas of the site.

The vegetative cover component is a locally adapted perennial plant mix that is suitable for the Rhode Island area climate. The species will be capable of surviving in a low nutrient soil, with little or no requirements for nutrient addition. Root penetration into the soil should be less than the minimum thickness of the soil cover layer so as not to affect the drainage media or geosynthetic material beneath.

The sluiceway has been remediated through the installation of an engineered barrier in the upstream portion of the water body. The contaminated sediment has been capped with a geogrid (to provide stability), a geotextile (to prevent migration of contaminated sediment), and 6 in. of crushed stone (to prevent direct exposure and stabilize the geotextile). Check dams have been installed in the downstream portion of the sluiceway to aerate and remove iron from the surface water prior to discharge into the Woonasquatucket River.

In the vicinity of the tailrace on the southern portion of the site, remedial activities include the removal of existing debris, as possible; the removal of invasive plant species in and along the tailrace; and the introduction of native wetland plant species. A wetland buffer along the northern edge of the tailrace will be established to allow plants to thrive and minimize potential

impacts from the site-wide cap construction. A buffer will also be established along the Woonasquatucket River between the river and the proposed bike path.

## **B.5 FUTURE DEVELOPMENT**

In accordance with Section A(iii) of the ELUR, no soil at the property is to be disturbed in any manner without prior written permission of RIDEM's Office of Waste Management, except for minor inspections, maintenance, and landscaping activities that do not disturb the contaminated soil at the site. The integrity of the existing engineered cap will be maintained during all future operations on the Site. Operations that require the temporary removal or alteration of the cap may be permissible subject to RIDEM approval of a work plan. This work plan must include a description of the anticipated site activity, including the volume of soil to be excavated, anticipated contaminants of concern, a site figure identifying the proposed area to be excavated or disturbed, the expected duration of the project, and the proposed disposal location for excavated soil. This work plan must be submitted to RIDEM no later than 60 days prior to the proposed initiation of these activities. RIDEM will determine if the submittal of a Closure Report for these activities will be required, as well as if Public Notice is required prior to the initiation of soil disturbance. RIDEM will be subsequently notified, following the approval of the work plan, at least 2 days prior to the initiation of soil disturbance activities. Work associated with the Notification will not commence until written RIDEM approval has been issued. If these operations are performed in areas where the existing cap exists, the cap must be replaced within 14 days unless otherwise approved. Shall any significant alterations to the RIDEM-approved plan be necessary, a written description of the proposed deviation will be submitted to RIDEM for review and approval prior to initiating such changes.

Any operations that may require contact with capped, impacted soil, such as utility trenching, must follow the same procedures listed above, including those detailed in the Safety, Health, and Emergency Response Plan (SHERP). If the cap is disturbed, it must be replaced with the appropriate layer of clean fill, asphalt, concrete, and/or geotextile fabric within 14 days unless otherwise approved. Any impacted soil below the cap must be handled properly, and the use of Level D personnel protective equipment (PPE) would be required.

### Applicable Area

This SMP and affiliated ELUR, which restricts the property from **Residential** use, pertains to the **area detailed in Exhibit A of the ELUR**. See attached site figure.

## Soil Management

The risk of direct exposure of humans to contaminated soil and sediment is the primary concern at the Site. Individuals engaged in activities at the Site may be exposed through incidental ingestion, dermal contact, or inhalation of vapors or entrained soil particles if proper precautions are not taken. Therefore, the following procedures will be followed to minimize the potential of exposure.

The appropriate precautions will be taken to restrict unauthorized access to the property during site work. Dust suppression (i.e. watering) techniques must be employed at all times. Air monitoring and a means to control odors will be utilized, as appropriate (odor-suppressing foam, etc.) if odors become a nuisance. Best management practices also include the managing and minimizing of the migration and/or surface runoff of hazardous materials at the site during remedial and/or future site surface disturbances. This should be achieved via the installation of hay bales, silt fencing, and any other appropriate measures during the entire duration of site/earth work.

Activities that encounter unexpected observation or situation arises during site work will immediately cease. Workers will not attempt to handle the situation themselves but will contact the appropriate authority for further direction.

All soils are presumed to be regulated until such time that it is demonstrated to RIDEM, through sampling and laboratory analysis, that they are not regulated (i.e., presumptive remedies or locations of previously-inaccessible soil).

Excess soil is to remain onsite for analytical testing, to be performed by an Environmental Professional, in order to determine the appropriate disposal and/or management options. The soil must be placed on and covered with polyethylene/plastic sheeting during the entire duration of its staging and secured with appropriate controls to limit the loss of the cover and protect against stormwater and/or wind erosion (i.e. hay bales, silt fencing, rocks).

Excavated soils will be staged and temporarily stored in a designated area of the property. Within reason, the storage location will be selected to limit unauthorized access to the materials (i.e., away from public roadways/walkways). No regulated soil will be stockpiled onsite for greater than 60 days without prior RIDEM approval.

Native soils excavated from the Site that will be used as subgrade beneath the engineered cap shall be observed via visual and olfactory observation during excavation and screened using a photo-ionization detector and at a frequency of one sample every 500 cubic yards. These soils shall be sampled and analyzed at a Rhode Island Certified Laboratory for arsenic, lead, and mercury at a frequency of one sample every 500 cubic yards.

A proper leakproof container (i.e. drum or lined roll-off) or secondary containment will be utilized if stockpiled soils pose a risk or threat of leaching hazardous materials.



Soils excavated from the site may not be reused as fill on residential property. Excavated fill material shall not be reused as fill on commercial or industrial properties unless it meets RIDEM's Method 1 RDEC for all constituents listed in Table 1 of the Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases (Remediation Regulations). Soil must be sampled and analyzed by a qualified Environmental Professional at a frequency of one sample per 500 tons for all constituents. Copies of the laboratory analysis results shall be maintained by the site owner and included in the annual inspection report for the site, or the closure report if applicable. In the event that the soil does not meet any of these criteria, the material must be properly managed and disposed of offsite at a licensed facility.

Site soils that are to be disposed of offsite must be done so at a licensed facility in accordance with all local, state, and federal laws. Copies of the material shipping records associated with the disposal of the material shall be maintained by the site owner and included in the annual inspection report for the site.

Best soil management practices should be employed at all times, and regulated soils should be segregated into separate piles (or cells or containers) as appropriate based upon the results of analytical testing when multiple reuse options are planned (i.e. reuse onsite, reuse at a RIDEM-approved industrial/commercial property, or disposal at a RIDEM- approved licensed facility).

All non-disposable equipment used during the soil disturbance activities will be properly decontaminated as appropriate prior to removal from the site. All disposable equipment used during the soil disturbance activities will be properly containerized and disposed of following completion of the work. All vehicles utilized during the work shall be properly decontaminated as appropriate prior to leaving the site.

At the completion of site work, all exposed soils are required to be recapped with RIDEM-approved engineered controls (2 ft of clean fill or equivalent: building foundations, 4 in. of pavement/concrete underlain with 6 in. of clean fill and/or 1 ft of clean fill underlain with a geotextile liner) consistent or better than the site surface conditions prior to the work that took place. These measures must also be consistent with the RIDEM- approved ELUR recorded on the property.

Any clean fill that is to be used to cap the site must be sampled **prior to delivery and placement**. All clean fill imported to the site, including subgrade material and loam, must be sampled prior to delivery and placement. Please note that all samples are to be discrete, grab samples; composite samples are not acceptable. Clean fill and loam must be sampled for arsenic at a frequency of one sample per 500 cubic yards (yd<sup>3</sup>). One-quarter of the total number of compliance samples of clean fill and loam will be sampled for VOCs, semi-volatile organic compounds (SVOCs), priority pollutant 13 (PP 13) metals, and TPH. **A minimum of one sample should be analyzed for all analytes (i.e. PP 13 metals, SVOCs, VOCs, and TPH) if less than 500 yd<sup>3</sup> of fill/loam brought onsite.** All soil that is to be utilized onsite must meet the RDEC for all constituents or be certified to be non-jurisdictional by an Environmental Professional. Laboratory analytical results shall be submitted to RIDEM via fax, and written approval via email to use the material must be received by RIDEM *prior* to use. The Annual

Inspection Report for the site, or Closure Report if applicable, should include either analytical sampling results from the fill demonstrating compliance or, alternatively, include written certification by an Environmental Professional attesting to the material's origin and suitability and that the fill is not jurisdictional.

## **B.6 DOCUMENTATION**

Reports of the annual cap inspections will be submitted to RIDEM as specified in the ELUR.

## **B.7 HEALTH AND SAFETY**

Direct contact with contaminated material during construction activities will be minimized with the use of Level D PPE including gloves, boots, long-sleeved shirts, and safety glasses. Workers are also required to wash their hands with soap and water prior to eating, drinking, smoking, or leaving the site. Strict dust control measures will also be kept in place to prevent the contaminated soil from becoming airborne. Refer to the Remedial Action Work Plan Addendum, Section 3, for the site-specific contingency plan.