



Loureiro Engineering Associates, Inc.

March 9, 2007

**Town of Hillsborough**

29 School Street

Hillsborough, New Hampshire 03244

**Attention: Mr. Matthew Taylor, Town Planner**

Re: Limited Subsurface Assessment Results  
Former Woods Woolen Mill Property, 23/25 West Mill Street  
LEA Comm. No. 40HM602.001

Dear Mr. Taylor:

Loureiro Engineering Associates, Inc. (LEA) has prepared this letter report for the Town of Hillsborough (“the Town”) summarizing the results of the limited subsurface investigation performed at the Former Woods Woolen Mill Property (“the Site”) located on West Mill Street. The property was the location of a former woolen (textile) mill from circa the late 1800s up until the mid 1980s and is identified on town Tax Map 25 as Lot 28 and consists of an approximately 2.6± acres of town-owned land.

The activities completed as part of the subsurface investigation included the advancement of soil borings, collection and laboratory analysis of soil samples. This work was performed in accordance with our proposal dated June 16, 2006 and our agreement with the Town dated September 26, 2006. The purpose of the limited subsurface investigation was to visually assess and test for the potential presence of specific contaminants of concern (COCs) in the surficial and subsurface soils in some of the Areas of Concern (AOCs) as identified in the Phase I Environmental Site Assessment (ESA) conducted by LEA in October 2006.

A summary of the subsurface investigation activities conducted by LEA, including general approach and methodologies, discussion of the results of the subsurface investigation, summary and conclusions and our recommendations are provided below. Copies of the soil boring logs and the laboratory analytical data are provided in Attachments A and B, respectively.

**GENERAL APPROACH AND RATIONALE**

As identified in the Phase I ESA (LEA, December 2006), seven primary AOCs (AOC-1 through AOC-7) were delineated as areas to potentially contain hazardous substances or petroleum. Secondary AOCs included the Boiler Room/House and the perimeter area of existing structures/buildings. These areas were based on LEA’s visual assessment of site conditions in June and October 2006 and historical information obtained about the property and various structures from file reviews. Potential contaminants of concern (COC) included: petroleum, volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polynuclear



aromatic hydrocarbons (PAHs), and heavy metals. PCBs were also identified as possibly being present due to the former use of transformer(s).

The seven primary AOCs are shown on Drawing 1 and included: the former Railroad Right-of-Way or ROW (AOC-1), the Former Warehouse Building No. 2 (AOC-2), the Former Machine Shop Building (AOC-3), the Former Dye House Building (AOC-4), the former 12,000-gallon UST and Coal Bin Area (AOC-5), Former Transformer Areas (AOC-6) and the Former Mill Building Foundation (AOC-7). ACM issues associated with the Boiler Room/House were not assessed as part of LEA's limited subsurface investigation. Surficial soils around the existing structure/building perimeters were identified to possibly contain lead-based paint (LBP) associated chipping and peeling of the red paint on the wood clapboard siding. The red paint was confirmed to contain leachable lead at 105 mg/L (above the RCRA regulatory level) based on past investigations. Surficial soil sampling was performed around building perimeters to assess whether releases to soil had occurred from the flaking/chipping of exterior paint on the buildings.

Soil borings were not drilled nor were surface soil samples collected from within AOC-1 (the Former Railroad ROW) because this area is on a separate parcel (Lot 27) and is privately owned and operated by the New Hampshire Department of Transportation (NHDOT). Boring installation and soil sampling was performed in the following areas:

#### Limited Subsurface Investigation and Areas of Concern

AOC	Description	Sample Location
1	Former Railroad Right of Way (ROW)	-
2	Warehouse Building No. 2	SB-006
3	Former Machine Shop	SB-004
4	Former Dye House Building	SB-003
5	Former 12,000-gallon UST and Coal Bin Area	SB-005
6	Former Transformer Areas	SB-002
7	Former Mill Building Foundation	SB-001, SS-1, SS-2, SS-3
-	Building Perimeters	SS-4, SS-5, SS-6
-	Boiler Room/House	-

**Note:** SB designates soil boring. SS designates surficial or shallow surface sample. (-) indicates not assessed as part of Phase I ESA.

Surficial soil sample SS-1, SS-2 and SS-3 were selected to further assess conditions beneath the former Mill Building. SS-1 was collected from a location in the northern portion of the foundation where several drums containing petroleum and hazardous substances were used, stored and later removed and where roof collapse had occurred. SS-2 was collected from a location in the central portion of the foundation and was selected to assess an area adjacent to and where dark brown "petroleum-like" staining was observed atop and on the sides of a concrete structure/footing. SS-3 was collected from a location in the southern portion of the foundation and was selected to assess general soil conditions.



## **DRILLING AND SUBSURFACE SOIL SAMPLING**

On November 7, 2006, LEA advanced six narrow-diameter soil borings (SB-001 through SB-006) in the locations shown on Drawing 1 (Site Plan). The soil borings were advanced using a GeoProbe® Model 5400 direct-push truck-mounted drill rig. Soil samples were collected at 4-foot long intervals using disposable polyethylene-sampling sleeves and containerized in pre-clean laboratory bottles. Soil samples were field-screened for total volatile organic compounds (TVOCs) using a photoionization detector (PID) fitted with a 10.2 electron volt (eV) lamp.

Soil borings were advanced to depths between 3.8 to 11 feet below grade (fbg). Soil boring SB-006 advanced in AOC-2 in the northernmost part of the property adjacent to the Warehouse Building was ended at 3.8 fbg due to refusal. Bedrock outcrops are present in the immediate area of SB-006. Depths of all other borings ranged between approximately 8 and 11 fbg. An attempt was made to obtain an in-situ groundwater table in SB-004 at 11 fbg using a screen-point sampler which was placed inside the downhole equipment. A sufficient volume of groundwater needed for laboratory analysis could not be collected; consequently, a groundwater sample was not submitted for laboratory analysis. Soil boring logs are provided in Attachment A.

## **SURFICAL SOIL SAMPLING**

Six surficial soil samples (SS-1 through SS-6) were collected from the locations shown in Drawing 1. Samples SS-1, SS-2 and SS-3 were collected from within the bottom of the northern, central and southern parts of the foundation of the former mill building (AOC-7). Samples were collected using a hand auger and were collected from the top 12 inches of ground surface. Soil samples SS-4 through SS-6 were collected adjacent to and within one foot of each of the three existing structures to assess for potential lead contamination in surface soils related to chipping and peeling of the red paint on the clapboard siding. SS-4 was collected from the southeast corner of the office building; SS-5 was collected adjacent to the east side of the Boiler Room/House and SS-6 was collected from the east side of the Warehouse Building. Samples SS-4, SS-5 and SS-6 were collected using a hand shovel from the top 6 inches of the ground surface.

## **INVESTIGATION RESULTS**

### General Soil Characteristics

*Surficial Soils:* These soils consisted primarily of dry, loose, medium to coarse sand with some coarse sand and fine gravel. Surficial soil samples ranged in color from brown-orange brown in SS-2, SS-3, SS-4 and SS-5 to dark brown-black in SS-1 and SS-6. Small flecks of red paint were observed in some of the samples.

*Subsurface Soils:* These soils were generally dry in the top 4 feet of ground surface, moist to wet between 4 and 8 fbg and wet between 8 and 11 fbg. No obvious signs of staining or odors were noted in subsurface soils. Soils consisted of topsoil overlying fill and native soils. In some locations (i.e. SB-004), the fill was inter-layered with native soils.



Two types of fill were encountered. A “visually clean” fill consisting of loose brown-orange to brown medium sand was observed in SB-005 in all samples down to 9 fbg and was considered to be backfill material associated with the former 12,000-gallon No. 6 fuel oil UST removal. A dark brown-black fill material was encountered in all other soil borings except SB-001. The dark brown-black fill contained pieces of coal, white ash and cinders and was observed at varying thicknesses and depths in SB-002 (2-4 ft sample), SB-003 (4-12 ft sample), SB-004 (0-4 ft and 8-11 ft samples), SB-005 (0-2 ft and 4-8 ft samples) and SB-006 (0-2 ft).

The native soil layer varied in color (from a brown to a brown gray) and texture (from a medium to fine sand to a fine sand and silt with little clay). Secondary components within the native soil layer included sub-angular to sub-rounded fine to coarse gravel.

### Soil Field Screening Results

Soil samples from borings were field-screened for total VOCs using a photoionization detector (PID) as indicated on the boring logs in Attachment A. PID readings measured less than 0.2 ppmv in all soil samples screened. Based on the non-detectable levels of total VOCs on the PID and lack of olfactory evidence (i.e. odors), no samples were collected for and/or submitted for laboratory analysis for VOCs.

### Soil Laboratory Analytical Results

A total of twelve (12) soil samples were submitted to Resource Laboratories, LLC of Portsmouth, New Hampshire for further analytical testing for a combination of the following parameters: total petroleum hydrocarbons (TPH) for the diesel-range organics (TPH-DRO) by EPA Method 8015, PAHs by EPA Method 8270C, 13 priority pollutant metals (PP13 metals) and PCBs by Method 8082.. A summary of constituents detected in soil is presented in Tables 1 and 2 and are summarized below. A copy of the laboratory analytical data report is provided in Attachment B.

*PAHs:* PAHs were detected in two out of the four (50%) samples analyzed: SB-004/0-4 ft soil sample collected from AOC-4 and SB-003/8-12 ft soil sample collected from AOC-3. The presence of PAHs is likely attributed to the fill material which was observed to contain white cinders, wood debris and/or pieces of coal.

In SB-004/0-4 ft, total PAHs measured 12.4 milligrams per kilogram (mg/kg) of which 4.8 mg/kg consisted of the carcinogenic PAHs (C-PAHs) and 7.6 mg/kg consisted of the non-carcinogenic PAHs (non-CPAHs). The highest individual concentrations consisted of non-CPAHs and included: phenanthrene (3.1 mg/kg), fluoranthene (3.0 mg/kg), and pyrene (2.5 mg/kg).

In SB-003/8-12 ft, total PAHs measured 36.8 mg/kg of which 10.4 mg/kg consisted of the C-PAHs and 26.40 mg/kg consisted of the non-CPAHs. Similar to the soil sample collected from SB-004/0-4 ft, highest individual concentrations in SB-003/8-12 ft consisted of non-CPAHs and included: phenanthrene (10.0 mg/kg), pyrene (6.2 mg/kg) and fluoranthene (5.9 mg/kg).



**TPH -DRO:** TPH-DRO range (C10-C28 hydrocarbons) were detected in two out of the three (67%) samples analyzed – surficial samples SS-1 and SS-2 collected from the northern and central portions of the mill building foundation. TPH-DRO concentrations in SS-1 and SS-2 measured 38,000 and 1,600 mg/kg, respectively. TPH-DRO concentration was less than 200 mg/kg (not detected) in subsurface soil samples collected from SB-005/8-9 ft located closest to the former 12,000-gallon UST excavation.

**PCBs:** A single soil sample (SB-002/2-4 ft from AOC- 6) was collected and analyzed for PCBs. The PCB concentration in the sample measured less than 0.1 mg/kg (not detected).

**PP13 Metals:** Metals were detected in eight out of the eight (100%) soil samples analyzed. Nine of the metals were detected which included: antimony, arsenic, beryllium, chromium, copper, lead, mercury, nickel and zinc at various concentrations which were as follows:

**Summary of Metals Concentrations in Soil (mg/kg)**

<b>Metal</b>	<b>Frequency of Detection</b>	<b>Range of Concentrations</b>	<b>Sample with Maximum Concentration</b>
Antimony	5/6	<0.7 to 43	SB-004/0-4 ft
Arsenic	5/6	<1.2 to 17	SS-1/0-0.5 ft
Beryllium	2/6	<0.5 to 0.5	SB-006/0-3.8 ft
Chromium	6/6	10 to 140	SS-1/0-0.5 ft
Copper	6/6	10 to 47	SB-003/8-12 ft
Lead	10/11	<1.2 to 6,600	SB-004/0-4 ft
Mercury	5/6	<0.02 to 0.15	SB-004/0-4 ft
Nickel	3/6	< 6 to 20	SB-006/0-3.8 ft
Zinc	6/6	36 to 180	SS-1/0-0.5 ft

In general, the highest concentration of metals (lead, zinc and chromium) were detected in soil samples: SB-004/0-4 ft collected from adjacent to AOC-3 (Former Machine Shop), SB-006/0-3.8 ft collected from adjacent to AOC-2 (Warehouse Building #2) and surficial sample SS-1/0-0.5 ft collected from within the northern portion of the Former Mill Building Foundation.

## **DISCUSSION OF DATA**

In accordance with the *New Hampshire Department of Environmental Services (NHDES) Contaminated Sites Risk Characterization and Management Policy (RCMP)*, soil categories S-1 and S-2 are both applicable based on current and future exposure assumptions. Current exposure conditions assume that children are present at the site, a child's frequency and intensity of use is low and soils are accessible. Future exposure conditions (as a passive use recreational park) assume that children are present at the site, a child's frequency of use is high but intensity of use is low and soils are accessible. Contaminants in soil at the property are both accessible (between 0 and 2 fbg in unpaved areas) and potentially accessible (between 2 and 15 fbg in unpaved areas).



## Risk Evaluation

For the purposes of evaluating potential risk, concentrations of constituents detected in soil were compared to the NHDES S-1 and S-2 Method 1 soil standards and the Method 3 Upper Concentration Limits (UCLs) in soil as listed in the RCMP. A comparison of the contaminant concentrations detected in surficial and subsurface soils to the applicable Method 1 soil and UCLs is presented in Tables 4 and 5, respectively. Several exceedances of the Method 1 standards and/or UCLs were identified, primarily in soil borings SB-003 and SB-004 and several surficial soil sampling locations as follows:

**Soil Concentrations Detected above Method 1 Soil Standards  
and/or UCLs**

Analyte	Sample ID/Depth (fbg)	Concentration (mg/kg)	Method 1 S-1	Method 1 S-2	UCL in Soil
Benzo(a)anthracene	SB-003/8-12	2.3	0.7	2	400
	SB-004/0-4	1.1			
Benzo(a)pyrene	SB-003/8-12	1.8	0.7	0.7	40
	SB-004/0-4	1			
Indeno(1,2,3-cd)pyrene	SB-003/8-12	0.9	0.7	2	40
TPH	SS-1/0-0.5	<b>38,000</b>	10,000	10,000	10,000*
Lead	SB-004/0-4	<b>6,600</b>	400	400	4,000
	SS-1/0-0.5	900			
	SS-3/0-0.5	2,100			
	SS-4/0-0.5	510			
	SS-5/0-0.5	1,100			
Antimony	SB-004/0-4	43	8	26	260
Beryllium	SS-1/0-0.5	0.7	0.1	0.1	10
Arsenic	SS-1/0-0.5	17	12	12	120
Chromium (total)	SS-1/0-0.5	140	1,000(III) 130 (VI)	2,500 (III) 460 (VI)	10,000 5,400

**Note:** **BOLD/ITALICS** indicates concentration also exceeds UCL. (-) indicates no standard. Source: NHDES RCMP, effective January 1, 1998, updated May 10, 2005. (\*) indicates default criterion.

**PAHs:** In soil samples collected from SB-003 and SB-004, concentrations of benzo(a)anthracene (2.3 and 1.1 mg/kg) and benzo(a)pyrene (1.8 and 1 mg/kg) exceeded both the S-1 and S-2 Method 1 soil standards. Concentration of indeno(1,2,3-cd)pyrene (0.9 mg/kg) exceeded the S-1 Method 1 soil standard only. PAH concentrations were below UCLs.

**Petroleum:** The TPH concentration of 38,000 mg/kg in the 0 to 0.5 foot sample from SS-1 exceeds the S-1 and S-2 Method 2 soil standard and the UCL of 10,000 mg/kg.

**Metals:** Lead concentration in five surficial and subsurface soil samples/locations which ranged between 510 and 6,600 mg/kg exceed the S-1 and S-2 Method 1 soil standard of 400 mg/kg. The lead concentration in near surface sample SB-004 collected from between 0 and 4 feet (6,600 mg/kg) also exceeds the UCL for lead of 4,000 mg/kg. Concentration of antimony in SB-004





(43 mg/kg) and beryllium (0.7 mg/kg) and arsenic (17 mg/kg) exceeds their respective S-1 and S-2 Method 1 soil standards but are below UCLs.

Total chromium in surficial sample SS-1 was detected at 140 mg/kg which is above the S-1 Method 1 soil standard of 130 mg/kg for hexavalent chromium. Separate Method 1 soil standards have been established for trivalent chromium (Cr III) and hexavalent chromium (Cr VI). A Method 1 soil standard has not been established for total chromium in soil. Therefore a condition of risk relative to chromium cannot be evaluated using total chromium sampling results. Future soil sampling for chromium should include speciation so that trivalent and hexavalent chromium concentrations in soil can be quantified and compared to their applicable Method 1 standards.

#### Notification Evaluation

For the purpose of identifying a potential discharge of oil and/or potential oil notification requirements, contaminant concentrations detected in soil were also compared to the Soil Remediation Standards (SRSs) as listed in Table 600-2 in Section Env-Or 606.19 (Soil Remediation Criteria) of Env-Or 600 – Contaminated Site Management Rules (600 Rules). These rules went into effect on February 1, 2007. Under Section 604.07 of the Rules, “*an exceedance of the soil remediation standards of Env-Or 606.19 that might have been caused by an oil discharge*” requires notification to the department within 60 days of obtaining knowledge of the exceedance.

As indicated in Table 3 and 4, four PAHs, TPH, lead, antimony, arsenic and possibly chromium were detected above their respective SRSs. However, only the contaminant TPH (specifically the detection of 38,000 mg/kg in SS-1) is considered attributable to an oil discharge and that would be reportable as per the 600 Rule. The detection of PAHs in soil above SRSs (which is attributed to the presence of coal, ash and cinder) and antimony, arsenic and possibly chromium are not considered to be related to a petroleum release and therefore would not be reportable as per the 600 Rules. Similarly, the presence of elevated lead levels in soil is not considered to be due to an oil discharge but rather is likely due to chipping and peeling of LBP from the exterior clapboard/wood siding of the on-site building structures and is not considered reportable as per the 600 Rules.

#### TCLP Soil Analytical Results

Concentrations of total lead in eight soil samples from seven locations (SB-002, SB-003, SB-004, SS-1, SS-3, SS-4 and SS-5) and concentrations of total chromium in one location (SS-1) were above 100 mg/kg. The 100 mg/kg threshold represents a concentration which is 20 times greater than the toxicity characteristic leaching procedure (TCLP) value of 5.0 mg/L (or 20x rule) which is used to designate soil as a hazardous waste under the Resource Conservation Recovery Act (RCRA). The total chromium in surficial soil sample from SS-1/0-0.5 ft also exceeded the 20x rule. Two of the nine samples were selected and further tested for leachable lead and chromium by the TCLP procedure. A summary of lead and total chromium concentrations in soil exceeding the 20x rule and TCLP results is presented below:



**Summary of Total Lead and Chromium Concentrations  
above RCRA 20x Rule and TCLP Testing Results**

<b>Sample</b>	<b>Sample Depth (fbg)</b>	<b>Total Lead (mg/kg)</b>	<b>Total Chromium (mg/kg)</b>	<b>TCLP Lead (mg/L)</b>	<b>TCLP-Chromium (mg/L)</b>
SB-002	2 – 4	130	10	-	-
SB-003	8 – 12	400	63	-	-
SB-004	0 – 4	6,600	15	<b>380</b>	-
SB-004	8 - 11	130	11	-	-
SS-1	0 – 0.5	900	<b>140</b>	1.0	<0.5
SS-3	0 – 0.5	2,100	NA	-	-
SS-4	0 – 0.3	510	NA	-	-
SS-5	0 – 0.3	1,100	NA	-	-
<b>RCRA Regulatory Level (mg/L)</b>				5.0	5.0

**Note:** fbg = feet below ground. Concentration(s) in **BOLD** exceed the RCRA threshold of 5.0 mg/L.  
(-) indicates not analyzed.

The TCLP-lead concentrations in samples SB-004/0-4 ft and SS-1 were reported to be 380 and 1.0 milligrams per liter (mg/L), respectively. The TCLP-chromium concentration in SS-1 measured less than 0.5 mg/L (not detected). The TCLP-lead concentration of 380 mg/L in sample SB-004/0-4 ft exceeds the RCRA regulatory level of 5.0 mg/L, which would characterize the soil as “toxic” and require special handling as a RCRA hazardous waste if excavated and/or removed from the property. The elevated TCLP-lead result of 380 mg/L reported in SB-004 may be due to heterogeneity of the soils sample.

## **SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

Based on the findings of the limited subsurface assessment, oil (petroleum) and hazardous substances has been identified to be present in surficial, near surface and shallow subsurface soils at the Former Woods Woolen Mill property. The potential for risk to human health and/or the environment exists at the property based on the exceedance of the S-1 and S-2 Method 1 standards (for PAHs, TPH, lead, antimony, arsenic, beryllium) and UCLs (TPH and lead only). In addition, TCLP testing results for lead in one surficial soil sample indicated a concentration of 380 mg/L, which would potentially categorize the soil as hazardous waste if excavated and transported off-site for disposal.

Petroleum consists of diesel-range hydrocarbons and is likely related to former historic textile mill operations and/or to recent storage and use of chemicals in drums and containers unassociated with former mill activities. Lead is likely attributed to the chipping and peeling of lead-based paint (LBP) in exterior clapboard siding materials of on-site building structures to surrounding soils. PAHs and other metals are attributed to the presence of fill material containing coal and wood ash. Additional future sampling for chromium is recommended to obtain speciated chromium concentrations for comparison to applicable Method 1 standards and to





assess risk. The use and/or presence of chromium may be related to former textile mill activities and operations.

The TPH concentration of 38,000 mg/kg which was detected in the SS-1/0 to 0.5 foot sample (collected from within the northern end of the former mill building foundation), is considered an "oil discharge" (likely former drums used and stored inside the mill building) and therefore requires notification to the NHDES within 60 days as per the 600 Rules. Notification should be verbally and/or in writing within 60 days of receipt of this letter. Information to be provided as part of notification should include: location (boring and sample numbers), discharge type and concentration (chemical names and concentrations), proximity of nearest surface water body and water supply wells.

Future comprehensive assessment of environmental conditions (both surficial and subsurface) at the former Woolen Mill property is recommended. However as previously stated in the Phase I ESA, removal of surface debris and abatement/removal of ACM from inside structures and ACM and LBP building materials is recommended prior to initiation of comprehensive assessment activities.

If you have any questions about the information discussed in this letter, please feel free to contact us at 603-423-0025.

Sincerely,

**LOUREIRO ENGINEERING ASSOCIATES, INC.**

Bettina E. Eames, P.G.  
Project Geologist

Margaret M. Averill, LEP  
Vice President

Attachments:

- |           |   |
|-----------|---|
| Table 1   | Comparison of Surficial Soil Concentrations to Method 1 Standards, UCLs and Soil Remediation Standards  |
| Table 2   | Comparison of Subsurface Soil Concentrations to Method 1 Standards, UCLs and Soil Remediation Standards |
| Drawing 1 | Site Plan   |

Attachment A Soil Boring Logs

Attachment B Laboratory Analytical Data Report

**DRAWING**







## **TABLES**

**TABLE 1**  
**Comparison of Surficial Soil Concentrations to Method 1 Standards, UCLs and Soil Remediation Standards**  
**Former Woods Woolen Mill Property, 23/25 West Mill Street, Hillsborough, New Hampshire**

Parameter	Unit	Sample Number/Location						Risk Characterization Management Policy			600 Rules Soil Remediation Standard
								Method 1 Soil Standards		Method 3 UCL in Soil	
		SS-1	SS-2	SS-3	SS-4	SS-5	SS-6	S-1	S-2		
Sample Depth	ft	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.3	0 - 0.3	0 - 0.3	-	-		-
LEA Sample ID	-	1188068	1188069	1188070	1188071	1188072	1188073	-	-		-
TPH-DRO (Method 8015B) C10-C28 DRO	mg/kg	38,000	1,600	NA	NA	NA	NA	10,000	10,000	10,000	10,000
PP13 Metals (6010B/7470A)											
Lead	mg/kg	900	79	2,100	510	1,100	97	400***	400***	4,000	400
Silver	mg/kg	<0.9	NA	NA	NA	NA	NA	45	200	2,000	89
Zinc	mg/kg	180	NA	NA	NA	NA	NA	1,000	2,500	10,000	1,000
Thallium	mg/kg	<0.3	NA	NA	NA	NA	NA	10	21	320	10
Antimony	mg/kg	4.1	NA	NA	NA	NA	NA	8	26	260	9
Nickel	mg/kg	<7	NA	NA	NA	NA	NA	580	2,500	10,000	400
Mercury	mg/kg	0.14	NA	NA	NA	NA	NA	1	7	70	6
Copper	mg/kg	47	NA	NA	NA	NA	NA	-	-	-	-
Chromium	mg/kg	140	NA	NA	NA	NA	NA	1,000(III)/130(VI)	2,500 (III)/460(VI)	10,000(III)/5,400(VI)	1,000 (III)/130 (VI)
Cadmium	mg/kg	0.7	NA	NA	NA	NA	NA	32	320	2,300	33
Beryllium	mg/kg	0.7	NA	NA	NA	NA	NA	0.1	0.1	10	1
Arsenic	mg/kg	17	NA	NA	NA	NA	NA	12	12	120	11
Selenium	mg/kg	7	NA	NA	NA	NA	NA	260	2,500	10,000	260

**Notes:**

**Bold** indicates constituent detected above reporting limit but value is below Method 1 standards.

**Bold/Shade** indicates constituent detected above reporting limit but value is above Method 1 standards and/or SRS.

**Bold/Shade/Outline** indicates constituent detected above Upper Concentration Limit (UCL).

Risk Characterization Management Policy (RCMP), NHDES, Waste Management Division, January 1998, updated April 3, 2001.

NHDES 600 Rules, Chapter Env-Or 600 Contaminated Site Management, Section 606.19 Soil Remediation Criteria, Table 600-2.effective 2/1/2007.

\*\*\* standard for lead is based on EPA's 1994 revised Interim Soil Lead Guidance for CERCLA Sites and RCRA Corrective Action Facilities.

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**TABLE 2**  
**Comparison of Subsurface Soil Concentrations to Method 1 Standards, UCLs and Soil Remediation Standards**  
**Former Woods Woolen Mill Property, 23/25 West Mill Street, Hillsborough, New Hampshire**

Parameter	Unit	Sample Boring Number/Location						Risk Characterization Management Policy			Soil Remediation Standard
								Method 1 Soil Standards		Method 3 UCL in Soil	
		SB-002	SB-003	SB-004	SB-004	SB-005	SB-006	S-1	S-2		
Sample Depth	ft	2 - 4	8 - 12	0 - 4	8 - 11	8 - 9	0 - 3.8	-	-	-	-
LEA Sample ID	-	1188150	1188154	1188155	1188157	1188160	1188161	-	-	-	-
PAHs (Method 8270)											
Acenaphthene	mg/kg	NA	<0.5	<0.6	<0.6	NA	<0.6	270	270	10,000	340
Acenaphthylene	mg/kg	NA	1.0	<0.6	<0.6	NA	<0.6	300	300	10,000	490
Anthracene	mg/kg	NA	1.2	<0.6	<0.6	NA	<0.6	1,000	1,700	10,000	1,000
Fluoranthene	mg/kg	NA	5.9	3.0	<0.6	NA	<0.6	810	2,500	10,000	960
Fluorene	mg/kg	NA	1.5	<0.6	<0.6	NA	<0.6	510	510	10,000	77
2-methylnaphthalene	mg/kg	NA	<0.5	<0.6	<0.6	NA	<0.6	150	150	10,000	96
Naphthalene	mg/kg	NA	0.6	<0.6	<0.6	NA	<0.6	5	5	10,000	5
Benzo(g,h,i)perylene <sup>1</sup>	mg/kg	NA	1.0	<0.6	<0.6	NA	<0.6	-	-	10,000	960
Phenanthrene <sup>2</sup>	mg/kg	NA	10.0	3.1	<0.6	NA	<0.6	-	-	10,000	960
Pyrene <sup>3</sup>	mg/kg	NA	6.2	2.5	<0.6	NA	<0.6	-	-	10,000	720
Sum 1,2,3	mg/kg	NA	17.2	5.6	<0.6	NA	<0.6	<480	<2,400	-	-
Total Non-CPAHs	mg/kg	NA	27.4	8.6	<0.6	NA	<0.6	-	-	-	-
Benzo(a)anthracene	mg/kg	NA	2.3	1.1	<0.6	NA	<0.6	0.7	2	400	0.7
Benzo(a)pyrene	mg/kg	NA	1.8	1	<0.6	NA	<0.6	0.7	0.7	40	0.7
Benzo(b)fluoranthene	mg/kg	NA	1.6	0.8	<0.6	NA	<0.6	7	20	4,000	0.7
Benzo(k)fluoranthene	mg/kg	NA	1.2	0.8	<0.6	NA	<0.6	7	20	4,000	4
Chrysene	mg/kg	NA	2.6	1.1	<0.6	NA	<0.6	70	200	10,000	44
Dibenzo(a,h)anthracene	mg/kg	NA	<0.5	<0.6	<0.6	NA	<0.6	0.7	0.7	40	0.7
Indeno(1,2,3-cd)pyrene	mg/kg	NA	0.9	<0.6	<0.6	NA	<0.6	0.7	2	400	0.7
Total C-PAHs	mg/kg	NA	10.4	4.8	<0.6	NA	<0.6	-	-	-	-
Dibenzofuran	mg/kg	NA	<0.5	<0.6	<0.6	NA	<0.6	-	-	-	-
Total Other PAHs	mg/kg	NA	<0.5	<0.6	<0.6	NA	<0.6	-	-	-	-
PCBs (Method 8082A)	mg/kg	<0.1	NA	NA	NA	NA	NA	1	1	20****	1
TPH-DRO (Method 8015B)	mg/kg	NA	NA	NA	NA	<200	NA	10,000	10,000	10,000	10,000
C10-C28 DRO	mg/kg	NA	NA	NA	NA	<200	NA	10,000	10,000	10,000	10,000
PP13 Metals (6010B/7470A)											
Lead	mg/kg	130	400	6,600	130	NA	<1.2	400***	400***	4,000	400
Silver	mg/kg	<0.8	<0.8	<0.9	<0.8	NA	<0.8	45	200	2,000	89
Zinc	mg/kg	54	74	55	36	NA	78	1,000	2,500	10,000	1,000
Thallium	mg/kg	<0.2	<0.2	<0.2	<0.2	NA	<0.2	10	21	320	10
Antimony	mg/kg	1.2	0.7	43	2.6	NA	<0.7	8	26	260	9
Nickel	mg/kg	<6	10	9	<6	NA	20	580	2,500	10,000	400
Mercury	mg/kg	0.02	0.06	0.15	0.04	NA	<0.02	1	7	70	6
Copper	mg/kg	18	41	34	10	NA	24	-	-	-	-
Chromium, total	mg/kg	10	63	15	11	NA	39	1,000(III)/130(VI)	2,500 (III)/460(VI)	10,000(III)/5,400(VI)	1,000 (III)/130 (VI)
Cadmium	mg/kg	<0.6	<0.5	<0.6	<0.6	NA	<0.6	32	320	2,300	33
Beryllium	mg/kg	<0.5	<0.4	<0.5	<0.5	NA	0.5	0.1	0.1	10	1
Arsenic	mg/kg	10	5.3	10	2.9	NA	<1.2	12	12	120	11
Selenium	mg/kg	<6	<5	<6	<6	NA	<6	260	2,500	10,000	260

**Notes:**

**Bold** indicates constituent detected above reporting limit but value is below Method 1 standards.

**Bold/Shade** indicates constituent detected above reporting limit but value is above Method 1 standards and/or SRS.

**Bold/Shade/Outline** indicates constituent detected above Upper Concentration Limit (UCL).

Risk Characterization Management Policy (RCMP), NHDES, Waste Management Division, January 1998, updated April 3, 2001.

NHDES 600 Rules, Chapter Env-Or 600 Contaminated Site Management, Section 606.19 Soil Remediation Criteria, Table 600-2.effective 2/1/2007.

\*\*\* standard for lead is based on EPA's 1994 revised Interim Soil Lead Guidance for CERCLA Sites and RCRA Corrective Action Facilities.

\*\*\*\* standard for PCBs is based on EPA August 1990 Guidance on Remedial Actions for Superfund Sites with PCB Contamination for Residential Areas.

G:\Projects\40H\602\Limited Subsurface Assessment\Table 1 and 2 Soil FINAL 2.7.07.xls\surface soils



**ATTACHMENT A**  
**SOIL BORING LOGS**

# GEOLOGIC BORING LOG

Page 1 of 1

<b>Project:</b> Former Woods Woolen Mill Site <b>LEA Commission Number</b> 40HM602.001 <b>Client</b> Town of Hillborough, NH <b>Location</b> Former Woods Woolen Mill Site				<b>Start Date</b> 11/07/2006  <b>End Date</b> 11/07/2006	<b>Boring ID</b>  <b>SB-001</b>
<b>Drilling Contractor</b> Loureiro Engineering Associates, Inc. <b>Drilling Method</b> direct push <b>Sampling Method</b> Macro Core <b>Groundwater Observation</b> <b>Depth</b> at <b>Hours</b> <b>Depth</b> at <b>Hours</b>				<b>Logged by</b> bettina eames <b>Drilling Foreman</b> Dave Brisson <b>Drill Rig</b> Geoprobe 5400 - LEA 97 <b>Surface Elevation</b> <b>Latitude</b> <b>Longitude</b>	
Depth	Sample Information			Soil Description Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structure, Density, Cohesiveness, Other	PID/FID ppm
	Sample No.	Recovery (%)	Blows /6"		
0-             	1188146			brown to tan, medium to fine SAND, some Silt, trace angular Gravel, loose to moderately dense, dry.	0.0
4-             	1188147	69		brown to orange-brown, medium to fine SAND and SILT, some medium to coarse Sand and fine Gravel, trace coarse angular to semi-rounded Gravel, moderately dense, moist to very moist.	0.0
8-             11	1188148	92		brown to orange-brown, medium to fine SAND and SILT, some very coarse Sand and fine Gravel, semi-angular to semi-rounded, trace coarse Gravel, silt and clay. Refusal at 11.0'	0.0



# GEOLOGIC BORING LOG

Page 1 of 1

<b>Project:</b> Former Woods Woolen Mill Site <b>LEA Commission Number</b> 40HM602.001 <b>Client</b> Town of Hillborough, NH <b>Location</b> Former Woods Woolen Mill Site				<b>Start Date</b> 11/07/2006  <b>End Date</b> 11/07/2006	<b>Boring ID</b> <b>SB-002</b>
<b>Drilling Contractor</b> Loureiro Engineering Associates, Inc. <b>Drilling Method</b> direct push <b>Sampling Method</b> Macro Core <b>Groundwater Observation</b> <b>Depth</b> 2.86 at <b>Hours</b> <b>Depth</b> at <b>Hours</b>				<b>Logged by</b> Bettina Eames <b>Drilling Foreman</b> Dave Brisson <b>Drill Rig</b> Geoprobe 5400 - LEA 97 <b>Surface Elevation</b> <b>Latitude</b> <b>Longitude</b>	
Depth	Sample Information			Soil Description Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structure, Density, Cohesiveness, Other	PID/FID ppm
	Sample No.	Recovery (%)	Blows /6"		
0-     	1188149	67		brown to tan medium SAND, some fine Sand, little very coarse Sand, little Silt, trace very coarse angular Gravel, loose, dry	0.0
2-   V   	1188150	58		0" - 2" brown to tan medium SAND, some fine Sand, little very coarse Sand, little Silt, trace very coarse angular Gravel, loose, dry 2" - 6" black and dark brown medium SAND 6" - 13" brown fine to medium SAND and SILT, trace very coarse Sand and fine Gravel, wet	0.0
4-             7.8	1188151	57		0" - 4" brown medium SAND and SILT, wet 4" - 22" crushed angular GRAVEL, very coarse 22" - 26" brown medium SAND and SILT, wet Refusal at 7.8'.	<2.0



# GEOLOGIC BORING LOG

Page 1 of 1

<b>Project:</b> Former Woods Woolen Mill Site <b>LEA Commission Number</b> 40HM602.001 <b>Client</b> Town of Hillborough, NH <b>Location</b> Former Woods Woolen Mill Site				<b>Start Date</b> 11/07/2006  <b>End Date</b> 11/07/2006	<b>Boring ID</b> <b>SB-003</b>
<b>Drilling Contractor</b> Loureiro Engineering Associates, Inc. <b>Drilling Method</b> direct push <b>Sampling Method</b> Macro Core <b>Groundwater Observation</b> <b>Depth</b> at <b>Hours</b> <b>Depth</b> at <b>Hours</b>				<b>Logged by</b> Bettina Eames <b>Drilling Foreman</b> Dave Brisson <b>Drill Rig</b> Geoprobe 5400 - LEA 97 <b>Surface Elevation</b> <b>Latitude</b> <b>Longitude</b>	
Depth	Sample Information			Soil Description Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structure, Density, Cohesiveness, Other	PID/FID ppm
	Sample No.	Recovery (%)	Blows /6"		
0-             	1188152	50		0" - 18" brown to dark brown medium SAND, trace fine Sand, Gravel, pieces of black coal (FILL), loose, dry. 18" - 24" brown grey fine SAND and SILT, some Clay (NATIVE SOIL), moderately dense, dry.	<0.2
4-             	1188153	67		rown fine SAND, some Silt, little medium Sand, trace coarse Sand and fine Gravel, trace vegetative root material, pieces of glass and coal (FILL), moderately dense, dry	<0.1
8-             	1188154	60		dark brown fine SAND, some Silt, little very coarse Sand, trace very coarse Gravel, pieces of glass, bottom 6" contains wood pieces with green staining (FILL), dry.	
12.00-   13.3		0		no recovery Refusal at 13.3'.	



# GEOLOGIC BORING LOG

Page 1 of 1

<b>Project:</b> Former Woods Woolen Mill Site <b>LEA Commission Number</b> 40HM602.001 <b>Client</b> Town of Hillborough, NH <b>Location</b> Former Woods Woolen Mill Site				<b>Start Date</b> 11/07/2006  <b>End Date</b> 11/07/2006	<b>Boring ID</b> <b>SB-004</b>
<b>Drilling Contractor</b> Loureiro Engineering Associates, Inc. <b>Drilling Method</b> direct push <b>Sampling Method</b> Macro Core <b>Groundwater Observation</b> <b>Depth</b> at <b>Hours</b> <b>Depth</b> at <b>Hours</b>				<b>Logged by</b> Bettina Eames <b>Drilling Foreman</b> Dave Brisson <b>Drill Rig</b> Geoprobe 5400 - LEA 97 <b>Surface Elevation</b> <b>Latitude</b> <b>Longitude</b>	
Depth	Sample Information			Soil Description Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structure, Density, Cohesiveness, Other	PID/FID ppm
	Sample No.	Recovery (%)	Blows /6"		
0-             	1188155	56		0" - 6" brown grey medium SAND, some Silt, trace very fine Gravel and pieces of slag (FILL), loose, dry 6" - 16" brown to orange medium SAND, some coarse Sand, trace Silt, trace very fine Gravel (FILL), loose, dry 16" - 27" black medium SAND, some coarse Sand, little to trace coal, ash, cinders (FILL), dry- moist	0.0
4-             	1188156	58		brown medium fine SAND and SILT, little very coarse Sand, trace subangular to subrounded coarse Gravel, trace vegetable root material (NATIVE), moderately dense, moist-wet at 28".	<0.2
8-             11	1188157	89		0" - 4" brown grey, fine SAND and SILT, moderately dense (NATIVE) 4' - 30" black brown orange, medium to coarse SAND, trace crushed angular coarse gravel/rock, trace slag (FILL) 30" -34" brown grey, fine SAND and SILT, moderately dense (NATIVE)  Refusal at 11.0'	<0.1



# GEOLOGIC BORING LOG

Page 1 of 1

<b>Project:</b> Former Woods Woolen Mill Site <b>LEA Commission Number</b> 40HM602.001 <b>Client</b> Town of Hillborough, NH <b>Location</b> Former Woods Woolen Mill Site				<b>Start Date</b> 11/07/2006  <b>End Date</b> 11/07/2006	<b>Boring ID</b> <b>SB-005</b>
<b>Drilling Contractor</b> Loureiro Engineering Associates, Inc. <b>Drilling Method</b> direct push <b>Sampling Method</b> Macro Core <b>Groundwater Observation</b> <b>Depth</b> at <b>Hours</b> <b>Depth</b> at <b>Hours</b>				<b>Logged by</b> Bettina Eames <b>Drilling Foreman</b> Dave Brisson <b>Drill Rig</b> Geoprobe 5400 - LEA 97 <b>Surface Elevation</b> <b>Latitude</b> <b>Longitude</b>	
Depth	Sample Information			Soil Description Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structure, Density, Cohesiveness, Other	PID/FID ppm
	Sample No.	Recovery (%)	Blows /6"		
0-             	1188158	63		0" - 24" brown to orange medium SAND, some fine Sand and Silt, little very fine Gravel, loose, dry (FILL) 24" - 30" grey brown SILT and fine SAND, some to little slightly plastic Clay, trace coarse Sand and fine Gravel, (NATIVE)	<0.2
4-             	1188159	44		0" - 5" brown to orange, medium SAND, some fine Sand and Silt, little very fine Gravel, loose, dry (FILL) 5" - 14" grey brown SILT and fine SAND, some slightly plastic Clay, trace coarse Sand and fine Gravel, (NATIVE) 14" - 21" coarse SAND and fine GRAVEL, some crushed rock (FILL)	<0.2
8-   9	1188160	33		dark medium SAND, some coarse Sand (clean backfill possible). Refusal at 9.0'.	<0.2





# GEOLOGIC BORING LOG

Page 1 of 1

<b>Project:</b> Former Woods Woolen Mill Site <b>LEA Commission Number</b> 40HM602.001 <b>Client</b> Town of Hillborough, NH <b>Location</b> Former Woods Woolen Mill Site				<b>Start Date</b> 11/07/2006  <b>End Date</b> 11/07/2006	<b>Boring ID</b> <b>SB-006</b>
<b>Drilling Contractor</b> Loureiro Engineering Associates, Inc. <b>Drilling Method</b> direct push <b>Sampling Method</b> Macro Core <b>Groundwater Observation</b> <b>Depth</b> at <b>Hours</b> <b>Depth</b> at <b>Hours</b>				<b>Logged by</b> Bettina Eames <b>Drilling Foreman</b> Dave Brisson <b>Drill Rig</b> Geoprobe 5400 - LEA 97 <b>Surface Elevation</b> <b>Latitude</b> <b>Longitude</b>	
Depth	Sample Information			Soil Description Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structure, Density, Cohesiveness, Other	PID/FID ppm
	Sample No.	Recovery (%)	Blows /6"		
0-             3.8	1188161	70		0" - 2" dark brown topsoil, loose, moist 2" - 32" brown, medium SAND, some very coarse Sand and fine angular to subangular Gravel, some white ash in bottom, loose, dry (FILL) Refusal at 3.5'.	<0.2



**ATTACHMENT B**  
**LABORATORY ANALYTICAL DATA REPORT**

## Laboratory Report

Bettina Eames, PG  
Loureiro Engineering Associates, Inc.  
26 Columbia Circle, Unit E  
Merrimack, NH 03054

PO Number: None  
LabID: 11308  
Date Received: 11/8/06

Project: 40HM602.001 Hillsboro, Wodds Woolen Mills

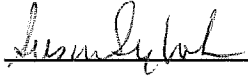
Attached please find results for the analysis of the samples received on the date referenced above.

Unless otherwise noted in the attached report, the analyses performed met the requirements of Resource Laboratories, LLC Quality Assurance Plan. The Standard Operating Procedures (SOP) are based upon USEPA SW-846, USEPA Methods for Chemical Analysis of Water and Wastewater, Standard Methods for the Examination of Water and Wastewater and other recognized methodologies. The results contained in this report pertain only to the samples as indicated on the chain of custody.

Resource Laboratories, LLC maintains certification with the agencies listed below.

We appreciate the opportunity to provide laboratory services. If you have any questions regarding the enclosed report, please contact the laboratory and we will be glad to assist you.

Sincerely,  
Resource Laboratories, LLC



Susan Sylvester  
Principal, General Manager

11-22-06  
Date

Total number of pages

15

### Resource Laboratories, LLC Certifications

New Hampshire 1732  
Maine NH903

Massachusetts M-NH902

Lab Number: 11308-01  
 Sample Designation: 1188161  
 Date Sampled: 11/7/06  
 Date Extracted: 11/16/06  
 Date Analyzed: 11/18/06  
 Matrix: Solid  
 Dilution Factor: 1  
 Analyst: AJD  
 Percent Solids: 85.1%

POLYAROMATIC HYDROCARBONS  
 SW 846 Method 3550B/8270C.

	Concentration	Quantitation Limit
	ug/g dry wt	ug/g dry wt
naphthalene	U	0.6
2-methylnaphthalene	U	0.6
acenaphthylene	U	0.6
acenaphthene	U	0.6
dibenzofuran	U	0.6
fluorene	U	0.6
phenanthrene	U	0.6
anthracene	U	0.6
fluoranthene	U	0.6
pyrene	U	0.6
benzo(a)anthracene	U	0.6
chrysene	U	0.6
benzo(b)fluoranthene	U	0.6
benzo(k)fluoranthene	U	0.6
benzo(a)pyrene	U	0.6
indeno(1,2,3-cd)pyrene	U	0.6
dibenzo(a,h)anthracene	U	0.6
benzo(g,h,i)perylene	U	0.6

SURROGATE STANDARDS	Recovery	Acceptance Limits
	(%)	(%)
2-fluorobiphenyl	82	43-116
o-terphenyl	86	33-141

U = Below quantitation limit

Lab Number: 11308-02  
 Sample Designation: 1188155  
 Date Sampled: 11/7/06  
 Date Extracted: 11/16/06  
 Date Analyzed: 11/18/06  
 Matrix: Solid  
 Dilution Factor: 1  
 Analyst: AJD  
 Percent Solids: 80.3%

POLYAROMATIC HYDROCARBONS  
 SW 846 Method 3550B/8270C.

	Concentration ug/g dry wt	Quantitation Limit ug/g dry wt
naphthalene	U	0.6
2-methylnaphthalene	U	0.6
acenaphthylene	U	0.6
acenaphthene	U	0.6
dibenzofuran	U	0.6
fluorene	U	0.6
phenanthrene	3.1	0.6
anthracene	U	0.6
fluoranthene	3.0	0.6
pyrene	2.5	0.6
benzo(a)anthracene	1.1	0.6
chrysene	1.1	0.6
benzo(b)fluoranthene	0.8	0.6
benzo(k)fluoranthene	0.8	0.6
benzo(a)pyrene	1	0.6
indeno(1,2,3-cd)pyrene	U	0.6
dibenzo(a,h)anthracene	U	0.6
benzo(g,h,i)perylene	U	0.6

SURROGATE STANDARDS	Recovery (%)	Acceptance Limits (%)
2-fluorobiphenyl	75	43-116
o-terphenyl	72	33-141

U = Below quantitation limit

Lab Number: 11308-03  
 Sample Designation: 1188157  
 Date Sampled: 11/7/06  
 Date Extracted: 11/16/06  
 Date Analyzed: 11/18/06  
 Matrix: Solid  
 Dilution Factor: 1  
 Analyst: AJD  
 Percent Solids: 86.1%

POLYAROMATIC HYDROCARBONS  
 SW 846 Method 3550B/8270C.

	Concentration	Quantitation Limit
	ug/g dry wt	ug/g dry wt
naphthalene	U	0.6
2-methylnaphthalene	U	0.6
acenaphthylene	U	0.6
acenaphthene	U	0.6
dibenzofuran	U	0.6
fluorene	U	0.6
phenanthrene	U	0.6
anthracene	U	0.6
fluoranthene	U	0.6
pyrene	U	0.6
benzo(a)anthracene	U	0.6
chrysene	U	0.6
benzo(b)fluoranthene	U	0.6
benzo(k)fluoranthene	U	0.6
benzo(a)pyrene	U	0.6
indeno(1,2,3-cd)pyrene	U	0.6
dibenzo(a,h)anthracene	U	0.6
benzo(g,h,i)perylene	U	0.6

SURROGATE STANDARDS	Recovery	Acceptance Limits
	(%)	(%)
2-fluorobiphenyl	81	43-116
o-terphenyl	80	33-141

U = Below quantitation limit



Lab Number: 11308-04  
 Sample Designation: 1188154  
 Date Sampled: 11/7/06  
 Date Extracted: 11/16/06  
 Date Analyzed: 11/18/06  
 Matrix: Solid  
 Dilution Factor: 1  
 Analyst: AJD  
 Percent Solids: 93.0%

POLYAROMATIC HYDROCARBONS

SW 846 Method 3550B/8270C.

	Concentration	Quantitation Limit
	ug/g dry wt	ug/g dry wt
naphthalene	0.6	0.5
2-methylnaphthalene	U	0.5
acenaphthylene	1.0	0.5
acenaphthene	U	0.5
dibenzofuran	U	0.5
fluorene	1.5	0.5
phenanthrene	10.0	0.5
anthracene	1.2	0.5
fluoranthene	5.9	0.5
pyrene	6.2	0.5
benzo(a)anthracene	2.3	0.5
chrysene	2.6	0.5
benzo(b)fluoranthene	1.6	0.5
benzo(k)fluoranthene	1.2	0.5
benzo(a)pyrene	1.8	0.5
indeno(1,2,3-cd)pyrene	0.9	0.5
dibenzo(a,h)anthracene	U	0.5
benzo(g,h,i)perylene	1.0	0.5

SURROGATE STANDARDS	Recovery	Acceptance Limits
	(%)	(%)
2-fluorobiphenyl	89	43-116
o-terphenyl	88	33-141

U = Below quantitation limit

Lab Number: 11308-06  
Sample Designation: 1188150  
Date Sampled: 11/7/06  
Date Extracted: 11/15/06  
Date Analyzed: 11/16/06  
Matrix: Solid  
Dilution Factor: 1  
Analyst: AJD  
Percent Solids: 89.5%

POLYCHLORINATED BIPHENYLS

SW 846 Method 3550C/8082A.

	Concentration ug/g dry wt	Quantitation Limit ug/g dry wt
PCB-1016	U	0.1
PCB-1242	U	0.1
PCB-1221	U	0.1
PCB-1232	U	0.1
PCB-1248	U	0.1
PCB-1254	U	0.1
PCB-1260	U	0.1

SURROGATE STANDARDS	Recovery (%)	Acceptance Limits (%)
tetrachloro-m-xylene	57	30-150
decachlorobiphenyl	72	30-150

U = Below quantitation limit

Lab Number: 11308-05  
Sample Designation: 1188160  
Date Sampled: 11/7/06  
Date Extracted: 11/16/06  
Date Analyzed: 11/20/06  
Matrix: Solid  
Dilution Factor: 1  
Analyst: JLZ  
Percent Solids: 96.0%

**DIESEL RANGE ORGANICS**  
SW 846 3550B/8015B

	Concentration	Quantitation Limit
	ug/g dry wt	ug/g dry wt
C10-C28 DRO	U	200

SURROGATE STANDARDS	Recovery	Acceptance Limits
	(%)	(%)
2-fluorobiphenyl	107	40-140
o-terphenyl	104	40-140

U = Below quantitation limit

Lab Number: 11308-10  
Sample Designation: 1188068  
Date Sampled: 11/7/06  
Date Extracted: 11/16/06  
Date Analyzed: 11/20/06  
Matrix: Solid  
Dilution Factor: 10  
Analyst: JLZ  
Percent Solids: 76.5%

DIESEL RANGE ORGANICS  
SW 846 3550B/8015B

	Concentration ug/g dry wt	Quantitation Limit ug/g dry wt
C10-C28 DRO	38000	3000

SURROGATE STANDARDS	Recovery (%)	Acceptance Limits (%)
2-fluorobiphenyl	#	40-140
o-terphenyl	99	40-140

# = The surrogate could not be determined due to co-eluting hydrocarbons present in the sample.  
U = Below quantitation limit

Lab Number: 11308-11  
Sample Designation: 1188069  
Date Sampled: 11/7/06  
Date Extracted: 11/16/06  
Date Analyzed: 11/20/06  
Matrix: Solid  
Dilution Factor: 1  
Analyst: JLZ  
Percent Solids: 93.4%

**DIESEL RANGE ORGANICS**  
SW 846 3550B/8015B

	Concentration	Quantitation Limit
	ug/g dry wt	ug/g dry wt
C10-C28 DRO	1600	200

SURROGATE STANDARDS	Recovery	Acceptance Limits
	(%)	(%)
2-fluorobiphenyl	111	40-140
o-terphenyl	108	40-140

U = Below quantitation limit

Project ID: Hillsboro, Wodds Woolen Mills 40HM602.001

Lab ID: 11308

Lab Number: 11308-001

Sample ID: 1188161

Matrix: Solid Percent Dry: 85.1 % Results are expressed on a dry weight basis.

Sampled: 11/7/06 14:50

Sampled: 11/7/06 14:50		Quant	Instr Dil'n	Prep	Analysis	Analysis				
Parameter:	Result	Limit	Units	Factor	Analyst	Date	Date	Time	Reference	
Antimony	< 0.7	0.7	ug/g	1	BJS	11/16/06	11/16/06	16:51	SW3050B6010B	
Arsenic	< 1.2	1.2	ug/g	1	BJS	11/16/06	11/16/06	16:51	SW3050B6010B	
Beryllium	0.5	0.5	ug/g	1	BJS	11/16/06	11/16/06	16:51	SW3050B6010B	
Cadmium	< 0.6	0.6	ug/g	1	BJS	11/16/06	11/16/06	16:51	SW3050B6010B	
Chromium	39	6	ug/g	1	BJS	11/16/06	11/16/06	16:51	SW3050B6010B	
Copper	24	6	ug/g	1	BJS	11/16/06	11/16/06	16:51	SW3050B6010B	
Lead	< 1.2	1.2	ug/g	1	BJS	11/16/06	11/16/06	16:51	SW3050B6010B	
Mercury	< 0.02	0.02	ug/g	1	BJS	11/14/06	11/14/06		SW7470A	
Nickel	20	6	ug/g	1	BJS	11/16/06	11/16/06	16:51	SW3050B6010B	
Selenium	< 6	6	ug/g	1	BJS	11/16/06	11/16/06	16:51	SW3050B6010B	
Silver	< 0.8	0.8	ug/g	1	BJS	11/16/06	11/16/06	16:51	SW3050B6010B	
Thallium	< 0.2	0.2	ug/g	1	BJS	11/16/06	11/16/06	16:51	SW3050B6010B	
Zinc	78	6	ug/g	1	BJS	11/16/06	11/16/06	16:51	SW3050B6010B	

Lab Number: 11308-002

Sample ID: 1188155

Matrix: Solid Percent Dry: 80.3 % Results are expressed on a dry weight basis.

Sampled: 11/7/06 12:30

Sampled: 11/7/06 12:30			Quant	Instr Dil'n	Prep	Analysis	Analysis		
Parameter:	Result	Limit	Units	Factor	Analyst	Date	Date	Time	Reference
Antimony	43	0.7	ug/g	1	BJS	11/16/06	11/16/06	16:56	SW3050B6010B
Arsenic	10	1.2	ug/g	1	BJS	11/16/06	11/16/06	16:56	SW3050B6010B
Beryllium	< 0.5	0.5	ug/g	1	BJS	11/16/06	11/16/06	16:56	SW3050B6010B
Cadmium	< 0.6	0.6	ug/g	1	BJS	11/16/06	11/16/06	16:56	SW3050B6010B
Chromium	15	6	ug/g	1	BJS	11/16/06	11/16/06	16:56	SW3050B6010B
Copper	34	6	ug/g	1	BJS	11/16/06	11/16/06	16:56	SW3050B6010B
Lead	6600	1.2	ug/g	1	BJS	11/16/06	11/16/06	16:56	SW3050B6010B
Mercury	0.15	0.02	ug/g	1	BJS	11/14/06	11/14/06		SW7470A
Nickel	9	6	ug/g	1	BJS	11/16/06	11/16/06	16:56	SW3050B6010B
Selenium	< 6	6	ug/g	1	BJS	11/16/06	11/16/06	16:56	SW3050B6010B
Silver	< 0.9	0.9	ug/g	1	BJS	11/16/06	11/16/06	16:56	SW3050B6010B
Thallium	< 0.2	0.2	ug/g	1	BJS	11/16/06	11/16/06	16:56	SW3050B6010B
Zinc	55	6	ug/g	1	BJS	11/16/06	11/16/06	16:56	SW3050B6010B



Project ID: Hillsboro, Wodds Woolen Mills 40HM602.001

Lab ID: 11308

Lab Number: 11308-003

Sample ID: 1188157

Matrix: Solid Percent Dry: 86.1 % Results are expressed on a dry weight basis.

Sampled: 11/7/06 12:45

Sampled: 11/7/06 12:45			Quant	Instr Dil'n	Prep	Analysis	Analysis		
Parameter:	Result	Limit	Units	Factor	Analyst	Date	Date	Time	Reference
Antimony	2.6	0.7	ug/g	1	BJS	11/16/06	11/16/06	17:09	SW3050B6010B
Arsenic	2.9	1.2	ug/g	1	BJS	11/16/06	11/16/06	17:09	SW3050B6010B
Beryllium	< 0.5	0.5	ug/g	1	BJS	11/16/06	11/16/06	17:09	SW3050B6010B
Cadmium	< 0.6	0.6	ug/g	1	BJS	11/16/06	11/16/06	17:09	SW3050B6010B
Chromium	11	6	ug/g	1	BJS	11/16/06	11/16/06	17:09	SW3050B6010B
Copper	10	6	ug/g	1	BJS	11/16/06	11/16/06	17:09	SW3050B6010B
Lead	130	1.2	ug/g	1	BJS	11/16/06	11/16/06	17:09	SW3050B6010B
Mercury	0.04	0.02	ug/g	1	BJS	11/14/06	11/14/06		SW7470A
Nickel	< 6	6	ug/g	1	BJS	11/16/06	11/16/06	17:09	SW3050B6010B
Selenium	< 6	6	ug/g	1	BJS	11/16/06	11/16/06	17:09	SW3050B6010B
Silver	< 0.8	0.8	ug/g	1	BJS	11/16/06	11/16/06	17:09	SW3050B6010B
Thallium	< 0.2	0.2	ug/g	1	BJS	11/16/06	11/16/06	17:09	SW3050B6010B
Zinc	36	6	ug/g	1	BJS	11/16/06	11/16/06	17:09	SW3050B6010B

Lab Number: 11308-004

Sample ID: 1188154

Matrix: Solid Percent Dry: 93 % Results are expressed on a dry weight basis.

Sampled: 11/7/06 11:30

Sampled: 11/7/06 11:30			Quant	Instr Dil'n	Prep	Analysis	Analysis		
Parameter:	Result	Limit	Units	Factor	Analyst	Date	Date	Time	Reference
Antimony	0.7	0.7	ug/g	1	BJS	11/16/06	11/16/06	17:18	SW3050B6010B
Arsenic	5.3	1.1	ug/g	1	BJS	11/16/06	11/16/06	17:18	SW3050B6010B
Beryllium	< 0.4	0.4	ug/g	1	BJS	11/16/06	11/16/06	17:18	SW3050B6010B
Cadmium	< 0.5	0.5	ug/g	1	BJS	11/16/06	11/16/06	17:18	SW3050B6010B
Chromium	63	5	ug/g	1	BJS	11/16/06	11/16/06	17:18	SW3050B6010B
Copper	41	5	ug/g	1	BJS	11/16/06	11/16/06	17:18	SW3050B6010B
Lead	400	1.1	ug/g	1	BJS	11/16/06	11/16/06	17:18	SW3050B6010B
Mercury	0.06	0.02	ug/g	1	BJS	11/14/06	11/14/06		SW7470A
Nickel	10	5	ug/g	1	BJS	11/16/06	11/16/06	17:18	SW3050B6010B
Selenium	< 5	5	ug/g	1	BJS	11/16/06	11/16/06	17:18	SW3050B6010B
Silver	< 0.8	0.8	ug/g	1	BJS	11/16/06	11/16/06	17:18	SW3050B6010B
Thallium	< 0.2	0.2	ug/g	1	BJS	11/16/06	11/16/06	17:18	SW3050B6010B
Zinc	74	5	ug/g	1	BJS	11/16/06	11/16/06	17:18	SW3050B6010B

Project ID: Hillsboro, Wodds Woolen Mills 40HM602.001

Lab ID: 11308

Lab Number: 11308-006

Sample ID: 1188150

Matrix: Solid Percent Dry: 89.5 % Results are expressed on a dry weight basis.

Sampled: 11/7/06 10:30

Sampled: 11/7/06 10:30		Quant		Instr Dil'n		Prep	Analysis	Analysis		
Parameter:	Result	Limit	Units	Factor	Analyst	Date	Date	Time	Reference	
Antimony	1.2	0.7	ug/g	1	BJS	11/16/06	11/16/06	17:23	SW3050B6010B	
Arsenic	10	1.1	ug/g	1	BJS	11/16/06	11/16/06	17:23	SW3050B6010B	
Beryllium	< 0.5	0.5	ug/g	1	BJS	11/16/06	11/16/06	17:23	SW3050B6010B	
Cadmium	< 0.6	0.6	ug/g	1	BJS	11/16/06	11/16/06	17:23	SW3050B6010B	
Chromium	10	6	ug/g	1	BJS	11/16/06	11/16/06	17:23	SW3050B6010B	
Copper	18	6	ug/g	1	BJS	11/16/06	11/16/06	17:23	SW3050B6010B	
Lead	130	1.1	ug/g	1	BJS	11/16/06	11/16/06	17:23	SW3050B6010B	
Mercury	0.02	0.02	ug/g	1	BJS	11/14/06	11/14/06		SW7470A	
Nickel	< 6	6	ug/g	1	BJS	11/16/06	11/16/06	17:23	SW3050B6010B	
Selenium	< 6	6	ug/g	1	BJS	11/16/06	11/16/06	17:23	SW3050B6010B	
Silver	< 0.8	0.8	ug/g	1	BJS	11/16/06	11/16/06	17:23	SW3050B6010B	
Thallium	< 0.2	0.2	ug/g	1	BJS	11/16/06	11/16/06	17:23	SW3050B6010B	
Zinc	54	6	ug/g	1	BJS	11/16/06	11/16/06	17:23	SW3050B6010B	

Lab Number: 11308-007

Sample ID: 1188071

Matrix: Solid Percent Dry: 90.3 % Results are expressed on a dry weight basis.

Sampled: 11/7/06 10:00

Sampled: 11/7/06 10:00		Quant	Instr Dil'n		Prep	Analysis	Analysis		
Parameter:	Result	Limit	Units	Factor	Analyst	Date	Date	Time	Reference
Lead	510	1.1	ug/g	1	BJS	11/16/06	11/16/06	17:28	SW3050B6010B

Lab Number: 11308-008

Sample ID: 1188072

Matrix: Solid Percent Dry: 93.3 % Results are expressed on a dry weight basis.

Sampled: 11/7/06 10:30

Sampled: 11/7/06 10:30		Quant	Instr Dil'n		Prep	Analysis	Analysis		
Parameter:	Result	Limit	Units	Factor	Analyst	Date	Date	Time	Reference
Lead	1100	1.1	ug/g	1	BJS	11/16/06	11/16/06	17:33	SW3050B6010B

Lab Number: 11308-009

Sample ID: 1188073

Matrix: Solid Percent Dry: 93.4 % Results are expressed on a dry weight basis.

Sampled: 11/7/06 10:45

Sampled: 11/7/06 10:45		Quant	Instr Dil'n		Prep	Analysis	Analysis		
Parameter:	Result	Limit	Units	Factor	Analyst	Date	Date	Time	Reference
Lead	97	1.1	ug/g	1	BJS	11/16/06	11/16/06	17:43	SW3050B6010B

Project ID: Hillsboro, Wodds Woolen Mills 40HM602.001

Lab ID: 11308

Lab Number: 11308-010

Sample ID: 1188068

Matrix: Solid Percent Dry: 76.5 % Results are expressed on a dry weight basis.

Sampled: 11/7/06 9:00

Parameter:	Result	Quant	Instr Dil'n		Analyst	Prep	Analysis	Analysis	Reference
		Limit	Units	Factor		Date	Date	Time	
Antimony	4.1	0.8	ug/g	1	BJS	11/16/06	11/16/06	18:13	SW3050B6010B
Arsenic	17	1.3	ug/g	1	BJS	11/16/06	11/16/06	18:13	SW3050B6010B
Beryllium	0.7	0.5	ug/g	1	BJS	11/16/06	11/16/06	18:13	SW3050B6010B
Cadmium	0.7	0.7	ug/g	1	BJS	11/16/06	11/16/06	18:13	SW3050B6010B
Chromium	140	7	ug/g	1	BJS	11/16/06	11/16/06	18:13	SW3050B6010B
Copper	47	7	ug/g	1	BJS	11/16/06	11/16/06	18:13	SW3050B6010B
Lead	900	1.3	ug/g	1	BJS	11/16/06	11/16/06	18:13	SW3050B6010B
Mercury	0.14	0.02	ug/g	1	BJS	11/14/06	11/14/06		SW7470A
Nickel	< 7	7	ug/g	1	BJS	11/16/06	11/16/06	18:13	SW3050B6010B
Selenium	7	7	ug/g	1	BJS	11/16/06	11/16/06	18:13	SW3050B6010B
Silver	< 0.9	0.9	ug/g	1	BJS	11/16/06	11/16/06	18:13	SW3050B6010B
Thallium	< 0.3	0.3	ug/g	1	BJS	11/16/06	11/16/06	18:13	SW3050B6010B
Zinc	180	7	ug/g	1	BJS	11/16/06	11/16/06	18:13	SW3050B6010B

Lab Number: 11308-011

Sample ID: 1188069

Matrix: Solid Percent Dry: 93.4 % Results are expressed on a dry weight basis.

Sampled: 11/7/06 9:20

Parameter:	Result	Quant	Instr Dil'n		Analyst	Prep	Analysis	Analysis	Reference
		Limit	Units	Factor		Date	Date	Time	
Lead	79	1.1	ug/g	1	BJS	11/16/06	11/16/06	18:18	SW3050B6010B

Lab Number: 11308-012

Sample ID: 1188670

Matrix: Solid Percent Dry: 80.8 % Results are expressed on a dry weight basis.

Sampled: 11/7/06 9:45

Parameter:	Result	Quant	Instr Dil'n		Analyst	Prep	Analysis	Analysis	Reference
		Limit	Units	Factor		Date	Date	Time	
Lead	2100	1.2	ug/g	1	BJS	11/16/06	11/16/06	18:23	SW3050B6010B

# Resource Laboratories, LLC

124 Heritage Avenue • Portsmouth, NH 03801  
Phone: 603-436-2001 • Fax: 603-430-2100

Company Name:

Phone #: 603-423-0225

Company Address:

FAX #: 603-423-1010

Project Manager:

Site Location (City, State):

26E Columbia Circle, Merrimack, NH Hillsboro, New Hampshire

Project ID / Name:

4011402.001

Invoice To:

Protocol: RCRA SDWA NPDES MCHM602.001

Lab Sample ID

Field ID

# CONTAINERS

MATRIX

PRESERVATION METHOD

SAMPLING

SAMPLER

DATE TIME

Lab Sample ID

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DATE TIME

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

11308

GE 1 OF 2

ANALYSIS REQUEST

☐ VOC 8260-NH List ☐ MADEP VPH ☐ MEGRO  
☐ VOC 8260 ☐ VOC8015GRO ☐ VOC 624  
☐ VOC 8260 BTEX, MiBE, Naphthalene only  
☐ VOC 524.2 ☐ VOC 524.2 NH List  
☐ TPH Fingerprint ☐ MEDRO ☒ DRO 8015 ☐ EPH  
☒ 8270PAH ☐ 8270ABN ☐ 625  
☒ 8082 PCB ☐ 8081 Pesticides ☐ 608  
☐ O&G 1664 ☐ O&G SM5520F  
☐ pH ☐ BOD ☐ Conductivity  
☐ TSS ☐ TDS ☐ TS  
☐ RCRA Metals ☒ Priority Pollutant Metals ☐ TAL Metals  
☐ Total Metals-list ☐ Dissolved Metals-list  
☐ Ammonia ☐ COD  
☐ T-Phosphorus ☐ Phenol  
☐ Cyanide ☐ Sulfide  
☐ Nitrate ☐ Nitrite ☐ Ortho P ☐ Sulfate ☐ Bromide ☐ Chloride  
☐ Corrosivity ☐ Reactive CN ☐ Reactive S- ☐ Ignitibility/FP  
☐ TCLP Metals ☐ TCLP VOC ☐ TCLP SVOC  
☐ TCLP Pesticide ☐ TCLP Herbicides (subcontract)  
☐ Standard Drinking Water Test ☐ Bacteria P/A  
  
Lead only

Grab (G) or Composite (C)

Lab Sample ID	Field ID	# CONTAINERS	MATRIX	PRESERVATION METHOD	SAMPLING	SAMPLER	DATE	TIME
1188161	1188155	2	WATER	HCl	MeOH	BE	11/7/06	14:50
02	1188157	2	SOLID	HNO <sub>3</sub>	MeOH	BE	11/7/06	12:30
03	1188157	2	OTHER	H <sub>2</sub> SO <sub>4</sub>	MeOH	BE	11/7/06	12:45
04	1188154	2	OTHER	NaOH	MeOH	BE	11/7/06	11:30
05	1188160	2	OTHER	MeOH	MeOH	BE	11/7/06	14:00
06	1188150	1	OTHER	MeOH	MeOH	BE	11/7/06	10:30
07	1188071	2	OTHER	MeOH	MeOH	BE	11/7/06	10:00
08	1188072	2	OTHER	MeOH	MeOH	BE	11/7/06	10:30
09	1188073	2	OTHER	MeOH	MeOH	BE	11/7/06	10:45
10	1188068	2	OTHER	MeOH	MeOH	BE	11/7/06	09:00
11	1188069	2	OTHER	MeOH	MeOH	BE	11/7/06	09:20

## SPECIAL INSTRUCTIONS

Will run 2 samples for TCLP-lead pending total metals results. Please call with preliminary results to determine sample selection.

E-Deliverable custom equs

Drum Cleaners

E-Mail Address

Quote #

PO #

REPORTING INSTRUCTIONS

☐ PDF ☐ Excel Spreadsheet

RECEIVED ON ICE

TEMPERATURE

Lab Use Only

Received by:

Received by:

Received by Laboratory:

Way Bill#:

## CUSTODY RECORD

Relinquished by Sampler:

Relinquished by:

Relinquished by:

Relinquished by:

Relinquished by:

Relinquished by:

Relinquished by:

Relinquished by:

Relinquished by:

Relinquished by:

Relinquished by:

# ANALYSIS REQUIRES

## Laboratory Report

Bettina Eames, PG  
Loureiro Engineering Associates, Inc.  
26 Columbia Circle, Unit E  
Merrimack, NH 03054

PO Number: None  
LabID: 11413  
Date Received: 11/8/06

Project: 40HM602.001 Hillsboro, Wodds Woolen Mill

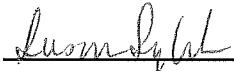
Attached please find results for the analysis of the samples received on the date referenced above.

Unless otherwise noted in the attached report, the analyses performed met the requirements of Resource Laboratories, LLC Quality Assurance Plan. The Standard Operating Procedures (SOP) are based upon USEPA SW-846, USEPA Methods for Chemical Analysis of Water and Wastewater, Standard Methods for the Examination of Water and Wastewater and other recognized methodologies. The results contained in this report pertain only to the samples as indicated on the chain of custody.

Resource Laboratories, LLC maintains certification with the agencies listed below.

We appreciate the opportunity to provide laboratory services. If you have any questions regarding the enclosed report, please contact the laboratory and we will be glad to assist you.

Sincerely,  
Resource Laboratories, LLC



Susan Sylvester  
Principal, General Manager

11-30-06  
Date

Total number of pages

3

### Resource Laboratories, LLC Certifications

New Hampshire 1732  
Maine NH903

Massachusetts M-NH902

## METALS RESULTS

Lab Number: 11413-01  
Sample ID: 1188155  
Date Sampled: 11/7/2006  
Matrix: TCLP Extract

Analyte	Concentration mg/L	Quantitation Limit mg/L	Analysis Date	TCLP Limit mg/L	Instrument Dil'n Factor	Init	Method Reference
TCLP Lead	380	0.1	11/28/06	5	10	BJS	SW 1311/3005A/6010B

Lab Number: 11413-02  
Sample ID: 1188068  
Date Sampled: 11/7/2006  
Matrix: TCLP Extract

Analyte	Concentration mg/L	Quantitation Limit mg/L	Analysis Date	TCLP Limit mg/L	Instrument Dil'n Factor	Init	Method Reference
TCLP Chromium	< 0.5	0.5	11/28/06	5	10	BJS	SW 1311/3005A/6010B
TCLP Lead	1.0	0.1	11/28/06	5	10	BJS	SW 1311/3005A/6010B

11413  
-01

-02

**Resource Laboratories, LLC**  
124 Heritage Avenue • Portsmouth, NH 03801  
Phone: 603-436-2001 • Fax: 603-430-2100

Company Name: **Leicester Engineering Assoc.**  
Company Address: **26E Columbia Circle, Merrimack, NH 03001**  
Project Manager: **Jeffrey E. Eames**  
Phone #: **603-923-0625**  
Fax #: **603-923-1010**  
Site Location (City, State): **Hillsboro, Vt. 05765**

Project ID / Name: **4044602.001**  
Protocol: **RCRA SDWA NPDOS MOP (NIDES) OTHER**

Invoice To: **Bettina Eames**

Lab Sample ID (Lab Use Only)	Field ID	# CONTAINERS	Matrix			Preservation Method						Sampling	
			WATER	SOLID	OTHER	HCl	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	NaOH	MeOH	OTHER (Specify)	DATE	TIME
118801	1188161	2	✓									11/7/06	14:50
02	1188155	2	✓									11/7/06	12:30
03	1188157	2	✓									11/7/06	12:45
04	1188154	2	✓									11/7/06	11:30
05	1188160	2	✓									11/7/06	14:00
06	1188153	1	✓									11/7/06	10:30
07	1188071	2	✓									11/7/06	10:30
08	1188072	2	✓									11/7/06	10:30
09	1188073	2	✓									11/7/06	10:45
10	1188065	2	✓									11/7/06	09:20
11	1188069	2	✓									11/7/06	09:20

**SPECIAL INSTRUCTIONS**

Will RUN 2 samples for TCLP-lead pending total metals results. Please call with preliminary results to determine sample selection.

**TAT REQUESTED**  
Priority (24 hr) ☐  
Expedited (48 hr) ☐  
10 Business Days ☒  
Other ☐  
Quote # \_\_\_\_\_  
E-Mail Address: **Debra@leicester.com**

**REPORTING INSTRUCTIONS**  
☐ PDF ☐ Excel Spreadsheet  
☒ FAX ☐ OTHER (specify) **Deliverable - 24 hrs**

**RECEIVED ON ICE** YES ☐ NO ☒  
**TEMPERATURE** 6 °C  
Lab Use Only

<b>CUSTODY RECORD</b>		Relinquished by Sampler: <b>Debra Eames</b>	Date: <b>11/8/06</b>	Time: <b>14:40</b>	Received by: _____	Date: _____	Time: _____
Relinquished by: _____		Date: _____	Time: _____	Received by Laboratory: <b>Debra Eames</b>	Date: <b>11/8/06</b>	Time: <b>17:40</b>	

- ☐ VOC 8260-NH List ☐ MADEP VPH ☐ M-CHO
- ☐ VOC 8260 ☐ VOC 8015/110 ☐ VOC 624
- ☐ VOC 8260 BTEX, MIBE, Naphthalene only
- ☐ VOC 624.2 ☐ VOC 524.2 NH List
- ☐ TPH Fingerprint ☐ MEQRO ☒ DRD 8015 ☐ EPH
- ☒ 8270PAH ☐ 8270ABN ☐ 625
- ☒ 8082 PCB ☐ 8081 Pesticides ☐ 608
- ☐ O&G 1604 ☐ O&G SM5520F
- ☐ pH ☐ BOD ☐ Conductivity
- ☐ TSS ☐ TDS ☐ TS
- ☐ HCHA Metals ☒ Priority Pollutant Metals ☐ TAL Metals
- ☐ Total Metals-list ☐ Dissolved Metals-list
- ☐ Ammonia ☐ COD
- ☐ T-Phosphorus ☐ Phenol
- ☐ Cyanide ☐ Sulfide
- ☐ Nitrate ☐ Nitrite ☐ Ortho P ☐ Sulfate ☐ Bromide ☐ Chloride
- ☐ Corrosivity ☐ Reactive CM ☐ Reactive S- ☐ Ignitability/FP
- ☐ TCLP Metals ☐ TCLP VOC ☐ TCLP SVOC
- ☐ TCLP Pesticide ☐ TCLP Herbicides (subcontract)
- ☐ Standard (Drinking Water Test) ☐ Bacteria P/A

Lead only

1188055 - TCLP-lead (see 11/22/06)

1188068 - TCLP-lead (see 11/22/06)

11413

11308

GE 1 OF 2

CHAIN-OF-CUSTODY AND ANALYSIS RECORD

ANALYSIS RESULTS