

**REMOVAL PROGRAM  
PRELIMINARY ASSESSMENT/  
SITE INVESTIGATION REPORT  
FOR THE  
LEBLANC CLEANERS SITE  
LEWISTON, ANDROSCOGGIN COUNTY, MAINE  
27 APRIL THROUGH 29 APRIL 2016**

Prepared For:

U.S. Environmental Protection Agency  
Region I  
Emergency Planning and Response Branch  
5 Post Office Square, Suite 100  
Boston, Massachusetts 02109-3912

CONTRACT NO. EP-S3-15-01

TO/TDD NO. TO1-01-16-02-0003

TASK NO. 0091

DC NO. R-00213

Submitted By:

Weston Solutions, Inc.  
Region I  
Superfund Technical Assessment and Response Team IV (START)  
3 Riverside Drive  
Andover, MA 01810

July 2016

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## I. Preliminary Assessment/Site Investigation Forms

## REMOVAL PRELIMINARY ASSESSMENT



### EPA REGION I REMOVAL PRELIMINARY ASSESSMENT

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#### Site Name and Location

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**Name:** LeBlanc Cleaners

**Location:** 10 Lafayette Street

**Town:** Lewiston

**County:** Androscoggin

**State:** Maine

**Site Status:**    ☐ NPL

☐ NON-NPL

☐ RCRA

☐ TSCA

☐ ACTIVE

☒ ABANDONED

☐ OTHER

☒ Attached USGS Map of Location

☒ Site I.D. No.: 01ZZ

**Latitude:** 44 ° 6 ' 6.2" North

**Longitude:** 70° 11' 49.1" West

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#### Referral

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☐ Citizen

☐ City/Town

☒ State

☐ Preremedial

☐ RCRA

☐ Other:

**Name of referring party:** Maine Department of Environmental Protection (ME DEP)

**Telephone:** (207) 287-7800

**Address:** 12 State House Station, Augusta, Maine, 04333

**Contacts Identified**

1) Jason Fish

**Telephone:** (207) 287-8426

2)

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#### Source of Information

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☐ **Verbal:**

☒ **Report:** Maine Department of Environmental Protection, Bureau of Remediation and Waste Management. 14 September 2015. *Notice of Violation*.

CES, Inc. 2015. *Dry Cleaner Initiative Phase II Environmental Site Assessment LeBlanc's Cleaners / 10 Lafayette Street / Lewiston, Maine*. October.

Ransom Consulting, Inc. 2015. *Phase I Environmental Site Assessment Report*. 4 May.

☒ **Other:** Information provided by EPA On-Scene Coordinator (OSC) Marcus Holmes.

## REMOVAL PRELIMINARY ASSESSMENT

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### Potential Responsible Parties

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**Owner:** Alfred LeBlanc **Telephone:** (207) 783-2244  
**Address:** PO Box 1236, Auburn, ME  
**Operator:** **Telephone:** ( )  
**Address:**

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### Site Access

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**Authorizing Person:** Alfred LeBlanc  
**Date:** 4 March 2016 **(X) Obtained** **( ) Verbal**  
**Telephone:** ( ) **( ) Not Obtained** **(X) Written**

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### Historical Preservation

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**( ) Site is Historically Significant or Eligible for Historic Preservation**

#### Contacts Identified

**1) State Historical Preservation Officer (SHPO)**

**Name:** Kirk F. Mohny **Telephone:** (207) 287-3811

**2) Tribal Historical Preservation Officer (THPO)**

**Name:** **Telephone:**( )

**Comments:**

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### Physical Site Characterization

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**Background Information:** The LeBlanc Cleaners site is located at 10 Lafayette Street, Lewiston, Androscoggin County, Maine (ME). The geographic coordinates, as measured from the entrance to the property, are 44° 6' 6.2" north latitude and 70° 11' 49.1" west longitude. The site is comprised of a 5,292 square-foot (ft<sup>2</sup>) rectangular building, a 972 ft<sup>2</sup> storage shed, and parking areas situated on a 0.24 acre parcel. The site is bordered to the northwest by St. Mary's Hospital and St. Mary's Medical Center, to the northeast and southwest by residential properties, and to the southeast by Lafayette Street and residential properties. The site is currently developed with a brick building constructed on a concrete slab-on-grade foundation with a flat, steel roof. The boiler room section of the main site building was constructed in the early 1900s. The main site building includes the boiler room, a dry-cleaning operations room, a bathroom, an office, and a reception area. A rectangular-shaped storage shed, constructed with wood floors and metal walls, is located on the southwestern portion of the site.

Around 1914 the site was developed with a wagon repair shop, steam dye facility, and dry cleaning operation. The main site building with the more current dry cleaning operations was constructed on the site circa 1955. At that time, the site operated one dry cleaning unit which utilized tetrachloroethene (PCE) as the primary dry cleaning solvent. According to the property

## REMOVAL PRELIMINARY ASSESSMENT

owner, the original dry cleaning machine was vented to the exterior on the western side of the site building. The original dry cleaning unit and associated vent pipe remain on the site but have not operated since the early 1970s. An additional Renzacci dry cleaning unit that was in use since the 1970s until 2014 utilized PCE throughout its operations. Dry cleaning operations ceased in November 2014, and used filters, pre filter lint, and spent solvents from the Renzacci dry cleaning machine remain on site.

The boiler room in the southwestern section of the site building contains two 275-gallon oil aboveground storage tanks (AST), a boiler unit, and an air compressor unit. The AST contains heating oil for the space furnace to heat the building and heating oil for the boiler units which provided steam formerly used by the dry cleaning and drying units. The dry-cleaning section of the site building has concrete floors except for the reception area, where 12-inch vinyl floor tiles were placed over the concrete floor. The office space in this section of the building is carpeted. It is possible that the floor tiles and/or carpet may be covering certain features of the original floors, such as stained areas. The dry cleaning room has a ceiling-mounted oil-fired space heater as well as an air compressor located on the southeastern wall.

In April 2015, Maine Department of Environmental Protection (MEDEP) hired Ransom Consulting, Inc. to conduct a Phase I Environmental Site Assessment. Ransom contracted Environmental Data Resources (EDR) to conduct a search of federal and state databases containing known and suspected sites of environmental contamination. The site was identified by EDR under databases including Resource Conservation and Recovery Act (RCRA) Conditionally Exempt Small Quantity Generator (RCRA-CESQG), Facility Index System/Facility Registry System (FINDS), EDR United States Historical Cleaners, United States Aerometric Information Retrieval System (AIRS), and Underground Injection Control (UIC) Site. According to information contained in the EDR report, the site was identified as a U.S. EPA Hazardous Waste Site for disposal of small quantities of halogenated solvent materials associated with the former dry cleaning operation, including tetrachloroethylene. Several violations were reported in connection with the site's listing as a RCRA CESQG.

As part of the Phase I ESA, a Vapor Encroachment Assessment (VEA) was performed in general accordance with American Society for Testing and Materials (ASTM) International Standard E2600-10. Based on the operation of the site property as a dry cleaning facility using "Perc" from at least 1955 until 2014, a Vapor Encroachment Condition (VEC) cannot be ruled out. If contaminants have impacted subsurface conditions at the site, these contaminants would have the potential to migrate in soil vapor to surrounding properties through preferential pathways such as the municipal utility trenches. These contaminants could then impact indoor air conditions through vapor intrusion to surrounding structures.

In July through September 2015, MEDEP hired CES, Inc. to conduct a Phase II Environmental Site Assessment. A total of eight soil borings were collected from which five were completed as temporary monitoring wells and groundwater monitoring samples. The groundwater sample collected from the monitoring well MW-05 was reported to contain total xylenes [3,700 micrograms per Liter ( $\mu\text{g/L}$ )] and naphthalene [330  $\mu\text{g/L}$ ] above the Remedial Action Guidelines (RAGs) for Groundwater for both Residential and Construction Worker scenarios toluene, ethylbenzene, acetone, n-butylbenzene, isopropylbenzene, p-isopropyltoluene, n-propylbenzene, 1,3,5-trimethylbenzene, and 1,2,4-trimethylbenzene were reported above the laboratory detection

## REMOVAL PRELIMINARY ASSESSMENT

limit. The groundwater sample collected from monitoring well MW-08 was reported to contain trichloroethene (320 µg/L) above the RAGs for Groundwater Construction Worker. Tetrachloroethene, vinyl chloride, trans-1,2-dichloroethene and cis-1,2-dichloroethene were reported above the laboratory detection limit. Several volatile organic compounds (VOCs) were detected in the groundwater sample from the monitoring wells MW-03 and MW-07 and were reported above the laboratory detection limit.

Surficial soil sample from SS-07 [0-2' below ground surface (bgs)] did not detect volatile compounds at concentrations above the RAGs for Residential and Commercial Worker scenarios. However, the concentration of tetrachloroethene was detected above the laboratory detection limits. No other VOC compounds were detected from the sample collected. Subsurface soil samples from boring B-02 (6-8' bgs), B-05 (0-4' bgs), and B-08 (0-2' bgs) did not detect any compounds at concentrations above the RAGs for Construction Worker scenarios. However, concentration of tetrachloroethene, trichloroethene, and cis-1,2-dichloroethene were detected above the laboratory detection limits. Soil gas samples were reported to contain volatile organic compounds (1,1-dichloroethene, trans-1,2-dichloroethene, 1,1-dichloroethene, and cis-1,2-dichloroethene), which were detected in soil gas sample locations (SV-01, SV-02, SV-03, SV-04, SV-08, SV-09, SV-10 and SV-12) above the laboratory detection limit

Several volatile organic compounds (trans-1,2-dichloroethene, cis-1,2-dichloroethene, and 1,1,1-trichloroethene) were detected in the sub slab soil gas sample locations (SSV-01, SSV- 02, and SSV-03) above the laboratory detection limit. The RAGs are not directly comparable to subslab soil gas samples. Therefore, an attenuation factor was applied to these samples prior to comparison. Applying this attenuation factor to the reported results, the concentrations of trans-1,2-dichloroethene, cis-1,2-dichloroethene, trichloroethene and tetrachloroethene for SSV-01 and trichloroethene and tetrachloroethene for SSV-02 and SSV-03 were greater than 10 times the Indoor Air for commercial settings.

The air sample collected from inside the facility (IA-1) reported concentrations of tetrachloroethene above the RAGs for the Indoor Air Commercial applications. Although several detections were identified, no other VOC compounds were identified exceeding the Indoor Air for commercial settings.

**Description of Substances Possibly Present, Known or Alleged:** Analytical results of groundwater and subsurface soil samples indicated elevated levels of VOCs (tetrachloroethene, trichloroethylene, total xylenes, and naphthalene)

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### Existing Analytical Data

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( ) **Real-Time Monitoring Data:**

## REMOVAL PRELIMINARY ASSESSMENT

**(X) Sampling Data:** Analytical results from the Phase II Environmental Site Assessment, conducted by CES Inc. on 29 October 2015 for ME DEP.

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### Potential Threat

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Description of potential hazards to environment and/or population-identify any of the criteria for a Removal Action (from NCP) that may be met by the site under 40 CFR 300.415 [b] [2].

- i. Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances, pollutants or contaminants.
- ii. Actual or potential contamination of drinking water supplies or sensitive ecosystems.
- iii. Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers, that may pose a threat of release.
- iv. High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate.
- v. Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released.
- vi. Threat of fire or explosion.
- vii. The availability of other appropriate federal or state response mechanisms to respond to the release.
- viii. Other situations or factors that may pose threats to public health or welfare or the environment.

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### Prior Response Activities

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**( ) PRP                      (X) STATE                      ( ) FEDERAL                      ( ) OTHER**

**Brief Description:** In April 2015, Ransom Consulting, Inc. conducted a Phase I Environmental Site Assessment (ESA) of the site for ME DEP. The site reconnaissance included observations of the property grounds for evidence of releases, or potential releases of oil and/or hazardous materials (OHM), or a material threat of releases of OHM.

In July through September 2015, CES Inc. conducted a Phase II ESA for ME DEP. The Phase II ESA was completed to identify the potential for dry cleaner-related issues affecting the site and adjacent properties.



## REMOVAL PRELIMINARY ASSESSMENT

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### Priority for Site Investigation

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☒ **High**  
**Comments:**

☐ **Medium**

☐ **Low**

☐ **None**

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### Report Generation

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**Originator:** Andrew Danikas  
**Affiliation:** Weston Solutions (START)  
**TDD No.:** TO1-01-16-02-0003

**Date:** 2 May 2016  
**Telephone:** (978) 621-8658  
**Task No.:** 0091



**EPA REGION I  
REMOVAL SITE INVESTIGATION**

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**Inspection Information**

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**Site Name:** LeBlanc Cleaners

**Address:** 10 Lafayette Street

**Town:** Lewiston

**County:** Androscoggin

**State:** Maine

**Date of Inspection:** 27 April 2016

**Time of Inspection:** 0730 - 1730 hours

**Date of Inspection:** 28 April 2016

**Time of Inspection:** 0730 - 1730 hours

**Date of Inspection:** 29 April 2016

**Time of Inspection:** 0730 - 1330 hours

**Weather Conditions:** 27 April 2016 - 55° Fahrenheit, Sunny, Breezy

28 April 2016 - 55° Fahrenheit, Sunny, Breezy

29 April 2016 - 55° Fahrenheit, Sunny, Breezy

**Site Status at Time of Inspection:**    ( ) ACTIVE    (X) INACTIVE

**Comments:** The site is an abandoned dry cleaning facility.

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**Agencies/Personnel Performing Inspection**

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	<u><b>Names</b></u>	<u><b>Program</b></u>
<b>(X) EPA:</b>	Marcus Holmes	U.S. Environmental Protection Agency (EPA) Region I Emergency Planning and Response Branch (EPRB) On-Scene Coordinators (OSC).
<b>(X) EPA Contractor:</b>	Andrew Danikas Eric Ackerman Christine Dupree Ken Robinson	Weston Solutions, Inc. (WESTON) Superfund Technical Assessment and Response Team III (START).
<b>(X) State:</b>	Ted Wolfertz	Maine Department of Environmental Protection (ME DEP), Division of Remediation.

**Current Owner Based on Field Interview:**

Alfred LeBlanc

## REMOVAL SITE INVESTIGATION

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### Physical Site Characteristics

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Parameter	Quantities/Extent
<input type="checkbox"/> Cylinders:	
<input checked="" type="checkbox"/> Drums:	There are numerous drums/containers inside the building containing waste oils, detergents, sodium hydroxide, potassium hydroxide, hydrogen peroxide, boiler water additives, and various solvents including tetrachloroethylene.
<input type="checkbox"/> Lagoons:	
<input checked="" type="checkbox"/> Tanks:	
<input checked="" type="checkbox"/> Above:	The boiler room contains two 275-gallon heating oil aboveground storage tanks.
<input checked="" type="checkbox"/> Below:	There is an underground storage tank below the driveway. The size and contents are currently unknown.
<input type="checkbox"/> Asbestos:	
<input type="checkbox"/> Piles:	
<input type="checkbox"/> Stained Soil:	
<input type="checkbox"/> Sheens:	
<input type="checkbox"/> Stressed Vegetation:	
<input type="checkbox"/> Landfill:	
<input checked="" type="checkbox"/> Population in Vicinity:	The site is located in a mixed residential/commercial area that is heavily populated.
<input type="checkbox"/> Wells:	
<input type="checkbox"/> Drinking:	
<input type="checkbox"/> Monitoring:	
<input checked="" type="checkbox"/> Other:	The property is abutted to the southwest, southeast and northeast by residential properties and by St. Mary's Regional Medical Center to the northwest.

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### Physical Site Observations

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The site is comprised of a 5,292 square-foot (ft<sup>2</sup>) rectangular building, a 972 ft<sup>2</sup> storage shed, and parking areas situated on a 0.24 acre parcel. The site is bordered to the northwest by St. Mary's Hospital and St. Mary's Medical Center, to the northeast and southwest by a residential property, and to the southeast by Lafayette Street and residential property. The site is currently developed with a brick building constructed on a concrete slab-on-grade foundation with a flat, steel roof. The boiler room section of the main site building was constructed in the early 1900s. The main site building includes the boiler room, a dry-cleaning operations room, a bathroom, an office, and a reception area. A rectangular-shaped storage shed is located on the western portion of the site, and is constructed with wooden floors and metal walls. The topography in the area surrounding the site generally slopes downward to the north, towards Jepson Brook.

## REMOVAL SITE INVESTIGATION

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### Field Sampling and Analysis

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Matrix/Analytical Parameter	Field Instrumentation				
	CGI/O <sub>2</sub>	RAD	PID	FID	Other
<b>Background Readings:</b>	0%/20.9%	10-15 μR/Hour	0.0 ppm		
<b>Air:</b>	0%/20.9%	10-15 μR/Hour	0.0 ppm		
<b>Soil:</b>	0%/20.9%	10-15 μR/Hour	0.0 ppm		
<b>Subsurface soil:</b>	0%/20.9%	10-15 μR/Hour	485 ppm		
<b>Drums:</b>	0%/20.9%	10-15 μR/Hour	>999 ppm		
<b>Sub-slab vapor</b>	0%/20.9%	10-15 μR/Hour	48 ppm		

ppm = parts per million.

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### Field Quality Control Procedures

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#### (X) SOP Followed

#### ( ) Deviation From SOP

**Comments:** START personnel conducted field activities in accordance with the document, entitled *Sampling and Analysis Plan for the LeBlanc Cleaners Site, Lewiston, Androscoggin County, Maine, April 2016*.

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### Description of Sampling Conducted

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START personnel utilized a mounted concrete core drill to remove a 3-inch diameter concrete core from the concrete floor in order to advance Geoprobe<sup>®</sup> macrocores with an electric jackhammer. Soil borings were collected from locations selected by the OSC. The mounted concrete core drill was not used for soil borings located outside of the building. START collected a total of 50 subsurface soil samples from 10 borings (SB-01 through SB-10) from locations inside and outside of the building. Five borings were advanced to a depth of 4 feet (ft) below ground surface (bgs), one boring was advanced to a depth of 6 feet bgs, three borings were advanced to a depth of 7 feet bgs, and one boring was advanced to a depth of 8 feet bgs. START collected 11 surface soil samples (SS-01 through SS-11) from locations along the perimeter of the site as selected by the OSC. In addition, START personnel installed five sub-slab vapor ports inside the building from which five sub-slab vapor samples (SG-01 through SG-05) were collected. START collected five drum product samples (DP-01 through DP-05) from drums/containers inside the building. Lastly, START collected one air sample from a floor drain inside the boiler room and one air sample from a storm drain located in the parking lot.

The subsurface soil and surface soil samples were screened in the field for volatile organic compounds (VOCs) and metals using the EPA Mobile Laboratory. The sub-slab vapor samples were screened in the field for VOCs using the EPA Mobile Laboratory. The sub-slab vapor

## REMOVAL SITE INVESTIGATION

samples for field analysis were collected in 1-Liter Tedlar® bags using dedicated tubing and a peristaltic pump to evacuate the soil gas from the sampling port.

The subsurface soil, surface soil, sub-slab vapor samples, storm drain, floor drain air samples, and drum product samples were also submitted for confirmatory VOC and semivolatile organic compound (SVOC) analyses to the EPA Office of Environmental Measurement and Evaluation (OEME) laboratory located in North Chelmsford, Massachusetts. Approximately 10% of the surface and subsurface soil samples were submitted for confirmatory metals analysis at the EPA OEME laboratory.

Analyses		
<b>Analytical Parameter</b>	<b>Media</b>	<b>Laboratory</b>
(X) VOC	(X) AIR	(X) NERL
( ) PCB	(X) WATER	( ) CLP
( ) PESTICIDE	(X) SOIL	( ) PRIVATE
(X) METALS	(X) SOURCE	( ) DAS
( ) CYANIDE	( ) SEDIMENT	( ) SOW
(X) SVOC	(X) SOIL GAS	(X) FIELD
( ) TOXICITY		
( ) DIOXIN		
( ) ASBESTOS		
( ) OTHER		

Receptors	
<u>Comments</u>	
( ) <b>Drinking Water:</b>	
(X) <b>Private:</b>	According to the Maine Geological Survey's online well database one private drinking water well (205 Webster Street) is located within 2,500 feet of the site.
(X) <b>Groundwater:</b>	Previous sample results indicated that the groundwater on site has been impacted by previous dry cleaning activities. Groundwater flow direction, based on previous depth-to-groundwater data, is generally west towards the Androscoggin River located approximately 1 mile west of the site. Based on the most recent groundwater elevation data collected in July 2015, groundwater beneath the site area ranges from approximately 4.61 ft to 9.22 ft bgs.

## REMOVAL SITE INVESTIGATION

- (X) **Unrestricted Access:** There are no access restrictions to the site; the site building is locked, but can be accessed via several large open/broken windows.
- (X) **Population in Proximity:** The site is located in a heavily populated residential area.
- (X) **Sensitive Ecosystem:** The Androscoggin River is located approximately 1 mile west of the site. Jepson Brook is located a half mile east of the site.

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### Additional Procedures for Site Determination

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#### ( ) Biological Evaluation

#### ( ) ATSDR

To be determined by the On-Scene Coordinator (OSC).

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### Site Determination

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Depending on further information, criteria that may be met by the site include 40 CFR 300.415 [b] [2], parts:

- i. Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances, pollutants or contaminants.
- ii. Actual or potential contamination of drinking water supplies or sensitive ecosystems.
- iii. Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers, that may pose a threat of release.
- iv. High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate.
- v. Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released.
- vi. Threat of fire or explosion.
- vii. The availability of other appropriate federal or state response mechanisms to respond to the release.
- viii. Other situations or factors that may pose threats to public health or welfare or the environment.

## REMOVAL SITE INVESTIGATION

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### Report Generation

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<b>Originator:</b>	Andrew Danikas	<b>Date:</b>	4 May 2016
<b>Affiliation:</b>	Weston Solutions (START)	<b>Telephone:</b>	(978) 621-8658
<b>TDD No.:</b>	TO1-01-16-02-0003	<b>Task No.:</b>	0091

## II. Narrative Chronology



## **Narrative Chronology**

### **Site Description**

The LeBlanc Cleaners site (the site) is located at 10 Lafayette Street, Lewiston, Androscoggin County, Maine (ME) (see Appendix A, Figure 1) [1, 2]. The geographic coordinates, as measured from the entrance to the property, are 44° 6' 6.2" north latitude and 70° 11' 49.1" west longitude. The site is comprised of a 5,292 square-foot (ft<sup>2</sup>) rectangular building, a 972 ft<sup>2</sup> storage shed, and parking areas situated on a 0.24 acre parcel. The site is bordered to the northwest by St. Mary's Hospital and St. Mary's Medical Center, to the northeast and southwest by a residential property, and to the southeast by Lafayette Street and residential property. The site is currently developed with a brick building constructed on a concrete slab-on-grade foundation with a flat, steel roof. The boiler room section of the main site building was constructed in the early 1900s. The main site building includes the boiler room, a dry-cleaning operations room, a bathroom, an office, and a reception area. A rectangular-shaped storage shed is located on the western portion of the site, and is constructed with wooden floors and metal walls (see Appendix A, Figure 2) [2].

### **Site Background**

Around 1914 the site was developed with a wagon repair shop, steam dye facility, and dry cleaning operation. The main site building with the more current dry cleaning operations was constructed on the site circa 1955. At that time, the site operated one dry cleaning unit which utilized tetrachloroethylene (PCE) as the primary dry cleaning solvent. According to the property owner, the original Renzacci dry cleaning machine was vented to the exterior on the western side of the site building. The original dry cleaning unit and associated vent pipe remain on the site but have not operated since the early 1970s. An additional Renzacci dry cleaning unit that was in use since the 1970s until 2014 utilized PCE throughout its operation. Dry cleaning operations ceased in November 2014, and used filters, pre filter lint, and spent solvents from the Renzacci dry cleaning machines are currently stored in the unoccupied building [3].

The boiler room on the southwestern section of the site contains two 275-gallon oil aboveground storage tanks (AST), a boiler unit, and an air compressor unit. The AST contains heating oil for the space furnace to heat the building and heating oil for the boiler units which provided steam formerly used by the dry cleaning and drying units. The dry-cleaning section of the site building has concrete floors except for in the reception area, where 12-inch vinyl floor tiles were placed over the concrete floor. The office space in this section of the building is carpeted. It is possible that the floor tiles and/or carpet may be covering certain features of the original floors, such as stained areas. The dry cleaning room has a ceiling-mounted oil-fired space heater as well as an air compressor located on the southeastern wall [3].

In April 2015, ME Department of Environmental Protection (ME DEP) hired Ransom Consulting, Inc. to conduct a Phase I Environmental Site Assessment. Ransom contracted Environmental Data Resources (EDR) to conduct a search of federal and state databases containing known and suspected sites of environmental contamination. The site was identified by EDR under databases including Resource Conservation and Recovery Act (RCRA) Conditionally Exempt Small Quantity Generator (CESQG), Facility Index System/Facility

Registry System (FINDS), EDR United States Historical Cleaners, United States Aerometric Information Retrieval System (AIRS), and Underground Injection Control (UIC) Site. According to information contained in the EDR report, the site was identified as a U.S. EPA Hazardous Waste Site for disposal of small quantities of halogenated solvent materials associated with the former dry cleaning operation, including tetrachloroethylene. Several violations were reported in connection with the site's listing as a RCRA CESQG [4].

As part of the Phase I ESA, a Vapor Encroachment Assessment (VEA) was performed in general accordance with American Society for Testing and Materials (ASTM) International Standard E2600-10. Based on the operation of the site property as a dry cleaning facility using "Perc" from at least 1955 until 2014, a Vapor Encroachment Condition (VEC) cannot be ruled out. If contaminants have impacted subsurface conditions at the site, these contaminants would have the potential to migrate in soil vapor to surrounding properties through preferential pathways such as municipal utility trenches. These contaminants could then impact indoor air conditions through vapor intrusion to surrounding structures [4].

From July through September 2015, ME DEP hired CES, Inc. to conduct a Phase II Environmental Site Assessment. A total of eight soil borings were advanced of which five were completed as temporary monitoring wells for the collection of groundwater samples. The groundwater sample collected from monitoring well MW-05 was reported to contain total xylenes [3,700 micrograms per Liter ( $\mu\text{g/L}$ )] and naphthalene (330  $\mu\text{g/L}$ ) above the ME Remedial Action Guidelines (RAGs) for Groundwater for both Residential and Construction Worker scenarios toluene, ethylbenzene, acetone, n-butylbenzene, isopropylbenzene, p-isopropyltoluene, n-propylbenzene, 1,3,5-trimethylbenzene, and 1,2,4-trimethylbenzene were reported above the laboratory detection limit. The groundwater sample collected from monitoring well MW-08 was reported to contain trichloroethene (320  $\mu\text{g/L}$ ) above the RAGs for Groundwater Construction Worker. Tetrachloroethene, vinyl chloride, trans-1,2-dichloroethene and cis-1,2-dichloroethene were reported above the laboratory detection limit. Several volatile organic compounds (VOCs) were detected in the groundwater sample from monitoring wells MW-03 and MW-07 and were reported above the laboratory detection limit [3].

Surficial soil sample results from SS-07 [0-2 feet below ground surface (bgs)] did not detect volatile compounds at concentrations above the RAGs for Residential and Commercial Worker scenarios. However, the concentration of tetrachloroethene was detected above the laboratory detection limits. No other VOC compounds were detected from the sample collected. Subsurface soil samples from boring B-02 (6-8 feet bgs), B-05 (0-4 feet bgs), and B-08 (0-2 feet bgs) did not detect any compounds at concentrations above the RAGs for Construction Worker scenarios. However, concentration of tetrachloroethene, trichloroethene, and cis-1,2-dichloroethene were detected above the laboratory detection limits. Soil gas samples were reported to contain volatile organic compounds (1,1-dichloroethene, trans-1,2-dichloroethene, 1,1-dichloroethene, and cis-1,2-dichloroethene), which were detected in soil gas sample locations (SV-01, SV-02, SV-03, SV-04, SV-08, SV-09, SV-10 and SV-12) above the laboratory detection limit.

Several volatile organic compounds (trans-1,2-dichloroethene, cis-1,2-dichloroethene, and 1,1,1-trichloroethene) were detected in the subslab soil vapor sample locations (SSV-01, SSV- 02, and SSV-03) above the laboratory detection limit. The RAGs are not directly comparable to subslab

soil gas samples. Therefore, an attenuation factor was applied to these samples prior to comparison. Applying this attenuation factor to the reported results, the concentrations of trans-1,2-dichloroethene, cis-1,2-dichloroethene, trichloroethene and tetrachloroethene for SSV-01 and trichloroethene and tetrachloroethene for SSV-02 and SSV-03 were greater than 10 times the Indoor Air for commercial settings level [3].

The air sample collected from inside the facility (IA-1) reported concentrations of tetrachloroethene above the RAGs for the Indoor Air Commercial applications. Although several detections were identified, no other VOC compounds were identified exceeding the Indoor Air for commercial settings [3].

On 28 July 2015, ME DEP conducted a hazardous waste management inspection at the site. LeBlanc Cleaners was inspected for compliance with standards for generators of hazardous waste. The inspection revealed that LeBlanc Cleaners generates regulated hazardous wastes, including tetrachloroethylene still bottoms, condenser water, filters, and lint. LeBlanc Cleaners also generates universal wastes, a category of hazardous waste which includes fluorescent lamps and other mercury-containing lamps, mercury switches and devices, cathode ray tubes (CRTs), certain batteries and other wastes which are required to be recycled. As a result of the inspection, ME DEP identified the following violations: treating or disposing of hazardous waste on-site without a license to do so, and by means of evaporation; failure to keep containers closed except when adding or removing waste; failure to determine if wastes generated are hazardous; failure to label or mark each container of hazardous waste with the date upon which each period of accumulation begins and the words "Hazardous Waste"; failure to ship hazardous waste off site within 180 days of the full date; and failure to conduct generator closure [5].

### **Site Activities**

On 27 April 2016, U.S. Environmental Protection Agency (EPA) On-Scene Coordinator (OSC) Marcus Holmes, EPA's Mobile Laboratory and EPA Chemist Scott Clifford, and Weston Solutions, Inc., START members Andrew Danikas, Eric Ackerman, Christine Dupree, and Ken Robinson mobilized to the site. The objective of this sampling event was to collect subsurface soil samples and surface soil samples for on-site VOC screening and X-Ray Fluorescence (XRF) metals screening, collect sub-slab soil gas for on-site VOC screening, and submit subsurface soil, surface soil, sub-slab soil gas samples, storm drain and floor drain air samples, and drum product samples for fixed laboratory confirmation analyses for VOC and semivolatile organic compound (SVOC) analyses to identify the presence of hazardous substances; and to determine if further actions, including removal activities, may be warranted at the site.

START personnel established a support zone, and START member Danikas conducted a safety and operations meeting. On-site personnel reviewed and signed the site Health and Safety Plan (HASP), which was prepared as a separate document entitled *Weston Solutions, Inc., Region I START Site Health and Safety Plan (HASP) LeBlanc Cleaners Site, Lewiston, Maine*, dated April 2016 [6]. Following the completion of the safety and operations meeting, START personnel calibrated the air monitoring instrument, a MultiRAE and a radiation meter (MicroR) [8, 9]. Background levels were recorded in the HASP as follows: photoionization detector (PID) = 0.0 parts per million (ppm); lower explosive limit (LEL) = 0%; oxygen (O<sub>2</sub>) = 20.9%; and MicroR = 12 -15 microRoentgens per hour (μR/hr). For the duration of the sampling event, START

personnel conducted daily safety and operations meetings and calibrated instrumentation for use on site throughout field operations.

START personnel conducted a site walk inside the building and noted the various dry cleaning machines, drums/containers, ASTs, and miscellaneous dry cleaning supplies (see Appendix C, Photodocumentation Log). During the site walk, OSC Holmes selected locations for the soil borings, sub-slab soil gas wells, and drum product samples. After completing the site walk, START personnel prepared the subsurface soil sampling apparatus (mounted concrete core drill and electric jackhammer with Geoprobe<sup>®</sup> macrocores) and bottleware. START personnel decontaminated all down-hole Geoprobe equipment and began preparing the equipment needed for soil boring classification in the driveway.

START personnel began collecting subsurface and surface soil samples. The concrete core drill was used to drill a 3-inch diameter hole through the concrete floor in order to advance the Geoprobe<sup>®</sup> macrocores with a electric hammer down to depths from 0 to 8 feet below ground surface (bgs). Surface soil samples were collected from 0 to 3 inches bgs using a stainless steel scoop. Sampling activities were performed in accordance with the Sampling and Analysis Plan (SAP), which was prepared as a separate document, entitled *Sampling and Analysis Plan for the LeBlanc Cleaners Site, Lewiston, Androscoggin County, Maine*, dated April 2016 [7].

START personnel installed five subslab soil gas wells, designated as SG-01 through SG-05 (see Appendix A, Figure 3). During the installation of sub-slab soil gas well SG-03, an initial solvent odor was noticed during and after port installation; and a PID reading of 48 ppm from the soil gas well was recorded.

START personnel collected 22 subsurface soil samples from four soil boring locations (SB-01 through SB-04) inside the building including one field duplicate (see Appendix F, Boring Logs). All of the subsurface soil samples collected were submitted to the EPA Office of Environmental Measurement and Evaluation (OEME) Mobile Field Laboratory, operated by EPA Field Chemist Clifford, for on-site metals screening analysis via XRF, and for VOC field screening analysis via gas chromatograph (GC). All of the subsurface soil samples collected were selected for confirmatory VOC and SVOC analyses at the OEME laboratory located in North Chelmsford, Massachusetts. Approximately 10% of the subsurface soil samples were selected for confirmatory metals analysis at the OEME Laboratory.

During the day, ME DEP representative Ted Wolfertz and the property owner Alfred LeBlanc arrived on site and met with OSC Holmes.

Sampling and field activities were completed for the day. START personnel collected the appropriate number of rinsate blanks. START personnel completed chain-of-custody (COC) records to document the history of soil samples from the time of sample collection through transportation and analysis (see Appendix F, Chain-of-Custody Record). The subsurface soil samples were placed on ice inside coolers, and secured pending delivery to the OEME Laboratory.

On 28 April 2016, EPA OSC Holmes, EPA Field Chemist Clifford, and START members Danikas, Ackerman, Dupree, and Robinson mobilized to the site to continue collecting

subsurface soil samples, conducting on-site screening analyses, and collecting sub-slab soil gas samples. START personnel established a support zone and calibrated the air monitoring instrument, a MultiRAE and a radiation meter (MicroR) [8, 9]. START member Ackerman conducted a site walk with the MultiRAE and MicroR instruments. No readings above background levels were recorded on either instrument.

START personnel collected 11 surface soil samples, and advanced the Geoprobe macrocores at an additional six locations (SB-06 through SB-10), collected 52 subsurface soil samples, including two field duplicates from the borings that were advanced both inside and outside of the building (see Appendix A, Figure 3, Appendix B, Table 1, Sample Descriptions, and Appendix F, Boring Logs). Soil samples were submitted to EPA Field Chemist Clifford for XRF (metals) and GC (VOC) field screening analyses in the OEME Mobile Field Laboratory.

Sampling and field activities were completed for the day. START personnel collected the appropriate number of rinsate blanks and completed COC records (see Appendix F, Chain-of-Custody Record). The soil and rinsate samples were placed on ice inside coolers, and secured pending delivery to the OEME.

On 29 April 2016, EPA OSC Holmes, EPA Field Chemist Clifford, and START members Danikas, Ackerman, Dupree, and Robinson mobilized to the site. START personnel collected five sub-slab soil gas samples (SG-01 through SG-05) including one duplicate and one ambient sample using SUMMA canisters. In addition, one air sample was collected from a floor drain (Sewer-01) inside the boiler room and one air sample (Sewer-02) was collected from a storm drain in the driveway. START member Ackerman collected five drum product samples (DP-01 through DP-05) from inside the building. During the sampling of the drums/containers, START member Ackerman noted a PID reading of 723 ppm for DP-02, and >999 ppm for DP-06 and DP-07. The sub-slab soil gas, air samples, and drum product samples were submitted for confirmatory VOC and SVOC analyses at the OEME laboratory located in North Chelmsford, Massachusetts.

Field sampling activities were completed. START personnel collected the appropriate number of rinsate blanks and completed COC records (see Appendix F, Chain-of-Custody Record). The soil, groundwater, and rinsate samples were placed into jars, labeled, and preserved by placing them on ice inside coolers, and secured pending delivery to the OEME.

START members Danikas, Dupree, and Robinson photodocumented sample locations and site features (see Appendix C, Photodocumentation Log).

START member Danikas utilized the Trimble™ Pathfinder Pro XRS Global Position System (GPS) unit to record sample locations (see Appendix A, Figure 3) [12].

Analytical data summary tables are provided in Appendix B.

## **ANALYTICAL DATA SUMMARIES**

A total of 50 subsurface soil samples were collected from 10 borings (SB-01 through SB-10) from locations inside and outside of the building. In addition, a total of 11 surface soil samples

(SS-01 through SS-11) were collected from locations along the perimeter of the site. A total of five sub-slab soil gas samples (SG-01 through SG-05) were collected. A total of five drum product samples (DP-01 through DP-05) were collected from drums/containers inside the building. One air sample was collected from a floor drain inside the boiler room and one air sample was collected from a storm drain in the parking lot.

The subsurface soil and surface soil samples were screened in the field for volatile organic compounds (VOCs) and metals using the EPA Mobile Laboratory. The sub-slab soil gas samples were screened in the field for VOCs using the EPA Mobile Laboratory.

The subsurface soil, surface soil, sub-slab soil gas samples, storm drain, floor drain air samples, and drum product samples were also submitted for confirmatory VOC and SVOC analyses to the EPA OEME laboratory located in North Chelmsford, Massachusetts. Approximately 10% of the surface and subsurface soil samples were submitted for confirmatory metals analysis at the EPA OEME laboratory. Complete field screening and laboratory analytical results for all of the samples submitted for analyses during this sampling event may be found in the EPA Site File.

### **Volatile Organic Compound Soil Field Screening Data Summary**

A total of 57 soil samples were field screened for cis-1,2-Dichloroethylene, trichloroethylene (TCE), and PCE. The maximum concentration of cis-1,2-Dichloroethylene detected was 38,500 micrograms per Kilogram ( $\mu\text{g/Kg}$ ) in SB-03C, the maximum concentration of TCE detected was 57,300  $\mu\text{g/Kg}$  in SB-03C, and the maximum concentration of PCE detected was 477,000  $\mu\text{g/Kg}$  in SB-03C. TCE was detected at concentrations exceeding its respective EPA Removal Management Level (RML) for Industrial Soil in one soil sample. Refer to Appendix B, Table 2.

### **Metals in Soil Field Screening Data Summary**

A total of 57 soil samples were field screened for arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver. Five of these metals were detected, as follows (maximum concentration and sample location in parentheses): arsenic (46  $\text{mg/Kg}$  in SB-01B), barium (946  $\text{mg/Kg}$  in SB-10C), cadmium (15  $\text{mg/Kg}$  in SB-04A), chromium (717  $\text{mg/Kg}$  in SB-10A), and lead (527 in SB-09B). Arsenic was detected at concentrations exceeding the respective Maine Remedial Action Guidelines (ME RAG) for a Commercial Worker Exposure Scenario. Refer to Appendix B, Table 4. Chromium was detected at concentrations exceeding the respective EPA Removal Management Level (RML) for Industrial Soil.

### **Volatile Organic Compounds in Air Field Screening Data Summary**

A total of five sub-slab soil gas samples were screened for cis-1,2-Dichloroethylene, trichloroethylene (TCE), and tetrachloroethylene (PCE). The maximum concentration of cis-1,2-Dichloroethylene detected was 39,236 micrograms per cubic meter ( $\mu\text{g/m}^3$ ) in sample SG-03, the maximum concentration of TCE detected was 32,230  $\mu\text{g/m}^3$  in sample SG-03, and the maximum concentration of PCE detected was 3,403,379  $\mu\text{g/m}^3$  in sample SG-03. See Appendix B, Table 3 for a summary of VOC results.

## **Volatile Organic Compound Soil Confirmation Data – OEME Laboratory Data Summary**

A total of 57 soil samples were submitted to OEME for VOC analyses. Laboratory analytical results of the samples indicated the presence of the following 14 VOCs (maximum concentration and sample number in parentheses): cis-1,2-dichloroethylene (150,000 µg/Kg in SB-03D), 1,3,5-trimethylbenzene (6,800 µg/Kg in SB-10D), 1,2,4-trimethylbenzene (14,000 µg/Kg in SB-02H), methylene chloride (110 µg/Kg in SB-02A), 2-propanone (4,500 µg/Kg in SS-08A), trans-1,2-dichloroethylene (3,700 µg/Kg in SB-03D), tetrachloroethylene (440,000 µg/Kg in SB-03C), trichloroethylene (61,000 µg/Kg in SB-03D), m/p xylene (5,900 µg/Kg in SB-10D), isopropylbenzene (880 µg/Kg in SB-10D), sec-butylbenzene (1,200 µg/Kg in SB-07GH) para-isopropyltoluene (7,100 µg/Kg in SB-08A), n-butylbenzene (1,400 µg/Kg in SB-10D), and naphthalene (4,000 µg/Kg in SB-10D) (see Appendix B, Table 6) [14, 15, 16, 19]. Trichloroethylene was detected at concentrations exceeding the respective EPA Removal Management Levels (RMLs) for Industrial Soil (HQ=3).

## **Volatile Organic Compound in Air Confirmation Data – OEME Laboratory Data Summary**

A total of nine sub-slab soil gas samples were submitted to OEME for confirmatory VOC analyses. Laboratory analytical results of the samples indicated the presence of the following 15 VOCs (maximum concentration and sample number in parentheses): 1,1,1-trichloroethane (2 µg/m<sup>3</sup> in SG-01), 1,2,4-trimethylbenzene (85 µg/m<sup>3</sup> in SG-04), 1,3,5-trimethylbenzene (27 µg/m<sup>3</sup> in SG-04), 4-ethyltoluene (21 µg/m<sup>3</sup> in SG-04), benzene (4.5 µg/m<sup>3</sup> in SG-05), cyclohexane (2.8 µg/m<sup>3</sup> in SG-05), dichlorodifluoromethane (2.2 µg/m<sup>3</sup> in AMB-01), hexane (28 µg/m<sup>3</sup> in SG-05) tetrachloroethylene (15,600,000 µg/m<sup>3</sup> in SG-03), toluene (16 µg/m<sup>3</sup> in SG-05) trichloroethylene (120,000 µg/m<sup>3</sup> in SG-03), trichlorofluoromethane (1.2 µg/m<sup>3</sup> in AMB-01), c-1,2-Dichloroethylene (130,000 µg/m<sup>3</sup> in SG-03), m/p-Xylenes (85 µg/m<sup>3</sup> in SG-05), and t-1,2-Dichloroethylene (130,000 µg/m<sup>3</sup> in SG-03) (see Appendix B, Table 5) [13].

## **Semivolatile Organic Compound Soil Confirmation Data – OEME Laboratory Data Summary**

A total of 57 soil samples were submitted to OEME for confirmatory SVOC analyses. Laboratory analytical results of the samples indicated the presence of the following 21 SVOCs (maximum concentration and sample number in parentheses): acenaphthylene (3,900 µg/Kg in SS-01), benzoic acid (940 µg/Kg in SS-03), naphthalene (3,900 µg/Kg in SB-106B), 2-Methylnaphthalene (1,600 µg/Kg in SB-09D), 1-Methylnaphthalene (820 µg/Kg in SB-01D), phenanthrene (14,000 µg/Kg SS-06), anthracene (730 µg/Kg SB-08A), carbazole (560 µg/Kg in SB-08A), fluoranthene (25,000 µg/Kg SS-01), pyrene (35,000 µg/Kg SS-01), butylbenzylphthalate (38,000 µg/Kg SS-02), benzo(a)anthracene (12,000 µg/Kg SS-01), chrysene (17,000 µg/Kg SS-01), bis(2-ethylhexyl)phthalate (22,000 µg/Kg SB-08A), di-n-octyl phthalate (1,200 µg/Kg SB-08A), benzo(b)fluoranthene (21,000 µg/Kg in SS-01), benzo(k)fluoranthene (9,200 µg/Kg in SS-02), benzo(a)pyrene (11,000 µg/Kg in SS-01), indeno(1,2,3-cd)pyrene (6,600 µg/Kg in SS-01), and benzo(g,h,i)perylene (2,300 µg/Kg in SS-01) [20]. One of the SVOCs (benzo(a)pyrene, was detected at concentrations exceeding the respective ME RAG for Commercial Soil Workers (see Appendix B, Table 7) [20-22].

### **Metals in Soil Confirmation Data – OEME Laboratory Data Summary**

A total of 13 soil samples were submitted to OEME for confirmatory metals analyses. Laboratory analytical results of the samples indicated the presence of the following 18 metals (maximum concentration and sample number in parentheses): silver (10 mg/Kg in SB-09B), aluminum (26,000 mg/Kg in SB-05B), arsenic (18 mg/Kg in SB-06B), barium (460 mg/Kg in SB-01B), beryllium (1.4 mg/Kg in SB-01B), calcium (17,000 mg/Kg in SB-01B), cadmium (3.4 mg/Kg in SB-09B), chromium (250 mg/Kg in SB-10A), copper (150 mg/Kg in SB-10A), iron (30,000 in SB-10D), magnesium (8,200 mg/Kg in SB-09B), manganese (690 mg/Kg in SB-01B), nickel (36 mg/Kg SB-07C), lead (2,300 in SB-05D), antimony (2 mg/Kg in SB-01B), vanadium (51 mg/Kg in SB-05D and SB-07C), and zinc (8,100 mg/Kg in SB-10A). Arsenic was detected at concentrations exceeding the respective ME RAG for a Commercial Worker Exposure Scenario. Refer to Appendix B, Table 4. Calcium and lead were detected at concentrations exceeding their respective EPA Removal Management Level (RML) for Industrial Soil (see Appendix B, Table 8) [17].

### **Semi-volatile Organic Compound Drum Product Confirmation Data – OEME Laboratory Data Summary**

A total of five drum product samples were submitted to OEME for SVOC confirmatory analyses. Laboratory analytical results of the samples indicated the presence of the following three SVOCs (maximum concentration and sample number in parentheses): butylbenzylphthalate (88 mg/Kg DP-05), benzo(b)fluoranthene (120 mg/Kg in DP-05), and benzo(k)fluoranthene (83 mg/Kg in DP-05) (see Appendix B, Table 10) [18].

### **Volatile Organic Compound Drum Product Confirmation Data – OEME Laboratory Data Summary**

A total of five drum product samples were submitted to OEME for confirmatory VOC analyses. Laboratory analytical results of the samples indicated the presence of the following two SVOCs (maximum concentration and sample number in parentheses): 2-Propanone (19,000 µg/Kg in DP-02), and tetrachloroethylene (190,000 µg/Kg in DP-02) (see Appendix B, Table 9) [19].



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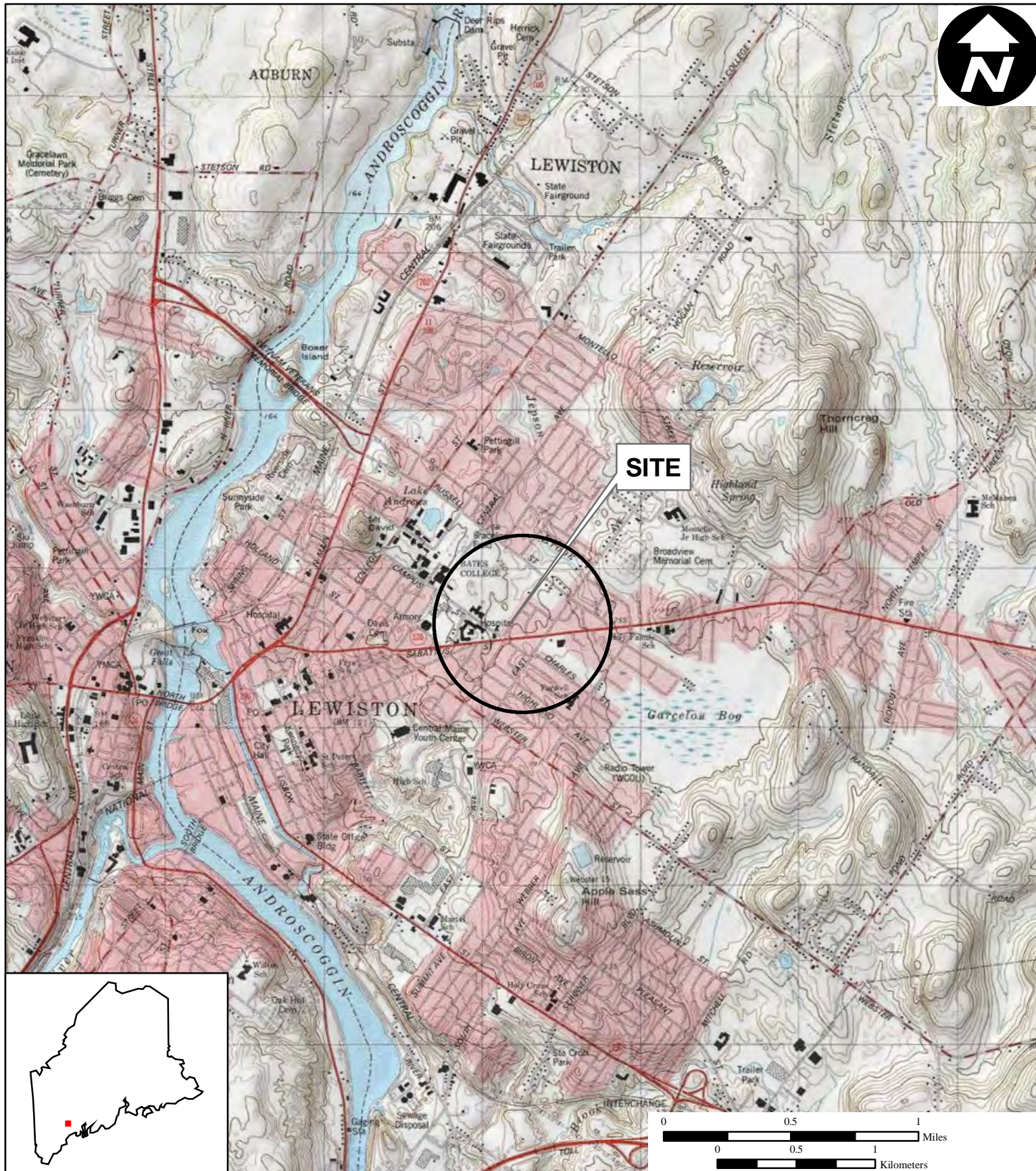
### III. Appendices

## Appendix A

### Figures

Figure 1	Site Location Map
Figure 2	Site Diagram
Figure 3	Sample Location Map
Figure 4	Sub-Slab Soil Gas Sample Results Map - Volatile Organic Compounds
Figure 5	Subsurface Soil Sample Results Map - Tetrachloroethylene
Figure 6	Subsurface Soil Sample Results Map - Trichloroethylene
Figure 7	Subsurface Soil Sample Results Map - cis-1,2-Dichloroethylene
Figure 8	Surface Soil Sample Results Map - Metals





**Figure 1**

**Site Location Map**

**LeBlanc Cleaners  
10 Lafayette Street  
Lewiston, Maine**

**EPA Region I  
Superfund Technical Assessment and  
Response Team (START) IV  
Contract No. EP-S3-15-01**

**TDD Number:** TO1-01-16-02-0003  
**Created by:** A. Danikas  
**Created on:** 22 February 2016  
**Modified by:** A. Danikas  
**Modified on:** 22 February 2016

**Data Sources:**

Topos: MicroPath/USGS/USA Topo Maps  
Quadrangle Name(s):  
All other data: START







**Figure 2**

**Site Diagram**

**LeBlanc Cleaners  
10 Lafayette Street  
Lewiston, Maine**

**EPA Region I  
Superfund Technical Assessment and  
Response Team (START) IV  
Contract No. EP-S3-15-01**  
**TDD Number:** TO1-01-16-02-0003  
**Created by:** A. Danikas  
**Created on:** 22 February 2016  
**Modified by:** A. Danikas  
**Modified on:** 22 February 2016

**LEGEND**



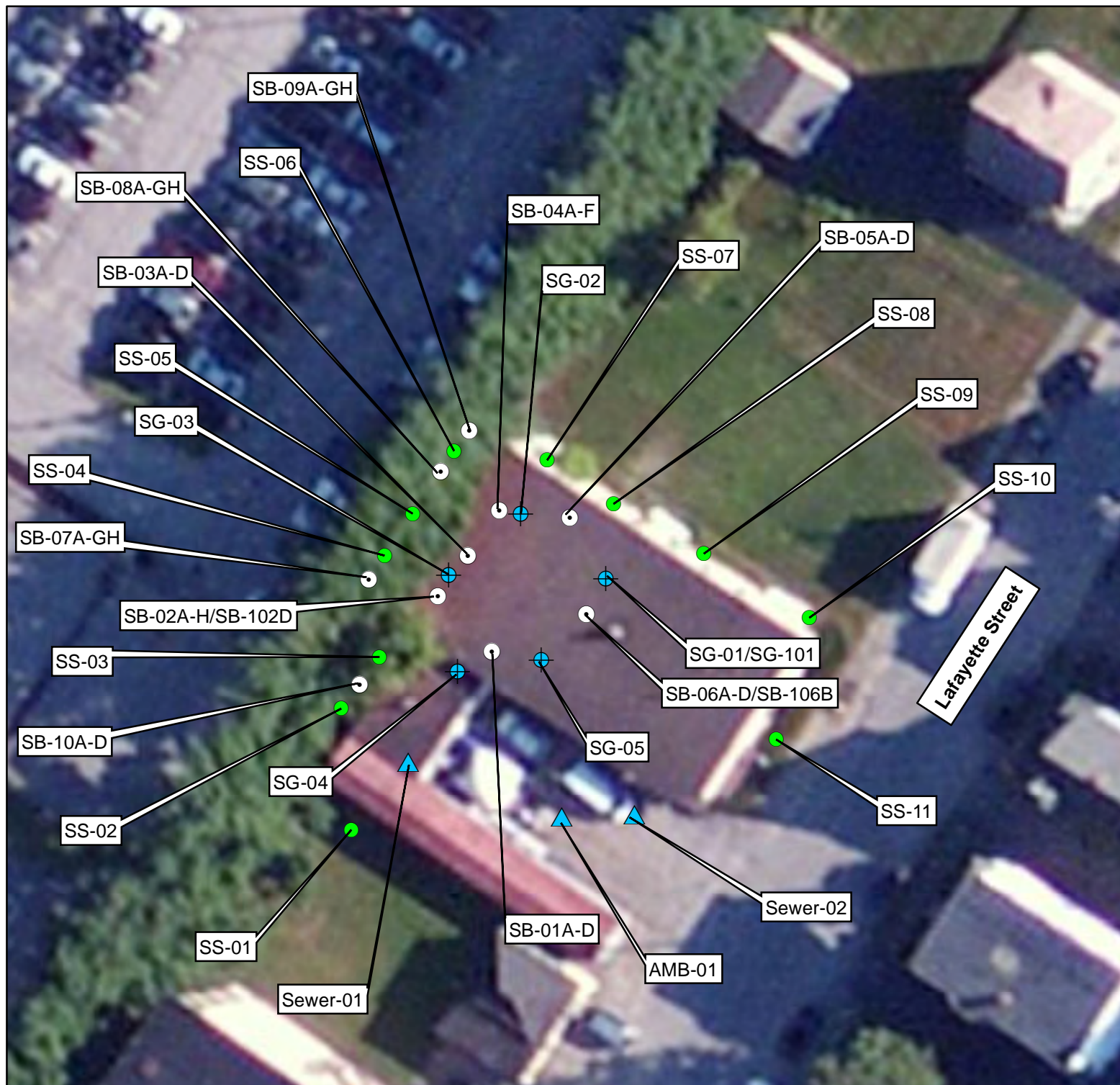
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**Data Sources:**

Imagery: ESRI, i-cubed, USDA FSA, USGS  
AEX, GeoEye, Getmapping, Aerogrid, IGP  
Topos: MicroPath  
All other data: START







**Figure 3**

**Sample Location Map**

**LeBlanc Cleaners  
10 Lafayette Street  
Lewiston, Maine**

**EPA Region I  
Superfund Technical Assessment and  
Response Team (START) IV  
Contract No. EP-S3-15-01**  
**TDD Number:** TO1-01-16-02-0003  
**Created by:** A. Danikas  
**Created on:** 22 February 2016  
**Modified by:** K. Robinson  
**Modified on:** 21 July 2016

**Legend**

- Surface Soil Sample
- Soil Boring Sample
- ⊕ Soil Gas Sample
- ▲ Air Sample



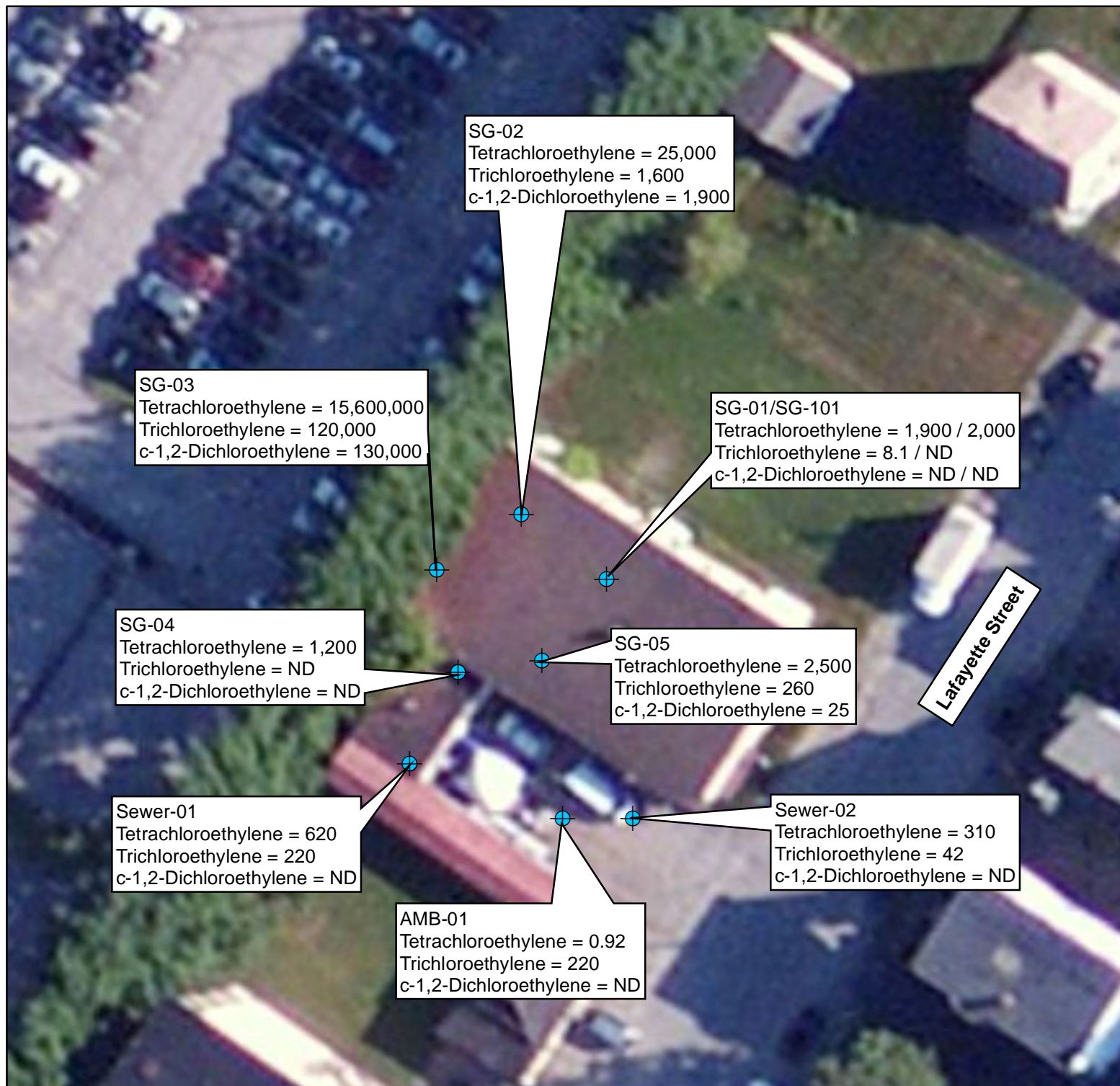
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**Data Sources:**

Imagery: ESRI, i-cubed, USDA FSA, USGS  
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 Topos: MicroPath  
 All other data: START







**Figure 4**  
**Sub-Slab Soil Gas**  
**Sample Results Map**  
**Volatile Organic Compounds**  
**LeBlanc Cleaners**  
**10 Lafayette Street**  
**Lewiston, Maine**


**EPA Region I**  
**Superfund Technical Assessment and**  
**Response Team (START) IV**  
**Contract No. EP-S3-15-01**  
**TDD Number:** TO1-01-16-02-0003  
**Created by:** A. Danikas  
**Created on:** 22 February 2016  
**Modified by:** A. Danikas  
**Modified on:** 27 June 2016

## Legend

 Soil Gas Sample

All results are reported in  
micrograms per cubic  
meter.



0 25 50  
 Feet

## Data Sources:

Imagery: ESRI, i-cubed, USDA FSA, USGS  
AEX, GeoEye, Getmapping, Aerogrid, IGP  
Topos: MicroPath  
All other data: START







**Figure 5**  
**Subsurface Soil Sample**  
**Results Map**  
**Tetrachloroethylene**  
**LeBlanc Cleaners**  
**10 Lafayette Street**  
**Lewiston, Maine**

**EPA Region I**  
**Superfund Technical Assessment and**  
**Response Team (START) IV**  
**Contract No. EP-S3-15-01**  
**TDD Number:** TO1-01-16-02-0003  
**Created by:** A. Danikas  
**Created on:** 22 February 2016  
**Modified by:** A. Danikas  
**Modified on:** 27 June 2016

## Legend

- Soil Boring Sample

Sample results that did not have any detections have been omitted.

All results are reported in micrograms per Kilogram.



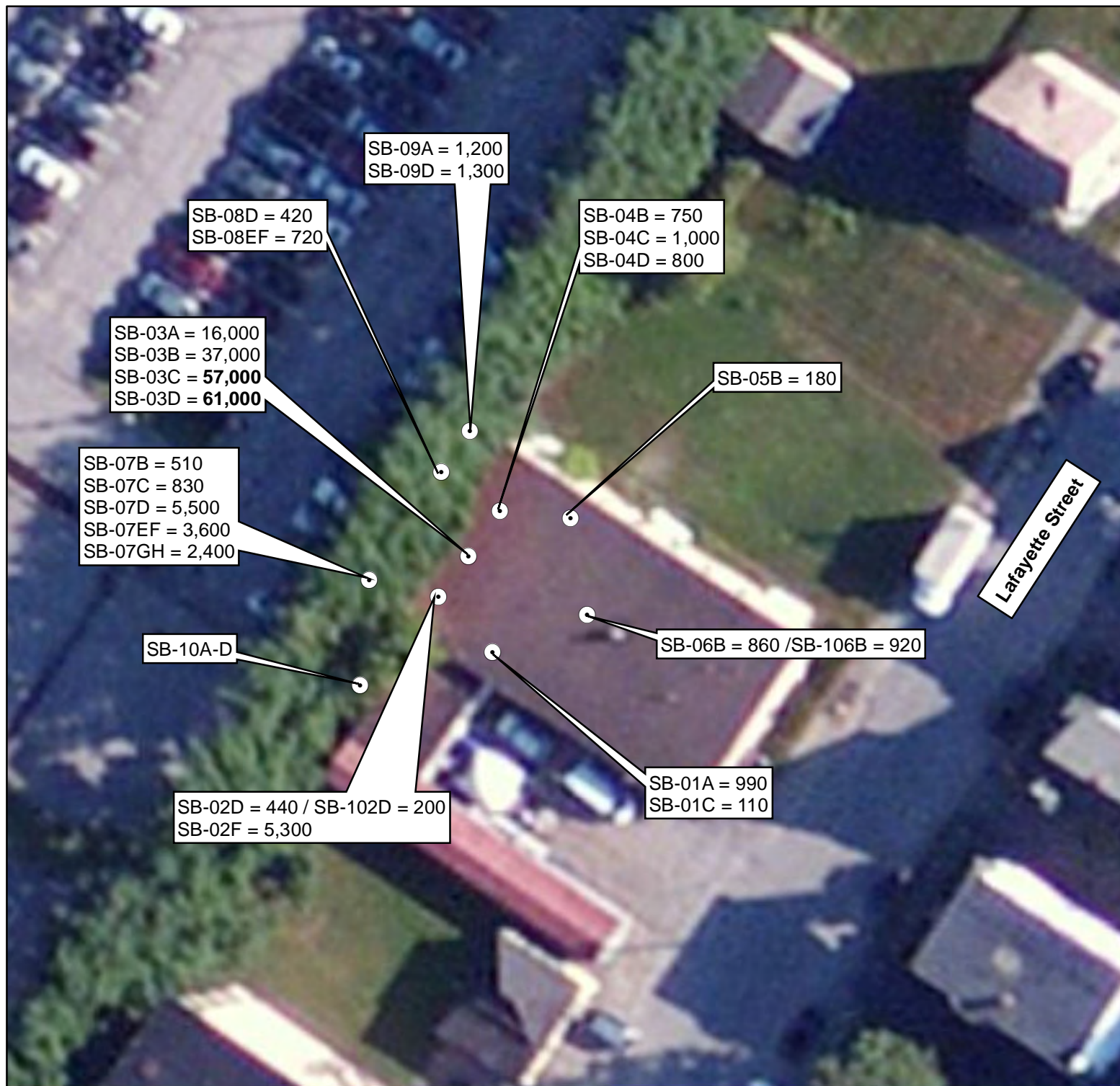
0 25 50  
 Feet

## Data Sources:

Imagery: ESRI, i-cubed, USDA FSA, USGS  
 AEX, GeoEye, Getmapping, Aerogrid, IGP  
 Topos: MicroPath  
 All other data: START







**Figure 6**  
**Subsurface Soil Sample**  
**Results Map**  
**Trichloroethylene**  
**LeBlanc Cleaners**  
**10 Lafayette Street**  
**Lewiston, Maine**

**EPA Region I**  
**Superfund Technical Assessment and**  
**Response Team (START) IV**  
**Contract No. EP-S3-15-01**  
**TDD Number:** TO1-01-16-02-0003  
**Created by:** A. Danikas  
**Created on:** 22 February 2016  
**Modified by:** A. Danikas  
**Modified on:** 27 June 2016

## Legend

- Soil Boring Sample

Sample results that did not have any detections have been omitted.

All results are reported in micrograms per Kilogram.

Results that are bolded exceed the EPA Removal Management Levels for Industrial Soil.



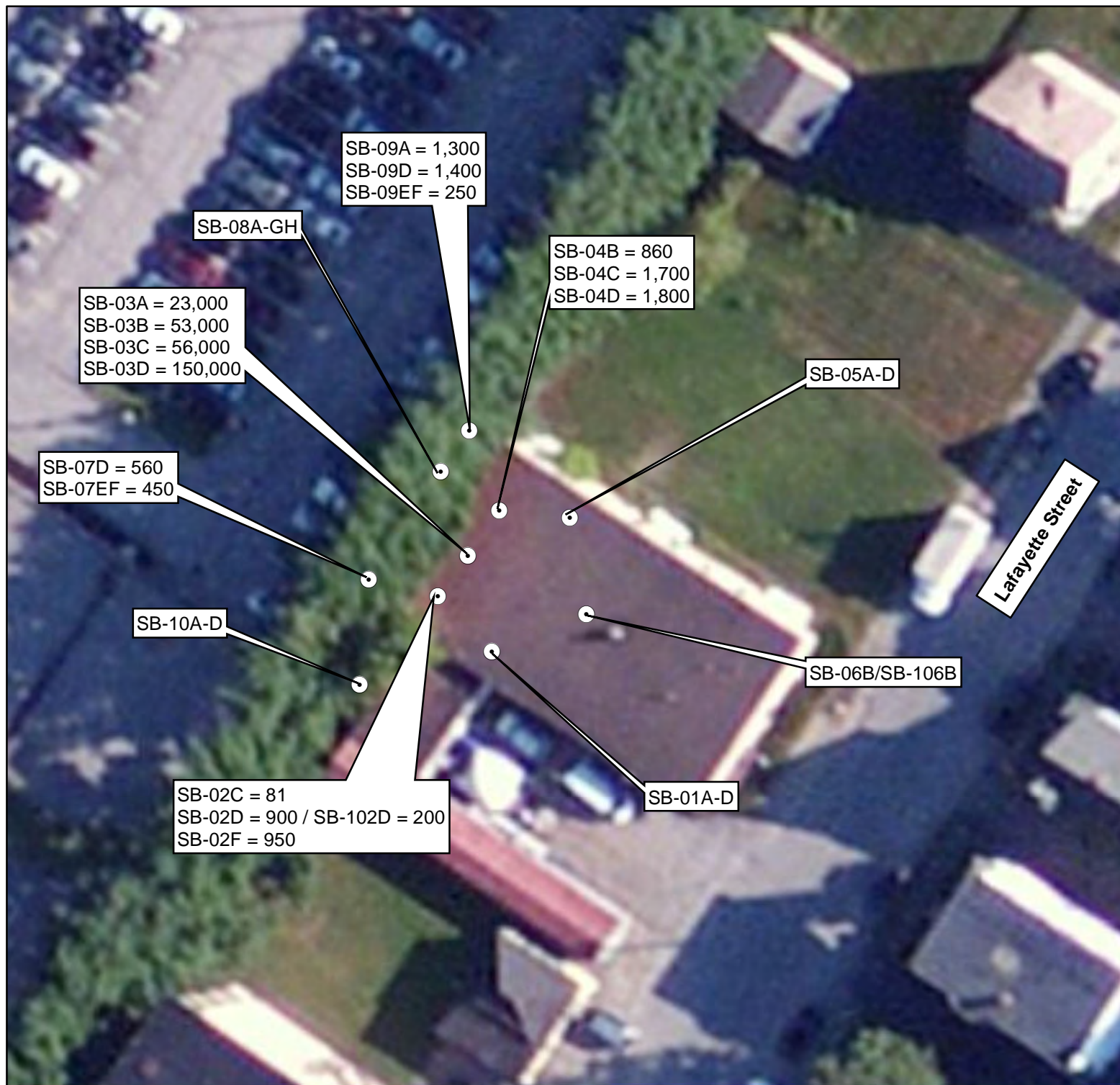
0 25 50  
Feet

### **Data Sources:**

Imagery: ESRI, i-cubed, USDA FSA, USGS  
AEX, GeoEye, Getmapping, Aerogrid, IGP  
Topos: MicroPath  
All other data: START







**Figure 7**  
**Subsurface Soil Sample**  
**Results Map**  
**cis-1,2-Dichloroethylene**  
**LeBlanc Cleaners**  
**10 Lafayette Street**  
**Lewiston, Maine**

**EPA Region I**  
**Superfund Technical Assessment and**  
**Response Team (START) IV**  
**Contract No. EP-S3-15-01**  
**TDD Number:** TO1-01-16-02-0003  
**Created by:** A. Danikas  
**Created on:** 22 February 2016  
**Modified by:** A. Danikas  
**Modified on:** 27 June 2016

## **Legend**

- Soil Boring Sample

Sample results that did not have any detections have been omitted.

All results are reported in micrograms per Kilogram.



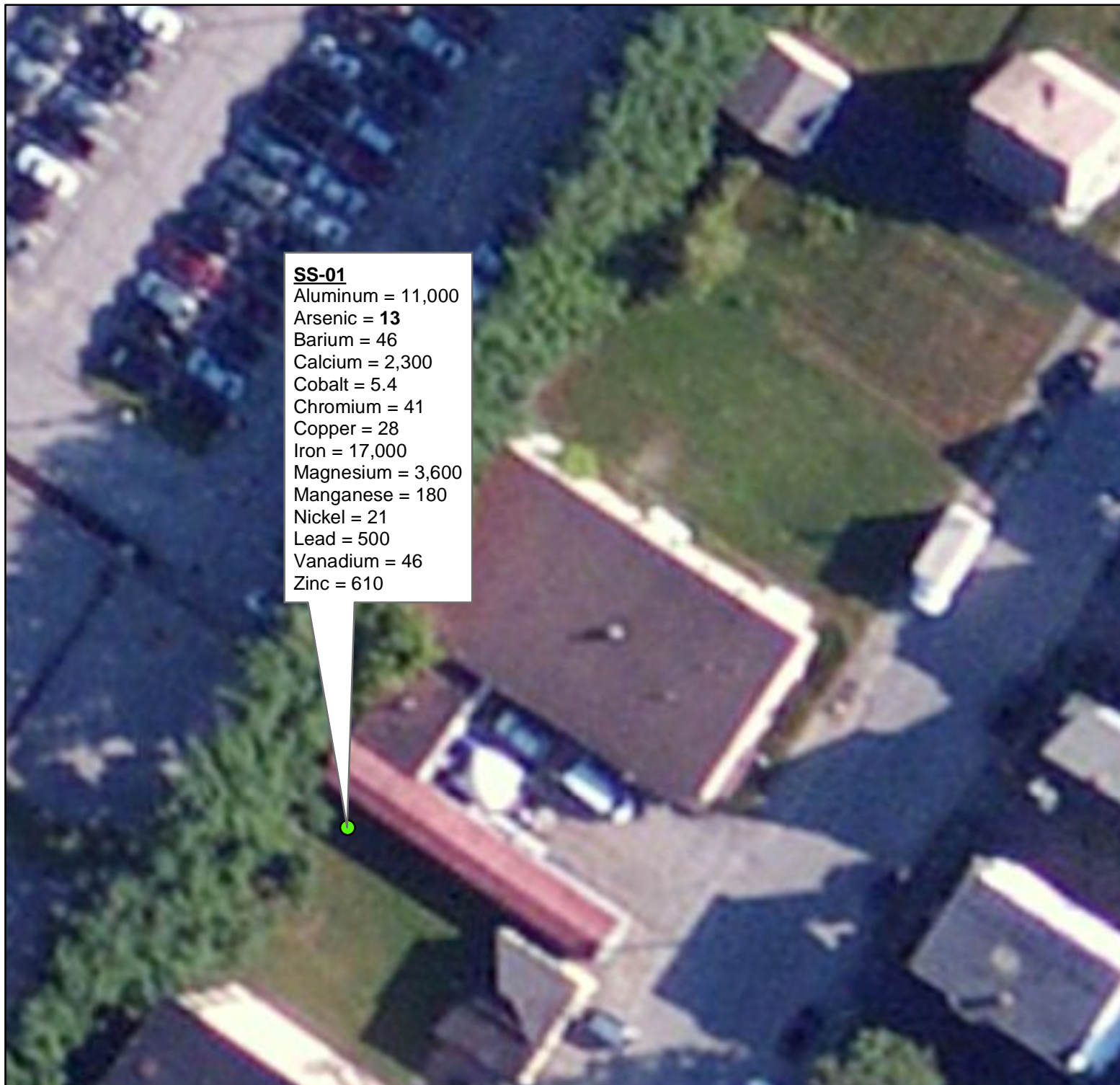
0 25 50  
 Feet

## **Data Sources:**

Imagery: ESRI, i-cubed, USDA FSA, USGS  
 AEX, GeoEye, Getmapping, Aerogrid, IGP  
 Topos: MicroPath  
 All other data: START







**Figure 8**

**Surface Soil Sample Results Map  
Metals**

**LeBlanc Cleaners  
10 Lafayette Street  
Lewiston, Maine**

**EPA Region I  
Superfund Technical Assessment and  
Response Team (START) IV  
Contract No. EP-S3-15-01**

**TDD Number:** TO1-01-16-02-0003

**Created by:** A. Danikas

**Created on:** 22 February 2016

**Modified by:** A. Danikas

**Modified on:** 27 June 2016

**Legend**

● Surface Soil Sample

Results are reported in  
milligrams per Kilogram.

Metal results that were analyzed  
for, but not detected, have been  
omitted.

Results that are bolded exceed  
the EPA Removal Management  
Levels for Industrial Soil.



0 25 50  
Feet

**Data Sources:**

Imagery: ESRI, i-cubed, USDA FSA, USGS  
AEX, GeoEye, Getmapping, Aerogrid, IGP  
Topos: MicroPath  
All other data: START



## Appendix B

### Tables and Spreadsheets

Table 1	Sample Descriptions - Surface Soil Samples
Table 2	Summary of Volatile Organic Compounds Field Screening Results - Soil Samples
Table 3	Summary of Volatile Organic Compounds Field Screening Results - Sub-Slab Soil Gas Samples
Table 4	Summary of Metals Field Screening Results - Soil Samples
Table 5	Summary of Volatile Organic Compounds Confirmation Results - Sub-slab Soil Gas Samples
Table 6	Summary of Volatile Organic Compounds Confirmation Results - Soil Samples
Table 7	Summary of Semivolatile Organic Compounds Confirmation Results - Soil Samples
Table 8	Summary of Metals Confirmation Results - Soil Samples
Table 9	Summary of Volatile Organic Compound Results - Drum Product Samples
Table 10	Summary of Semivolatile Organic Compound Results - Drum Product Samples

TABLE 1

**SAMPLE DESCRIPTIONS  
SURFACE SOIL SAMPLES  
LEBLANC CLEANERS  
LEWISTON, MAINE**

Sample Location	Sample Number	Collection Date	Depth (Inches)	Sample Type	Sample Description	Comments
SS-01	0091-MH-0056	4/28/2016	0 - 6	Grab	Brown, SILT and fine SAND, little medium gravel, trace organics (roots).	MS/MSD
SS-02	0091-MH-0057	4/28/2016	0 - 6	Grab	Brown, SILT and fine SAND, trace organics (roots).	
SS-03	0091-MH-0058	4/28/2016	0 - 6	Grab	Brown, SILT and fine SAND, trace organics (roots).	
SS-04	0091-MH-0059	4/28/2016	0 - 6	Grab	Brown, SILT and fine SAND, trace organics (roots).	
SS-05	0091-MH-0060	4/28/2016	0 - 6	Grab	Brown, SILT and fine SAND, trace fine gravel, trace organics (roots).	
SS-06	0091-MH-0061	4/28/2016	0 - 6	Grab	Brown, SILT and fine SAND, trace fine gravel, trace organics (roots).	
SS-07	0091-MH-0062	4/28/2016	0 - 6	Grab	Brownish gray SILT and fine SAND, trace fine gravel, trace organics (roots).	
SS-08	0091-MH-0063	4/28/2016	0 - 6	Grab	Brownish gray SILT and fine SAND, trace fine gravel, trace organics (roots).	
SS-09	0091-MH-0064	4/28/2016	0 - 6	Grab	Brownish gray SILT and fine SAND, trace fine gravel, trace organics (roots).	
SS-10	0091-MH-0065	4/28/2016	0 - 6	Grab	Brown, SILT and fine SAND, trace fine gravel, trace organics (roots).	
SS-11	0091-MH-0066	4/28/2016	0 - 6	Grab	Brown, SILT and fine SAND, trace fine gravel, trace organics (roots).	

**NOTES:**

- 1) Soil samples collected in accordance with Weston Solutions Inc. Region I Standard Operating Procedure (SOP) for Surface and Subsurface Soil Sampling SOP No. WSI/S3-001.
- 2) MS/MSD = Matrix Spike/Matrix Spike Duplicate
- 3) \* Modified Burmister Classification System used.
- 4) SS = Surface Soil Sample.

TABLE 2

**SUMMARY OF VOLATILE ORGANIC COMPOUNDS FIELD SCREENING RESULTS**  
**SOIL SAMPLES**  
**LEBLANC CLEANERS**  
**LEWISTON, MAINE**

SAMPLE LOCATION:	EPA RML (HQ=3) Industrial Soil	ME RAG Commercial Soil	SB-01A	SB-01B	SB-01C	SB-01D	SB-02A	SB-02B
SAMPLE DEPTH:			0 - 1 ft	1 - 2 ft	2 - 3 ft	3 - 4 ft	0 - 1 ft	1 - 2 ft
COMPOUND			µg/Kg					
cis-1,2-Dichloroethylene	<b>7,000,000</b>	<b>3,400,000</b>	ND (500)	ND (500)	ND (500)	ND (500)	ND (500)	ND (500)
Tetrachloroethylene (PCE)	<b>1,200,000</b>	<b>10,000,000</b>	4,600	4,300	820	ND (20)	1,800	1,100
Trichloroethylene (TCE)	<b>56,000</b>	<b>850,000</b>	520	130	40	ND (40)	ND (40)	ND (40)

**Analysis:**

Samples field screened by U.S. EPA Office of Environmental Measurement and Evaluation (OEME) mobile laboratory using EPA Region I Standard Operating Procedure (SOP) EIA-FLDOA2, Volatile Organic Analysis of Soil (PCE and TCE only).

**Notes:**

- 1) All Results in micrograms per Kilogram (µg/Kg). Results reported on a wet weight basis.
- 2) ND = Not detected at concentrations exceeding reporting limits. Reporting limit in parentheses.
- 3) ft = feet
- 4) in = inches
- 5) EPA RML = EPA Removal Management Levels for Industrial Soil. Used RML table where Hazard Quotient (HQ) = 3 and Target Risk (TR) =  $10^{-4}$ . Units in µg/Kg.
- 7) \* Sample SB-102D is a duplicate of Sample SB-02D.
- 8) \*\* Sample SB-106B is a duplicate of Sample SB-06B.
- 9) \*\*\* Sample SB-109A is a duplicate of Sample SB-09A.
- 10) ME RAG = Maine Remedial Action Guidelines Commercial Worker Exposure Scenario.
- 11) Values bolded and shaded in yellow indicate compounds exceeding ME RAGs for Commercial Soil.
- 12) Values bolded and shaded in red indicate compounds exceeding EPA RML (HQ = 3) for Industrial Soil.

TABLE 2

**SUMMARY OF VOLATILE ORGANIC COMPOUNDS FIELD SCREENING RESULTS**  
**SOIL SAMPLES**  
**LEBLANC CLEANERS**  
**LEWISTON, MAINE**

SAMPLE LOCATION:	EPA RML (HQ=3) Industrial Soil	ME RAG Commercial Soil	SB-02C	SB-02D	SB-02E	SB-02F	SB-02G	SB-02H
SAMPLE DEPTH:			2 - 3 ft	3 - 4 ft	4 - 5 ft	5 - 6 ft	6 - 7 ft	7 - 8 ft
COMPOUND			µg/Kg					
cis-1,2-Dichloroethylene	<b>7,000,000</b>	<b>3,400,000</b>	ND (500)	ND (500)	ND (500)	720	950	890
Tetrachloroethylene (PCE)	<b>1,200,000</b>	<b>10,000,000</b>	1,800	5,800	4,600	160,000	120,000	72,000
Trichloroethylene (TCE)	<b>56,000</b>	<b>850,000</b>	ND (40)	250	110	4,900	5,300	4,300

**Analysis:**

Samples field screened by U.S. EPA Office of Environmental Measurement and Evaluation (OEME) mobile laboratory using EPA Region I Standard Operating Procedure (SOP) EIA-FLDOA2, Volatile Organic Analysis of Soil (PCE and TCE only).

**Notes:**

- 1) All Results in micrograms per Kilogram (µg/Kg). Results reported on a wet weight basis.
- 2) ND = Not detected at concentrations exceeding reporting limits. Reporting limit in parentheses.
- 3) ft = feet
- 4) in = inches
- 5) EPA RML = EPA Removal Management Levels for Industrial Soil. Used RML table where Hazard Quotient (HQ) = 3 and Target Risk (TR) =  $10^{-4}$ . Units in µg/Kg.
- 7) \* Sample SB-102D is a duplicate of Sample SB-02D.
- 8) \*\* Sample SB-106B is a duplicate of Sample SB-06B.
- 9) \*\*\* Sample SB-109A is a duplicate of Sample SB-09A.
- 10) ME RAG = Maine Remedial Action Guidelines Commercial Worker Exposure Scenario.
- 11) Values bolded and shaded in yellow indicate compounds exceeding ME RAGs for Commercial Soil.
- 12) Values bolded and shaded in red indicate compounds exceeding EPA RML (HQ = 3) for Industrial Soil.



TABLE 2

**SUMMARY OF VOLATILE ORGANIC COMPOUNDS FIELD SCREENING RESULTS**  
**SOIL SAMPLES**  
**LEBLANC CLEANERS**  
**LEWISTON, MAINE**

SAMPLE LOCATION:	EPA RML (HQ=3) Industrial Soil	ME RAG Commercial Soil	SB-03A	SB-03B	SB-03C	SB-03D	SB-04A	SB-04B
SAMPLE DEPTH:			0 - 1 ft	1 - 2 ft	2 - 3 ft	3 - 4 ft	0 - 1 ft	1 - 2 ft
COMPOUND			µg/Kg					
cis-1,2-Dichloroethylene	7,000,000	3,400,000	11,000	21,000	39,000	25,000	ND (500)	630
Tetrachloroethylene (PCE)	1,200,000	10,000,000	55,000	93,000	480,000	25,000	110	7,200
Trichloroethylene (TCE)	56,000	850,000	9,700	23,000	57,000	21,000	ND (40)	630

**Analysis:**

Samples field screened by U.S. EPA Office of Environmental Measurement and Evaluation (OEME) mobile laboratory using EPA Region I Standard Operating Procedure (SOP) EIA-FLDVOA2, Volatile Organic Analysis of Soil (PCE and TCE only).

**Notes:**

- 1) All Results in micrograms per Kilogram (µg/Kg). Results reported on a wet weight basis.
- 2) ND = Not detected at concentrations exceeding reporting limits. Reporting limit in parentheses.
- 3) ft = feet
- 4) in = inches
- 5) EPA RML = EPA Removal Management Levels for Industrial Soil. Used RML table where Hazard Quotient (HQ) = 3 and Target Risk (TR) =  $10^{-4}$ . Units in µg/Kg.
- 7) \* Sample SB-102D is a duplicate of Sample SB-02D.
- 8) \*\* Sample SB-106B is a duplicate of Sample SB-06B.
- 9) \*\*\* Sample SB-109A is a duplicate of Sample SB-09A.
- 10) ME RAG = Maine Remedial Action Guidelines Commercial Worker Exposure Scenario.
- 11) Values bolded and shaded in yellow indicate compounds exceeding ME RAGs for Commercial Soil.
- 12) Values bolded and shaded in red indicate compounds exceeding EPA RML (HQ = 3) for Industrial Soil.

TABLE 2

**SUMMARY OF VOLATILE ORGANIC COMPOUNDS FIELD SCREENING RESULTS**  
**SOIL SAMPLES**  
**LEBLANC CLEANERS**  
**LEWISTON, MAINE**

SAMPLE LOCATION:	EPA RML (HQ=3) Industrial Soil	ME RAG Commercial Soil	SB-04C	SB-04D	SB-04E	SB-04F	SB-05A	SB-05B
SAMPLE DEPTH:			2 - 3 ft	3 - 4 ft	4 - 5 ft	5 - 6 ft	0 - 1 ft	1 - 2 ft
COMPOUND			µg/Kg					
cis-1,2-Dichloroethylene	<b>7,000,000</b>	<b>3,400,000</b>	680	570	ND (500)	ND (500)	ND (500)	ND (500)
Tetrachloroethylene (PCE)	<b>1,200,000</b>	<b>10,000,000</b>	2,800	1,400	21	ND (20)	220	230
Trichloroethylene (TCE)	<b>56,000</b>	<b>850,000</b>	470	350	ND (40)	ND (40)	ND (80)	ND (80)

**Analysis:**

Samples field screened by U.S. EPA Office of Environmental Measurement and Evaluation (OEME) mobile laboratory using EPA Region I Standard Operating Procedure (SOP) EIA-FLDVOA2, Volatile Organic Analysis of Soil (PCE and TCE only).

**Notes:**

- 1) All Results in micrograms per Kilogram (µg/Kg). Results reported on a wet weight basis.
- 2) ND = Not detected at concentrations exceeding reporting limits. Reporting limit in parentheses.
- 3) ft = feet
- 4) in = inches
- 5) EPA RML = EPA Removal Management Levels for Industrial Soil. Used RML table where Hazard Quotient (HQ) = 3 and Target Risk (TR) =  $10^{-4}$ . Units in µg/Kg.
- 7) \* Sample SB-102D is a duplicate of Sample SB-02D.
- 8) \*\* Sample SB-106B is a duplicate of Sample SB-06B.
- 9) \*\*\* Sample SB-109A is a duplicate of Sample SB-09A.
- 10) ME RAG = Maine Remedial Action Guidelines Commercial Worker Exposure Scenario.
- 11) Values bolded and shaded in yellow indicate compounds exceeding ME RAGs for Commercial Soil.
- 12) Values bolded and shaded in red indicate compounds exceeding EPA RML (HQ = 3) for Industrial Soil.

TABLE 2

**SUMMARY OF VOLATILE ORGANIC COMPOUNDS FIELD SCREENING RESULTS**  
**SOIL SAMPLES**  
**LEBLANC CLEANERS**  
**LEWISTON, MAINE**

SAMPLE LOCATION:	EPA RML (HQ=3) Industrial Soil	ME RAG Commercial Soil	SB-05C	SB-05D	SB-06A	SB-06B	SB-06C	SB-06D
SAMPLE DEPTH:			2 - 3 ft	3 - 4 ft	0 - 1 ft	1 - 2 ft	2 - 3 ft	3 - 4 ft
COMPOUND			µg/Kg					
cis-1,2-Dichloroethylene	<b>7,000,000</b>	<b>3,400,000</b>	ND (500)	ND (500)	ND (1000)	ND (1000)	ND (1000)	ND (1000)
Tetrachloroethylene (PCE)	<b>1,200,000</b>	<b>10,000,000</b>	480	ND (40)	ND (40)	300	ND (40)	ND (40)
Trichloroethylene (TCE)	<b>56,000</b>	<b>850,000</b>	ND (80)	ND (80)	ND (80)	ND (80)	ND (80)	ND (80)

**Analysis:**

Samples field screened by U.S. EPA Office of Environmental Measurement and Evaluation (OEME) mobile laboratory using EPA Region I Standard Operating Procedure (SOP) EIA-FLDOA2, Volatile Organic Analysis of Soil (PCE and TCE only).

**Notes:**

- 1) All Results in micrograms per Kilogram (µg/Kg). Results reported on a wet weight basis.
- 2) ND = Not detected at concentrations exceeding reporting limits. Reporting limit in parentheses.
- 3) ft = feet
- 4) in = inches
- 5) EPA RML = EPA Removal Management Levels for Industrial Soil. Used RML table where Hazard Quotient (HQ) = 3 and Target Risk (TR) =  $10^{-4}$ . Units in µg/Kg.
- 7) \* Sample SB-102D is a duplicate of Sample SB-02D.
- 8) \*\* Sample SB-106B is a duplicate of Sample SB-06B.
- 9) \*\*\* Sample SB-109A is a duplicate of Sample SB-09A.
- 10) ME RAG = Maine Remedial Action Guidelines Commercial Worker Exposure Scenario.
- 11) Values bolded and shaded in yellow indicate compounds exceeding ME RAGs for Commercial Soil.
- 12) Values bolded and shaded in red indicate compounds exceeding EPA RML (HQ = 3) for Industrial Soil.

TABLE 2

**SUMMARY OF VOLATILE ORGANIC COMPOUNDS FIELD SCREENING RESULTS**  
**SOIL SAMPLES**  
**LEBLANC CLEANERS**  
**LEWISTON, MAINE**

SAMPLE LOCATION:	EPA RML (HQ=3) Industrial Soil	ME RAG Commercial Soil	SB-07A	SB-07B	SB-07C	SB-07D	SB-07EF	SB-07GH
SAMPLE DEPTH:			0 - 1 ft	1 - 2 ft	2 - 3 ft	3 - 4 ft	4 - 5.5 ft	5.5 - 7 ft
COMPOUND			$\mu\text{g/Kg}$					
cis-1,2-Dichloroethylene	<b>7,000,000</b>	<b>3,400,000</b>	ND (500)	ND (500)	ND (500)	ND (500)	ND (500)	ND (500)
Tetrachloroethylene (PCE)	<b>1,200,000</b>	<b>10,000,000</b>	340	3,900	4,500	1,500	1,600	5,500
Trichloroethylene (TCE)	<b>56,000</b>	<b>850,000</b>	ND (40)	150	330	1,200	580	1,400

**Analysis:**

Samples field screened by U.S. EPA Office of Environmental Measurement and Evaluation (OEME) mobile laboratory using EPA Region I Standard Operating Procedure (SOP) EIA-FLDVOA2, Volatile Organic Analysis of Soil (PCE and TCE only).

**Notes:**

- 1) All Results in micrograms per Kilogram ( $\mu\text{g/Kg}$ ). Results reported on a wet weight basis.
- 2) ND = Not detected at concentrations exceeding reporting limits. Reporting limit in parentheses.
- 3) ft = feet
- 4) in = inches
- 5) EPA RML = EPA Removal Management Levels for Industrial Soil. Used RML table where Hazard Quotient (HQ) = 3 and Target Risk (TR) =  $10^{-4}$ . Units in  $\mu\text{g/Kg}$ .
- 7) \* Sample SB-102D is a duplicate of Sample SB-02D.
- 8) \*\* Sample SB-106B is a duplicate of Sample SB-06B.
- 9) \*\*\* Sample SB-109A is a duplicate of Sample SB-09A.
- 10) ME RAG = Maine Remedial Action Guidelines Commercial Worker Exposure Scenario.
- 11) Values bolded and shaded in yellow indicate compounds exceeding ME RAGs for Commercial Soil.
- 12) Values bolded and shaded in red indicate compounds exceeding EPA RML (HQ = 3) for Industrial Soil.

TABLE 2

**SUMMARY OF VOLATILE ORGANIC COMPOUNDS FIELD SCREENING RESULTS**  
**SOIL SAMPLES**  
**LEBLANC CLEANERS**  
**LEWISTON, MAINE**

SAMPLE LOCATION:	EPA RML (HQ=3) Industrial Soil	ME RAG Commercial Soil	SB-08A	SB-08B	SB-08C	SB-08D	SB-08EF	SB-08GH
SAMPLE DEPTH:			0 - 1 ft	1 - 2 ft	2 - 3 ft	3 - 4 ft	4 - 5.5 ft	5.5 - 7 ft
COMPOUND			µg/Kg					
cis-1,2-Dichloroethylene	<b>7,000,000</b>	<b>3,400,000</b>	ND (1,800)	ND (1,800)	ND (1,800)	ND (1,800)	ND (1,800)	ND (1,800)
Tetrachloroethylene (PCE)	<b>1,200,000</b>	<b>10,000,000</b>	520	1,700	1,900	1,800	2,900	ND (25)
Trichloroethylene (TCE)	<b>56,000</b>	<b>850,000</b>	ND (100)	ND (100)	ND (100)	170	430	ND (100)

**Analysis:**

Samples field screened by U.S. EPA Office of Environmental Measurement and Evaluation (OEME) mobile laboratory using EPA Region I Standard Operating Procedure (SOP) EIA-FLDVOA2, Volatile Organic Analysis of Soil (PCE and TCE only).

**Notes:**

- 1) All Results in micrograms per Kilogram (µg/Kg). Results reported on a wet weight basis.
- 2) ND = Not detected at concentrations exceeding reporting limits. Reporting limit in parentheses.
- 3) ft = feet
- 4) in = inches
- 5) EPA RML = EPA Removal Management Levels for Industrial Soil. Used RML table where Hazard Quotient (HQ) = 3 and Target Risk (TR) =  $10^{-4}$ . Units in µg/Kg.
- 7) \* Sample SB-102D is a duplicate of Sample SB-02D.
- 8) \*\* Sample SB-106B is a duplicate of Sample SB-06B.
- 9) \*\*\* Sample SB-109A is a duplicate of Sample SB-09A.
- 10) ME RAG = Maine Remedial Action Guidelines Commercial Worker Exposure Scenario.
- 11) Values bolded and shaded in yellow indicate compounds exceeding ME RAGs for Commercial Soil.
- 12) Values bolded and shaded in red indicate compounds exceeding EPA RML (HQ = 3) for Industrial Soil.

TABLE 2

**SUMMARY OF VOLATILE ORGANIC COMPOUNDS FIELD SCREENING RESULTS**  
**SOIL SAMPLES**  
**LEBLANC CLEANERS**  
**LEWISTON, MAINE**

SAMPLE LOCATION:	EPA RML (HQ=3) Industrial Soil	ME RAG Commercial Soil	SB-09A	SB-09B	SB-09C	SB-09D	SB-09EF	SB-09GH
SAMPLE DEPTH:			0 - 1 ft	1 - 2 ft	2 - 3 ft	3 - 4 ft	4 - 6 ft	6 - 8 ft
COMPOUND			µg/Kg					
cis-1,2-Dichloroethylene	7,000,000	3,400,000	ND (1,800)	ND (1,800)	ND (1,800)	ND (1,800)	ND (1,800)	ND (1,800)
Tetrachloroethylene (PCE)	1,200,000	10,000,000	5,800	2,700	1,500	5,700	100	ND (25)
Trichloroethylene (TCE)	56,000	850,000	1,400	ND (100)	ND (100)	1,100	ND (100)	ND (100)

**Analysis:**

Samples field screened by U.S. EPA Office of Environmental Measurement and Evaluation (OEME) mobile laboratory using EPA Region I Standard Operating Procedure (SOP) EIA-FLDOA2, Volatile Organic Analysis of Soil (PCE and TCE only).

**Notes:**

- 1) All Results in micrograms per Kilogram (µg/Kg). Results reported on a wet weight basis.
- 2) ND = Not detected at concentrations exceeding reporting limits. Reporting limit in parentheses.
- 3) ft = feet
- 4) in = inches
- 5) EPA RML = EPA Removal Management Levels for Industrial Soil. Used RML table where Hazard Quotient (HQ) = 3 and Target Risk (TR) =  $10^{-4}$ . Units in µg/Kg.
- 7) \* Sample SB-102D is a duplicate of Sample SB-02D.
- 8) \*\* Sample SB-106B is a duplicate of Sample SB-06B.
- 9) \*\*\* Sample SB-109A is a duplicate of Sample SB-09A.
- 10) ME RAG = Maine Remedial Action Guidelines Commercial Worker Exposure Scenario.
- 11) Values bolded and shaded in yellow indicate compounds exceeding ME RAGs for Commercial Soil.
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**TABLE 2**  
**SUMMARY OF VOLATILE ORGANIC COMPOUNDS FIELD SCREENING RESULTS**  
**SOIL SAMPLES**  
**LEBLANC CLEANERS**  
**LEWISTON, MAINE**

SAMPLE LOCATION:	EPA RML (HQ=3) Industrial Soil	ME RAG Commercial Soil	SB-10A	SB-10B	SB-10C	SB-10D	SB-102D*	SB-106B**
SAMPLE DEPTH:			0 - 1 ft	1 - 2 ft	2 - 3 ft	3 - 4 ft	3 - 4 ft	1 - 2 ft
COMPOUND			µg/Kg					
cis-1,2-Dichloroethylene	<b>7,000,000</b>	<b>3,400,000</b>	ND (1,800)	ND (1,800)	ND (1,800)	ND (1,800)	ND (500)	ND (1000)
Tetrachloroethylene (PCE)	<b>1,200,000</b>	<b>10,000,000</b>	ND (25)	ND (25)	ND (25)	ND (25)	4,400	580
Trichloroethylene (TCE)	<b>56,000</b>	<b>850,000</b>	ND (100)	ND (100)	ND (100)	ND (100)	80	ND (80)

**Analysis:**

Samples field screened by U.S. EPA Office of Environmental Measurement and Evaluation (OEME) mobile laboratory using EPA Region I Standard Operating Procedure (SOP) EIA-FLDVOA2, Volatile Organic Analysis of Soil (PCE and TCE only).

**Notes:**

- 1) All Results in micrograms per Kilogram (µg/Kg). Results reported on a wet weight basis.
- 2) ND = Not detected at concentrations exceeding reporting limits. Reporting limit in parentheses.
- 3) ft = feet
- 4) in = inches
- 5) EPA RML = EPA Removal Management Levels for Industrial Soil. Used RML table where Hazard Quotient (HQ) = 3 and Target Risk (TR) =  $10^{-4}$ . Units in µg/Kg.
- 7) \* Sample SB-102D is a duplicate of Sample SB-02D.
- 8) \*\* Sample SB-106B is a duplicate of Sample SB-06B.
- 9) \*\*\* Sample SB-109A is a duplicate of Sample SB-09A.
- 10) ME RAG = Maine Remedial Action Guidelines Commercial Worker Exposure Scenario.
- 11) Values bolded and shaded in yellow indicate compounds exceeding ME RAGs for Commercial Soil.
- 12) Values bolded and shaded in red indicate compounds exceeding EPA RML (HQ = 3) for Industrial Soil.

TABLE 2

**SUMMARY OF VOLATILE ORGANIC COMPOUNDS FIELD SCREENING RESULTS**  
**SOIL SAMPLES**  
**LEBLANC CLEANERS**  
**LEWISTON, MAINE**

SAMPLE LOCATION:	EPA RML (HQ=3) Industrial Soil	ME RAG Commercial Soil	SB-109A***	SS-01	SS-02	SS-03	SS-04	SS-05
SAMPLE DEPTH:			0 - 1 ft	0 - 6 in	0 - 6 in	0 - 6 in	0 - 6 in	0 - 6 in
COMPOUND			µg/Kg					
cis-1,2-Dichloroethylene	<b>7,000,000</b>	<b>3,400,000</b>	ND (1,800)	ND (500)	ND (500)	ND (500)	ND (500)	ND (500)
Tetrachloroethylene (PCE)	<b>1,200,000</b>	<b>10,000,000</b>	1,500	ND (20)	ND (20)	ND (20)	450	220
Trichloroethylene (TCE)	<b>56,000</b>	<b>850,000</b>	360	ND (40)	ND (40)	ND (40)	ND (40)	ND (40)

**Analysis:**

Samples field screened by U.S. EPA Office of Environmental Measurement and Evaluation (OEME) mobile laboratory using EPA Region I Standard Operating Procedure (SOP) EIA-FLDOA2, Volatile Organic Analysis of Soil (PCE and TCE only).

**Notes:**

- 1) All Results in micrograms per Kilogram (µg/Kg). Results reported on a wet weight basis.
- 2) ND = Not detected at concentrations exceeding reporting limits. Reporting limit in parentheses.
- 3) ft = feet
- 4) in = inches
- 5) EPA RML = EPA Removal Management Levels for Industrial Soil. Used RML table where Hazard Quotient (HQ) = 3 and Target Risk (TR) =  $10^{-4}$ . Units in µg/Kg.
- 7) \* Sample SB-102D is a duplicate of Sample SB-02D.
- 8) \*\* Sample SB-106B is a duplicate of Sample SB-06B.
- 9) \*\*\* Sample SB-109A is a duplicate of Sample SB-09A.
- 10) ME RAG = Maine Remedial Action Guidelines Commercial Worker Exposure Scenario.
- 11) Values bolded and shaded in yellow indicate compounds exceeding ME RAGs for Commercial Soil.
- 12) Values bolded and shaded in red indicate compounds exceeding EPA RML (HQ = 3) for Industrial Soil.



TABLE 2

**SUMMARY OF VOLATILE ORGANIC COMPOUNDS FIELD SCREENING RESULTS**  
**SOIL SAMPLES**  
**LEBLANC CLEANERS**  
**LEWISTON, MAINE**

SAMPLE LOCATION:	EPA RML (HQ=3) Industrial Soil	ME RAG Commercial Soil	SS-06	SS-07	SS-08	SS-09	SS-10	SS-11
SAMPLE DEPTH:			0 - 6 in	0 - 6 in	0 - 6 in	0 - 6 in	0 - 6 in	0 - 6 in
COMPOUND			µg/Kg					
cis-1,2-Dichloroethylene	<b>7,000,000</b>	<b>3,400,000</b>	ND (500)	ND (500)	ND (500)	ND (500)	ND (500)	ND (500)
Tetrachloroethylene (PCE)	<b>1,200,000</b>	<b>10,000,000</b>	200	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)
Trichloroethylene (TCE)	<b>56,000</b>	<b>850,000</b>	ND (40)	ND (40)	ND (40)	ND (40)	ND (40)	ND (40)

**Analysis:**

Samples field screened by U.S. EPA Office of Environmental Measurement and Evaluation (OEME) mobile laboratory using EPA Region I Standard Operating Procedure (SOP) EIA-FLDOA2, Volatile Organic Analysis of Soil (PCE and TCE only).

**Notes:**

- 1) All Results in micrograms per Kilogram (µg/Kg). Results reported on a wet weight basis.
- 2) ND = Not detected at concentrations exceeding reporting limits. Reporting limit in parentheses.
- 3) ft = feet
- 4) in = inches
- 5) EPA RML = EPA Removal Management Levels for Industrial Soil. Used RML table where Hazard Quotient (HQ) = 3 and Target Risk (TR) =  $10^{-4}$ . Units in µg/Kg.
- 7) \* Sample SB-102D is a duplicate of Sample SB-02D.
- 8) \*\* Sample SB-106B is a duplicate of Sample SB-06B.
- 9) \*\*\* Sample SB-109A is a duplicate of Sample SB-09A.
- 10) ME RAG = Maine Remedial Action Guidelines Commercial Worker Exposure Scenario.
- 11) Values bolded and shaded in yellow indicate compounds exceeding ME RAGs for Commercial Soil.
- 12) Values bolded and shaded in red indicate compounds exceeding EPA RML (HQ = 3) for Industrial Soil.

**TABLE 3**  
**SUMMARY OF VOLATILE ORGANIC COMPOUNDS**  
**FIELD SCREENING RESULTS**  
**SUB-SLAB SOIL GAS SAMPLES**  
**APRIL 2016**  
**LEBLANC CLEANERS SITE**  
**LEWISTON, MAINE**

SAMPLE LOCATION	SG-01a	SG-02a	SG-03a	SG-04a	SG-05a	SG-BL1
<b>VOC</b>						
cis-1,2-Dichloroethylene	ND (151)	2,021	39,236	ND (151)	ND (151)	ND (150.1)
Tetrachloroethylene (PCE)	576	22,373	3,389,820	569	2,101	ND (10)
Trichloroethylene (TCE)	ND (15)	1,558	32,230	ND (27)	220	ND (15)

**NOTES:**

- 1) Samples analyzed by U.S. EPA Office of Environmental Measurement and Evaluation (OEME) Mobile Laboratory using EPA Region I Standard Operating Procedure (SOP) EIA-FLDGRAB4 - Volatile Organic Compound Analysis of Air Samples.
- 2) All results are reported in micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ). Units initially reported in parts per billion per volume, and converted to  $\mu\text{g}/\text{m}^3$ .
- 3) ND = Not Detected. Reporting Limits provided in parentheses. Reporting Limits units reported in parts per billion per volume, and converted to  $\mu\text{g}/\text{m}^3$ .
- 4) VOC = Volatile Organic Compound
- 5) \*SG-BL1 = Sub-slab vapor blank sample.

TABLE 4

**SUMMARY OF METALS FIELD SCREENING RESULTS**  
**SOIL SAMPLES**  
**LEBLANC CLEANERS**  
**LEWISTON, MAINE**

Sample Location	Sample Depth	Cadmium ME RAG = 94 EPA RML (HQ=3) = 2,900	Lead ME RAG = 1,100 EPA RML (HQ=3) = 800	Arsenic ME RAG = 4.2 EPA RML (HQ=3) = 300	Chromium <sup>†</sup> ME RAG = 10,000 EPA RML (HQ=3) = 630	Barium ME RAG = 10,000 EPA RML (HQ=3) = 650,000	Silver ME RAG = 8,500 EPA RML (HQ=3) = 18,000
SB-01A	0 - 1 ft	ND	88	ND	ND	558	ND
SB-01B	1 - 2 ft	ND	448	<b>46</b>	93	101	ND
SB-01C	2 - 3 ft	ND	161	ND	88	345	ND
SB-01D	3 - 4 ft	ND	22	<b>7</b>	55	463	ND
SB-02A	0 - 1 ft	13	20	ND	ND	472	ND
SB-02B	1 - 2 ft	12	31	ND	ND	526	ND
SB-02C	2 - 3 ft	ND	31	ND	ND	541	ND
SB-02D	3 - 4 ft	ND	25	ND	ND	555	ND
SB-102D*	3 - 4 ft	ND	17	ND	ND	470	6
SB-02E	4 - 5 ft	ND	24	ND	ND	493	ND
SB-02F	5 - 6 ft	ND	27	<b>6</b>	47	624	ND
SB-02G	6 - 7 ft	11	29	<b>8</b>	59	644	ND
SB-02H	7 - 8 ft	11	25	<b>9</b>	61	628	ND
SB-03A	0 - 1 ft	ND	56	ND	ND	544	ND
SB-03B	1 - 2 ft	ND	126	<b>17</b>	95	482	ND
SB-03C	2 - 3 ft	ND	62	ND	ND	563	7
SB-03D	3 - 4 ft	ND	34	<b>9</b>	ND	477	ND
SB-04A	0 - 1 ft	15	25	ND	ND	594	7
SB-04B	1 - 2 ft	ND	141	<b>16</b>	43	495	ND
SB-04C	2 - 3 ft	9	183	<b>15</b>	65	413	ND
SB-04D	3 - 4 ft	ND	111	ND	104	531	ND
SB-04E	4 - 5 ft	ND	74	<b>15</b>	73	492	ND
SB-04F	5 - 6 ft	ND	45	<b>9</b>	68	504	9
SB-05A	0 - 1 ft	ND	50	ND	ND	506	ND
SB-05B	1 - 2 ft	ND	101	ND	ND	384	ND
SB-05C	2 - 3 ft	ND	159	ND	83	292	ND
SB-05D	3 - 4 ft	ND	177	ND	56	49	ND
SB-06A	0 - 1 ft	12	26	<b>8</b>	ND	458	ND
SB-06B	1 - 2 ft	ND	167	<b>23</b>	70	452	ND
SB-106B**	1 - 2 ft	ND	171	<b>14</b>	66	458	ND
SB-06C	2 - 3 ft	ND	38	ND	44	245	ND
SB-06D	3 - 4 ft	ND	26	ND	67	312	ND
SB-07A	0 - 1 ft	ND	108	ND	61	430	ND
SB-07B	1 - 2 ft	ND	109	ND	60	608	ND
SB-07C	2 - 3 ft	ND	164	ND	111	451	ND
SB-07D	3 - 4 ft	ND	60	ND	67	460	ND
SB-07EF	4 - 5.5 ft	ND	41	ND	74	504	ND
SB-07GH	5.5 - 7 ft	ND	24	ND	69	497	ND
SB-08A	0 - 1 ft	ND	104	ND	55	65	ND
SB-08B	1 - 2 ft	ND	171	ND	84	326	ND
SB-08C	2 - 3 ft	ND	153	ND	72	452	ND
SB-08D	3 - 4 ft	ND	133	ND	48	267	ND
SB-08EF	4 - 5.5 ft	ND	48	ND	65	441	ND
SB-08GH	5.5 - 7 ft	ND	23	<b>14</b>	ND	682	ND
SB-09A	0 - 1 ft	ND	105	ND	ND	262	ND
SB-109A***	0 - 1 ft	ND	98	ND	73	263	ND
SB-09B	1 - 2 ft	ND	527	ND	98	332	ND
SB-09C	2 - 3 ft	ND	312	<b>42</b>	58	496	6
SB-09D	3 - 4 ft	ND	169	ND	91	276	ND
SB-09EF	4 - 6 ft	ND	84	ND	55	451	ND
SB-09GH	6 - 8 ft	13	28	<b>20</b>	37	583	ND
SB-10A	0 - 1 ft	ND	521	ND	<b>717</b>	410	ND
SB-10B	1 - 2 ft	ND	30	ND	43	533	ND
SB-10C	2 - 3 ft	ND	23	ND	ND	511	ND
SB-10D	3 - 4 ft	11	36	ND	ND	446	ND
SS-01	0 - 6 in	ND	400	<b>20</b>	45	400	ND
SS-02	0 - 6 in	ND	320	ND	81	170	ND
SS-03	0 - 6 in	ND	220	ND	ND	56	ND

**NOTES:**

- Soil samples analyzed for heavy metals using EPA Region I Standard Operating Procedure (SOP) Environmental Metals Screening with Thermo Niton XL 3t-600 X-Ray Fluorescence (EIASOP-FLDXRFN3.SOP).
- Units in parts per million (ppm), equivalent to milligrams per Kilogram (mg/Kg).
- ME RAG = Maine Remedial Action Guidelines for a Commercial Worker Exposure Scenario.
- EPA RML = EPA Removal Management Levels for Industrial Soil. Used RML table where Hazard Quotient (HQ) = 3 and Target Risk (TR) = 10-4. Compounds were compared to RMLs (HQ = 3) by matching the compound CAS number to the RML table. The following RMLs were selected: inorganic arsenic, chromium (hexavalent), cadmium (diet), and lead.
- <sup>†</sup> = ME RAG value for chromium listed is for chromium (+3) while the EPA RML value for chromium listed is for hexavalent chromium. However, analysis performed was for total chromium.
- Values bolded and shaded in yellow indicate compounds exceeding ME RAG.
- Values bolded and shaded in red indicate compounds exceeding EPA RML (HQ = 3) Criteria, but less than ME RAG. (For chromium only.)
- ND = Not detected above the reporting limit.
- A compound is listed in the table above only if it was detected in at least one of the samples analyzed. Compounds that were analyzed for, but not detected, have been omitted.
- \* Sample SB-102D is a duplicate of Sample SB-02D.
- \*\* Sample SB-106B is a duplicate of Sample SB-06B.
- \*\*\* Sample SB-109A is a duplicate of Sample SB-09A.
- ft = feet.
- in = inches.

TABLE 4

**SUMMARY OF METALS FIELD SCREENING RESULTS**  
**SOIL SAMPLES**  
**LEBLANC CLEANERS**  
**LEWISTON, MAINE**

Sample Location	Sample Depth	Cadmium ME RAG = 94 EPA RML (HQ=3) = 2,900	Lead ME RAG = 1,100 EPA RML (HQ=3) = 800	Arsenic ME RAG = 4.2 EPA RML (HQ=3) = 300	Chromium <sup>†</sup> ME RAG = 10,000 EPA RML (HQ=3) = 630	Barium ME RAG = 10,000 EPA RML (HQ=3) = 650,000	Silver ME RAG = 8,500 EPA RML (HQ=3) = 18,000
SS-03	0 - 6 in	ND	220	ND	ND	56	ND
SS-04	0 - 6 in	ND	98	ND	50	330	ND
SS-05	0 - 6 in	ND	56	ND	50	160	ND
SS-06	0 - 6 in	ND	120	ND	52	120	ND
SS-07	0 - 6 in	ND	320	<b>19</b>	62	240	ND
SS-08	0 - 6 in	ND	110	<b>11</b>	ND	300	ND
SS-09	0 - 6 in	ND	57	<b>9</b>	ND	260	ND
SS-10	0 - 6 in	ND	84	<b>8</b>	ND	140	ND
SS-11	0 - 6 in	ND	79	ND	ND	260	ND

**NOTES:**

- 1) Soil samples analyzed for heavy metals using EPA Region I Standard Operating Procedure (SOP) Environmental Metals Screening with Thermo Niton XL 3t-600 X-Ray Fluorescence (EIASOP-FLDXRFN3.SOP).
- 2) Units in parts per million (ppm), equivalent to milligrams per Kilogram (mg/Kg).
- 3) ME RAG = Maine Remedial Action Guidelines for a Commercial Soil Worker.
- 4) EPA RML = EPA Removal Management Levels for Industrial Soil. Used RML table where Hazard Quotient (HQ) = 3 and Target Risk (TR) = 10-4. Compounds were compared to RMLs (HQ = 3) by matching the compound CAS number to the RML table. The following RMLs were selected: inorganic arsenic, chromium (hexavalent), cadmium (diet), and lead.
- 5) <sup>†</sup> = ME RAG value for chromium listed is for chromium (+3) while the EPA RML value for chromium listed is for hexavalent chromium. However, analysis performed was for total chromium.
- 6) Values bolded and shaded in yellow indicate compounds exceeding ME RAG.
- 7) Values bolded and shaded in red indicate compounds exceeding EPA RML (HQ = 3) Criteria, but less than ME RAG. (For chromium only.)
- 8) ND = Not detected above the reporting limit.
- 9) A compound is listed in the table above only if it was detected in at least one of the samples analyzed. Compounds that were analyzed for, but not detected, have been omitted.
- 10) \* Sample SB-102D is a duplicate of Sample SB-02D.
- 11) \*\* Sample SB-106B is a duplicate of Sample SB-06B.
- 12) \*\*\* Sample SB-109A is a duplicate of Sample SB-09A.
- 13) ft = feet.
- 14) in = inches.

TABLE 5

**SUMMARY OF VOLATILE ORGANIC COMPOUNDS  
CONFIRMATION RESULTS  
SUB-SLAB SOIL GAS SAMPLES  
APRIL 2016  
LEBLANC CLEANERS SITE  
LEWISTON, MAINE**

SUMMA CANISTER NO.	12567	12568	15058	15049	20858	13492
SAMPLE LOCATION	SG-01	SG-02	SG-03	SG-04	SG-05	SG-101
<b>VOC</b>	$\mu\text{g}/\text{m}^3$					
1,1,1-Trichloroethane	2	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	ND	ND	ND	85	ND	ND
1,3,5-Trimethylbenzene	ND	ND	ND	27	ND	ND
4-Ethyltoluene	ND	ND	ND	21	ND	ND
Benzene	ND	ND	ND	ND	4.5	ND
Cyclohexane	ND	ND	ND	ND	2.8	ND
Dichlorodifluoromethane	ND	ND	ND	ND	ND	ND
Hexane	ND	ND	ND	ND	28	ND
Tetrachloroethylene (PCE)	1,900	25,000	15,600,000	1,200	2,500	2,000
Toluene	ND	ND	ND	ND	16	ND
Trichloroethylene (TCE)	8.1	1,600	120,000	ND	260	ND
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND
c-1,2-Dichloroethylene	ND	1,900	130,000	ND	25	ND
m/p-Xylenes	ND	ND	ND	ND	8.5	ND
t-1,2-Dichloroethylene	ND	ND	ND	ND	5.2	ND

SUMMA CANISTER NO.	13046	22698	14896			
SAMPLE LOCATION	AMB-01	Sewer-01	Sewer-02			
<b>VOC</b>	$\mu\text{g}/\text{m}^3$					
1,1,1-Trichloroethane	ND	ND	ND			
1,2,4-Trimethylbenzene	ND	ND	ND			
1,3,5-Trimethylbenzene	ND	ND	ND			
4-Ethyltoluene	ND	ND	ND			
Benzene	0.36	ND	ND			
Cyclohexane	ND	ND	ND			
Dichlorodifluoromethane	2.2	ND	ND			
Hexane	ND	ND	ND			
Tetrachloroethylene (PCE)	0.92	620	310			
Toluene	0.39	ND	ND			
Trichloroethylene (TCE)	ND	ND	42			
Trichlorofluoromethane	1.2	ND	ND			
c-1,2-Dichloroethylene	ND	ND	ND			
m/p-Xylenes	ND	ND	ND			
t-1,2-Dichloroethylene	ND	ND	220			

**NOTES:**

- 1) Samples analyzed by U.S. EPA Office of Environmental Measurement and Evaluation (OEME) Mobile Laboratory using EPA Region I Standard Operating Procedure (SOP) EIA-FLDGRAB4 - Volatile Organic Compound Analysis of Air Samples.
- 2) All results are reported in micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ). Units initially reported in parts per billion per volume, and converted to  $\mu\text{g}/\text{m}^3$ .
- 3) ND = Not detected above reporting limit.
- 4) VOC = Volatile Organic Compound.
- 5) \*AMB-01 = Ambient air background sample.

TABLE 6

**SUMMARY OF VOLATILE ORGANIC COMPOUNDS CONFIRMATION RESULTS**  
**SOIL SAMPLES**  
**LEBLANC CLEANERS**  
**LEWISTON, MAINE**

SAMPLE LOCATION:			SB-01A	SB-01B	SB-01C	SB-01D	SB-02A	SB-02B	SB-02C
SAMPLE ID			0091MH-0001	0091MH-0002	0091MH-0003	0091MH-0004	0091MH-0005	0091MH-0006	0091MH-0007
SAMPLE DEPTH:			0 - 1 ft	1 - 2 ft	2 - 3 ft	3 - 4 ft	0 - 1 ft	1 - 2 ft	2 - 3 ft
COMPOUND	EPA RML (HQ=3) Industrial Soil	ME RAG Commercial Soil	µg/Kg						
cis-1,2-Dichloroethylene	7,000,000	3,400,000	ND	ND	ND	ND	ND	ND	81
1,3,5-Trimethylbenzene	35,000,000	NL	ND	ND	ND	1,600	ND	ND	ND
1,2,4-Trimethylbenzene	730,000	NL	ND	ND	ND	6,100	ND	ND	ND
Methylene Chloride	9,500,000	10,000,000	ND	ND	ND	ND	110	ND	ND
2-Propanone (acetone)	2,000,000,000	10,000,000	ND	ND	ND	ND	ND	ND	ND
Trans-1,2-Dichloroethylene	70,000,000	10,000,000	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethylene (PCE)	1,200,000	10,000,000	10,000	6,200	1,400	ND	1,600	1,000	1,600
Trichloroethylene (TCE)	56,000	850,000	990	ND	110	ND	ND	ND	ND
M/P Xylene	7,100,000	10,000,000	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	30,000,000	NL	ND	ND	ND	ND	ND	ND	ND
Sec-Butylbenzene	350,000,000	NL	ND	ND	ND	ND	ND	ND	ND
Para-Isopropyltoluene	NL	NL	ND	ND	ND	ND	ND	ND	ND
N-Butylbenzene	180,000,000	NL	ND	ND	ND	ND	ND	ND	ND
Naphthalene	1,700,000	10,000,000	ND	ND	ND	ND	ND	ND	ND

**Analysis:**

Samples analyzed by U.S. EPA Office of Environmental Measurement and Evaluation (OEME) using EPA Region I Standard Operating Procedure (SOP) EIASOP-VOAGCMS9, VOAs in Soil High Level Method.

**Note:**

- 1) All Results in micrograms per Kilogram (µg/Kg). Results reported on a dry weight basis.
- 2) ND = Not detected at concentrations exceeding reporting limits.
- 3) ft = feet
- 4) EPA RML = EPA Removal Management Levels for Industrial Soil. Used RML table where Hazard Quotient (HQ) = 3 and Target Risk (TR) =  $10^{-4}$ . Units in µg/Kg.
- 5) \* Sample SB-102D is a duplicate of Sample SB-02D.
- 6) \*\* Sample SB-106B is a duplicate of Sample SB-06B.
- 7) \*\*\* Sample SB-109A is a duplicate of Sample SB-09A.
- 8) ME RAG = Maine Remedial Action Guidelines for a Commercial Worker Exposure Scenario.
- 9) Values bolded and shaded in yellow indicate compounds exceeding ME RAGs for Commercial Soil.
- 10) Values bolded and shaded in red indicate compounds exceeding EPA RML (HQ = 3) for Industrial Soil.
- 11) The EPA RML Industrial Soil value for m-Xylene was used for M/P Xylene.
- 12) NL = Not Listed.
- 13) A compound is listed only if it was detected in at least one of the samples. Compounds that were analyzed for, but not detected, have been omitted.

TABLE 6

**SUMMARY OF VOLATILE ORGANIC COMPOUNDS CONFIRMATION RESULTS**  
**SOIL SAMPLES**  
**LEBLANC CLEANERS**  
**LEWISTON, MAINE**

SAMPLE LOCATION:			SB-02D	SB-02E	SB-02F	SB-02H	SB-03A	SB-03B	SB-03C
SAMPLE ID			0091MH-0008	0091MH-0009	0091MH-0010	0091MH-0012	0091MH-0013	0091MH-0014	0091MH-0015
SAMPLE DEPTH:			3 - 4 ft	4 - 5 ft	5 - 6 ft	6 - 7 ft	0 - 1 ft	1 - 2 ft	2 - 3 ft
COMPOUND	EPA RML (HQ=3) Industrial Soil	ME RAG Commercial Soil	µg/Kg						
cis-1,2-Dichloroethylene	7,000,000	3,400,000	900	ND	ND	ND	25,000	53,000	56,000
1,3,5-Trimethylbenzene	35,000,000	NL	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	730,000	NL	ND	ND	ND	14,000	ND	940	ND
Methylene Chloride	9,500,000	10,000,000	ND	ND	ND	ND	ND	ND	ND
2-Propanone (acetone)	2,000,000,000	10,000,000	ND	ND	ND	ND	ND	ND	ND
Trans-1,2-Dichloroethylene	70,000,000	10,000,000	ND	ND	ND	ND	ND	1,300	ND
Tetrachloroethylene (PCE)	1,200,000	10,000,000	8,100	2,800	140,000	76,000	98,000	130,000 E	440,000
Trichloroethylene (TCE)	56,000	850,000	440	ND	ND	ND	16,000	37,000	57,000
M/P Xylene	7,100,000	10,000,000	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	30,000,000	NL	ND	ND	ND	ND	ND	ND	ND
Sec-Butylbenzene	350,000,000	NL	ND	ND	ND	ND	ND	ND	ND
Para-Isopropyltoluene	NL	NL	ND	ND	ND	ND	ND	ND	
N-Butylbenzene	180,000,000	NL	ND	ND	ND	ND	ND	ND	ND
Naphthalene	1,700,000	10,000,000	ND	ND	ND	ND	ND	ND	ND

**Analysis:**

Samples analyzed by U.S. EPA Office of Environmental Measurement and Evaluation (OEME) using EPA Region I Standard Operating Procedure (SOP) EIASOP-VOAGCMS9, VOAs in Soil High Level Method.

**Note:**

- 1) All Results in micrograms per Kilogram (µg/Kg). Results reported on a dry weight basis.
- 2) ND = Not detected at concentrations exceeding reporting limits.
- 3) ft = feet
- 4) EPA RML = EPA Removal Management Levels for Industrial Soil. Used RML table where Hazard Quotient (HQ) = 3 and Target Risk (TR) =  $10^{-4}$ . Units in µg/Kg.
- 5) \* Sample SB-102D is a duplicate of Sample SB-02D.
- 6) \*\* Sample SB-106B is a duplicate of Sample SB-06B.
- 7) \*\*\* Sample SB-109A is a duplicate of Sample SB-09A.
- 8) ME RAG = Maine Remedial Action Guidelines for a Commercial Worker Exposure Scenario.
- 9) Values bolded and shaded in yellow indicate compounds exceeding ME RAGs for Commercial Soil.
- 10) Values bolded and shaded in red indicate compounds exceeding EPA RML (HQ = 3) for Industrial Soil.
- 11) The EPA RML Industrial Soil value for m-Xylene was used for M/P Xylene.
- 12) NL = Not Listed.
- 13) A compound is listed only if it was detected in at least one of the samples. Compounds that were analyzed for, but not detected, have been omitted.

TABLE 6

**SUMMARY OF VOLATILE ORGANIC COMPOUNDS CONFIRMATION RESULTS**  
**SOIL SAMPLES**  
**LEBLANC CLEANERS**  
**LEWISTON, MAINE**

SAMPLE LOCATION:			SB-03D	SB-04A	SB-04B	SB-04C	SB-04D	SB-04F	SB-05A
SAMPLE ID			0091MH-0016	0091MH-0017	0091MH-0018	0091MH-0019	0091MH-0020	0091MH-0022	0091MH-0023
SAMPLE DEPTH:			3 - 4 ft	0 - 1 ft	1 - 2 ft	2 - 3 ft	3 - 4 ft	5 - 6 ft	0 - 1 ft
COMPOUND	EPA RML (HQ=3)	ME RAG							
	Industrial Soil	Commercial Soil	µg/Kg						
cis-1,2-Dichloroethylene	7,000,000	3,400,000	150,000	ND	860	1,700	1,800	ND	ND
1,3,5-Trimethylbenzene	35,000,000	NL	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	730,000	NL	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	9,500,000	10,000,000	ND	ND	ND	ND	ND	ND	ND
2-Propanone (acetone)	2,000,000,000	10,000,000	ND	ND	ND	ND	ND	ND	ND
Trans-1,2-Dichloroethylene	70,000,000	10,000,000	3,700	ND	ND	ND	140	ND	ND
Tetrachloroethylene (PCE)	1,200,000	10,000,000	40,000	68	11,000	6,200	2,800	ND	1,200
Trichloroethylene (TCE)	56,000	850,000	61,000	ND	750	1,000	800	ND	ND
M/P Xylene	7,100,000	10,000,000	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	30,000,000	NL	ND	ND	ND	ND	ND	ND	ND
Sec-Butylbenzene	350,000,000	NL	ND	ND	ND	ND	ND	ND	ND
Para-Isopropyltoluene	NL	NL	ND	ND	ND	ND	ND	ND	ND
N-Butylbenzene	180,000,000	NL	ND	ND	ND	ND	ND	ND	ND
Naphthalene	1,700,000	10,000,000	ND	ND	ND	ND	ND	ND	ND

**Analysis:**

Samples analyzed by U.S. EPA Office of Environmental Measurement and Evaluation (OEME) using EPA Region I Standard Operating Procedure (SOP) EIASOP-VOAGCMS9, VOAs in Soil High Level Method.

**Note:**

- 1) All Results in micrograms per Kilogram (µg/Kg). Results reported on a dry weight basis.
- 2) ND = Not detected at concentrations exceeding reporting limits.
- 3) ft = feet
- 4) EPA RML = EPA Removal Management Levels for Industrial Soil. Used RML table where Hazard Quotient (HQ) = 3 and Target Risk (TR) =  $10^{-4}$ . Units in µg/Kg.
- 5) \* Sample SB-102D is a duplicate of Sample SB-02D.
- 6) \*\* Sample SB-106B is a duplicate of Sample SB-06B.
- 7) \*\*\* Sample SB-109A is a duplicate of Sample SB-09A.
- 8) ME RAG = Maine Remedial Action Guidelines for a Commercial Worker Exposure Scenario.
- 9) Values bolded and shaded in yellow indicate compounds exceeding ME RAGs for Commercial Soil.
- 10) Values bolded and shaded in red indicate compounds exceeding EPA RML (HQ = 3) for Industrial Soil.
- 11) The EPA RML Industrial Soil value for m-Xylene was used for M/P Xylene.
- 12) NL = Not Listed.
- 13) A compound is listed only if it was detected in at least one of the samples. Compounds that were analyzed for, but not detected, have been omitted.



TABLE 6

**SUMMARY OF VOLATILE ORGANIC COMPOUNDS CONFIRMATION RESULTS**  
**SOIL SAMPLES**  
**LEBLANC CLEANERS**  
**LEWISTON, MAINE**

SAMPLE LOCATION:			SB-05B	SB-05C	SB-05D	SB-06A	SB-06B	SB-06C	SB-06D
SAMPLE ID			0091MH-0024	0091MH-0025	0091MH-0026	0091MH-0027	0091MH-0028	0091MH-0029	0091MH-0030
SAMPLE DEPTH:			4 - 6 ft	2 - 3 ft	3 - 4 ft	0 - 1 ft	1 - 2 ft	2 - 3 ft	3 - 4 ft
COMPOUND	EPA RML (HQ=3)	ME RAG							
	Industrial Soil	Commercial Soil	µg/Kg						
cis-1,2-Dichloroethylene	7,000,000	3,400,000	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	35,000,000	NL	ND	ND	ND	ND	440	ND	ND
1,2,4-Trimethylbenzene	730,000	NL	ND	ND	ND	ND	2,100	ND	ND
Methylene Chloride	9,500,000	10,000,000	ND	ND	ND	ND	ND	ND	ND
2-Propanone (acetone)	2,000,000,000	10,000,000	ND	ND	ND	ND	ND	ND	ND
Trans-1,2-Dichloroethylene	70,000,000	10,000,000	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethylene (PCE)	1,200,000	10,000,000	1,000	1,600	ND	ND	860	ND	ND
Trichloroethylene (TCE)	56,000	850,000	180	ND	ND	ND	ND	ND	ND
M/P Xylene	7,100,000	10,000,000	ND	ND	ND	ND	530	ND	ND
Isopropylbenzene	30,000,000	NL	ND	ND	ND	ND	ND	ND	ND
Sec-Butylbenzene	350,000,000	NL	ND	ND	ND	ND	ND	ND	ND
Para-Isopropyltoluene	NL	NL	ND	ND	ND	ND	ND	ND	ND
N-Butylbenzene	180,000,000	NL	ND	ND	ND	ND	260	ND	ND
Naphthalene	1,700,000	10,000,000	ND	ND	ND	ND	300	ND	ND

**Analysis:**

Samples analyzed by U.S. EPA Office of Environmental Measurement and Evaluation (OEME) using EPA Region I Standard Operating Procedure (SOP) EIASOP-VOAGCMS9, VOAs in Soil High Level Method.

**Note:**

- 1) All Results in micrograms per Kilogram (µg/Kg). Results reported on a dry weight basis.
- 2) ND = Not detected at concentrations exceeding reporting limits.
- 3) ft = feet
- 4) EPA RML = EPA Removal Management Levels for Industrial Soil. Used RML table where Hazard Quotient (HQ) = 3 and Target Risk (TR) =  $10^{-4}$ . Units in µg/Kg.
- 5) \* Sample SB-102D is a duplicate of Sample SB-02D.
- 6) \*\* Sample SB-106B is a duplicate of Sample SB-06B.
- 7) \*\*\* Sample SB-109A is a duplicate of Sample SB-09A.
- 8) ME RAG = Maine Remedial Action Guidelines for a Commercial Worker Exposure Scenario.
- 9) Values bolded and shaded in yellow indicate compounds exceeding ME RAGs for Commercial Soil.
- 10) Values bolded and shaded in red indicate compounds exceeding EPA RML (HQ = 3) for Industrial Soil.
- 11) The EPA RML Industrial Soil value for m-Xylene was used for M/P Xylene.
- 12) NL = Not Listed.
- 13) A compound is listed only if it was detected in at least one of the samples. Compounds that were analyzed for, but not detected, have been omitted.

TABLE 6

**SUMMARY OF VOLATILE ORGANIC COMPOUNDS CONFIRMATION RESULTS**  
**SOIL SAMPLES**  
**LEBLANC CLEANERS**  
**LEWISTON, MAINE**

SAMPLE LOCATION:			SB-07A	SB-07B	SB-07C	SB-07D	SB-07EF	SB-07GH	SB-08A
SAMPLE ID			0091MH-0031	0091MH-0032	0091MH-0033	0091MH-0034	0091MH-0035	0091MH-0036	0091MH-0037
SAMPLE DEPTH:			0 - 1 ft	1 - 2 ft	2 - 3 ft	3 - 4 ft	4 - 5.5 ft	5.5 - 7 ft	0 - 1 ft
COMPOUND	EPA RML (HQ=3)	ME RAG							
	Industrial Soil	Commercial Soil	µg/Kg						
cis-1,2-Dichloroethylene	7,000,000	3,400,000	ND	ND	ND	560	450	ND	ND
1,3,5-Trimethylbenzene	35,000,000	NL	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	730,000	NL	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	9,500,000	10,000,000	ND	ND	ND	ND	ND	ND	ND
2-Propanone (acetone)	2,000,000,000	10,000,000	ND	ND	ND	ND	ND	ND	4,500
Trans-1,2-Dichloroethylene	70,000,000	10,000,000	ND	ND	ND	170	87	ND	ND
Tetrachloroethylene (PCE)	1,200,000	10,000,000	2,500	29,000	16,000	6,000	8,800	13,000	12,000
Trichloroethylene (TCE)	56,000	850,000	ND	510	830	5,500	3,600	2,400	ND
M/P Xylene	7,100,000	10,000,000	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	30,000,000	NL	ND	ND	ND	ND	ND	ND	ND
Sec-Butylbenzene	350,000,000	NL	ND	ND	ND	ND	ND	1,200	ND
Para-Isopropyltoluene	NL	NL	690	ND	ND	ND	ND	ND	7,100
N-Butylbenzene	180,000,000	NL	ND	ND	ND	ND	ND	1,100	ND
Naphthalene	1,700,000	10,000,000	ND	ND	ND	ND	ND	ND	ND

**Analysis:**

Samples analyzed by U.S. EPA Office of Environmental Measurement and Evaluation (OEME) using EPA Region I Standard Operating Procedure (SOP) EIASOP-VOAGCMS9, VOAs in Soil High Level Method.

**Note:**

- 1) All Results in micrograms per Kilogram (µg/Kg). Results reported on a dry weight basis.
- 2) ND = Not detected at concentrations exceeding reporting limits.
- 3) ft = feet
- 4) EPA RML = EPA Removal Management Levels for Industrial Soil. Used RML table where Hazard Quotient (HQ) = 3 and Target Risk (TR) =  $10^{-4}$ . Units in µg/Kg.
- 5) \* Sample SB-102D is a duplicate of Sample SB-02D.
- 6) \*\* Sample SB-106B is a duplicate of Sample SB-06B.
- 7) \*\*\* Sample SB-109A is a duplicate of Sample SB-09A.
- 8) ME RAG = Maine Remedial Action Guidelines for a Commercial Worker Exposure Scenario.
- 9) Values bolded and shaded in yellow indicate compounds exceeding ME RAGs for Commercial Soil.
- 10) Values bolded and shaded in red indicate compounds exceeding EPA RML (HQ = 3) for Industrial Soil.
- 11) The EPA RML Industrial Soil value for m-Xylene was used for M/P Xylene.
- 12) NL = Not Listed.
- 13) A compound is listed only if it was detected in at least one of the samples. Compounds that were analyzed for, but not detected, have been omitted.

TABLE 6

**SUMMARY OF VOLATILE ORGANIC COMPOUNDS CONFIRMATION RESULTS**  
**SOIL SAMPLES**  
**LEBLANC CLEANERS**  
**LEWISTON, MAINE**

SAMPLE LOCATION:			SB-08B	SB-08C	SB-08D	SB-08EF	SB-08GH	SB-09A	SB-09B
SAMPLE ID			0091MH-0038	0091MH-0039	0091MH-0040	0091MH-0041	0091MH-0042	0091MH-0043	0091MH-0044
SAMPLE DEPTH:			1 - 2 ft	2 - 3 ft	3 - 4 ft	4 - 5.5 ft	5.5 - 7 ft	0 - 1 ft	1 - 2 ft
COMPOUND	EPA RML (HQ=3) Industrial Soil	ME RAG Commercial Soil	µg/Kg						
cis-1,2-Dichloroethylene	7,000,000	3,400,000	ND	ND	ND	ND	ND	1,300	ND
1,3,5-Trimethylbenzene	35,000,000	NL	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	730,000	NL	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	9,500,000	10,000,000	ND	ND	ND	ND	ND	ND	ND
2-Propanone (acetone)	2,000,000,000	10,000,000	ND	ND	ND	ND	ND	ND	ND
Trans-1,2-Dichloroethylene	70,000,000	10,000,000	ND	ND	ND	ND	ND	550	ND
Tetrachloroethylene (PCE)	1,200,000	10,000,000	4,400	3,100	3,500	3,500	ND	4,800	5,900
Trichloroethylene (TCE)	56,000	850,000	ND	ND	420	720	ND	1,200	ND
M/P Xylene	7,100,000	10,000,000	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	30,000,000	NL	ND	ND	ND	ND	ND	ND	ND
Sec-Butylbenzene	350,000,000	NL	ND	ND	ND	ND	ND	ND	ND
Para-Isopropyltoluene	NL	NL	ND	2,700	ND	ND	ND	ND	ND
N-Butylbenzene	180,000,000	NL	ND	ND	ND	ND	ND	ND	ND
Naphthalene	1,700,000	10,000,000	ND	ND	ND	ND	ND	ND	ND

**Analysis:**

Samples analyzed by U.S. EPA Office of Environmental Measurement and Evaluation (OEME) using EPA Region I Standard Operating Procedure (SOP) EIASOP-VOAGCMS9, VOAs in Soil High Level Method.

**Note:**

- 1) All Results in micrograms per Kilogram (µg/Kg). Results reported on a dry weight basis.
- 2) ND = Not detected at concentrations exceeding reporting limits.
- 3) ft = feet
- 4) EPA RML = EPA Removal Management Levels for Industrial Soil. Used RML table where Hazard Quotient (HQ) = 3 and Target Risk (TR) =  $10^{-4}$ . Units in µg/Kg.
- 5) \* Sample SB-102D is a duplicate of Sample SB-02D.
- 6) \*\* Sample SB-106B is a duplicate of Sample SB-06B.
- 7) \*\*\* Sample SB-109A is a duplicate of Sample SB-09A.
- 8) ME RAG = Maine Remedial Action Guidelines for a Commercial Worker Exposure Scenario.
- 9) Values bolded and shaded in yellow indicate compounds exceeding ME RAGs for Commercial Soil.
- 10) Values bolded and shaded in red indicate compounds exceeding EPA RML (HQ = 3) for Industrial Soil.
- 11) The EPA RML Industrial Soil value for m-Xylene was used for M/P Xylene.
- 12) NL = Not Listed.
- 13) A compound is listed only if it was detected in at least one of the samples. Compounds that were analyzed for, but not detected, have been omitted.

TABLE 6

**SUMMARY OF VOLATILE ORGANIC COMPOUNDS CONFIRMATION RESULTS**  
**SOIL SAMPLES**  
**LEBLANC CLEANERS**  
**LEWISTON, MAINE**

SAMPLE LOCATION:			SB-09C	SB-09D	SB-09EF	SB-09GH	SB-10A	SB-10B	SB-10C
SAMPLE ID			0091MH-0045	0091MH-0046	0091MH-0047	0091MH-0048	0091MH-0049	0091MH-0050	0091MH-0051
SAMPLE DEPTH:			2 - 3 ft	3 - 4 ft	4 - 6 ft	6 - 8 ft	0 - 1 ft	1 - 2 ft	2 - 3 ft
COMPOUND	EPA RML (HQ=3) Industrial Soil	ME RAG Commercial Soil	µg/Kg						
cis-1,2-Dichloroethylene	7,000,000	3,400,000	ND	1,400	250	ND	ND	ND	ND
1,3,5-Trimethylbenzene	35,000,000	NL	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	730,000	NL	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	9,500,000	10,000,000	ND	ND	ND	ND	ND	ND	ND
2-Propanone (acetone)	2,000,000,000	10,000,000	ND	ND	ND	ND	110	ND	ND
Trans-1,2-Dichloroethylene	70,000,000	10,000,000	ND	ND	210	ND	ND	ND	ND
Tetrachloroethylene (PCE)	1,200,000	10,000,000	4,700	6,100	170	ND	ND	ND	ND
Trichloroethylene (TCE)	56,000	850,000	ND	1,300	ND	ND	ND	ND	ND
M/P Xylene	7,100,000	10,000,000	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	30,000,000	NL	ND	ND	ND	ND	ND	ND	ND
Sec-Butylbenzene	350,000,000	NL	ND	ND	ND	ND	ND	ND	ND
Para-Isopropyltoluene	NL	NL	ND	ND	ND	ND	ND	ND	ND
N-Butylbenzene	180,000,000	NL	ND	ND	ND	ND	ND	ND	ND
Naphthalene	1,700,000	10,000,000	ND	ND	ND	ND	ND	ND	ND

**Analysis:**

Samples analyzed by U.S. EPA Office of Environmental Measurement and Evaluation (OEME) using EPA Region I Standard Operating Procedure (SOP) EIASOP-VOAGCMS9, VOAs in Soil High Level Method.

**Note:**

- 1) All Results in micrograms per Kilogram (µg/Kg). Results reported on a dry weight basis.
- 2) ND = Not detected at concentrations exceeding reporting limits.
- 3) ft = feet
- 4) EPA RML = EPA Removal Management Levels for Industrial Soil. Used RML table where Hazard Quotient (HQ) = 3 and Target Risk (TR) =  $10^{-4}$ . Units in µg/Kg.
- 5) \* Sample SB-102D is a duplicate of Sample SB-02D.
- 6) \*\* Sample SB-106B is a duplicate of Sample SB-06B.
- 7) \*\*\* Sample SB-109A is a duplicate of Sample SB-09A.
- 8) ME RAG = Maine Remedial Action Guidelines for a Commercial Worker Exposure Scenario.
- 9) Values bolded and shaded in yellow indicate compounds exceeding ME RAGs for Commercial Soil.
- 10) Values bolded and shaded in red indicate compounds exceeding EPA RML (HQ = 3) for Industrial Soil.
- 11) The EPA RML Industrial Soil value for m-Xylene was used for M/P Xylene.
- 12) NL = Not Listed.
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TABLE 6

**SUMMARY OF VOLATILE ORGANIC COMPOUNDS CONFIRMATION RESULTS**  
**SOIL SAMPLES**  
**LEBLANC CLEANERS**  
**LEWISTON, MAINE**

SAMPLE LOCATION:			SB-10D	SB-102D*	SB-106B**	SB-109A***	SS-01	SS-02	SS-03
SAMPLE ID			0091MH-0052	0091MH-0053	0091MH-0054	0091MH-0055	0091MH-0056	0091MH-0057	0091MH-0058
SAMPLE DEPTH:			3 - 4 ft	3 - 4 ft	1 - 2 ft	0 - 1 ft	0 - 6 in	0 - 6 in	0 - 6 in
COMPOUND	EPA RML (HQ=3) Industrial Soil	ME RAG Commercial Soil	µg/Kg						
cis-1,2-Dichloroethylene	7,000,000	3,400,000	ND	200	ND	1,700	ND	ND	ND
1,3,5-Trimethylbenzene	35,000,000	NL	6,800	ND	400	ND	ND	ND	ND
1,2,4-Trimethylbenzene	730,000	NL	19,000	ND	2,000	ND	ND	ND	ND
Methylene Chloride	9,500,000	10,000,000	ND	ND	ND	ND	ND	ND	ND
2-Propanone (acetone)	2,000,000,000	10,000,000	ND	ND	ND	ND	ND	ND	ND
Trans-1,2-Dichloroethylene	70,000,000	10,000,000	ND	ND	ND	350	ND	ND	ND
Tetrachloroethylene (PCE)	1,200,000	10,000,000	ND	5,800	920	2,000	ND	ND	ND
Trichloroethylene (TCE)	56,000	850,000	ND	200	ND	660	ND	ND	ND
M/P Xylene	7,100,000	10,000,000	5,900	ND	450	ND	ND	ND	ND
Isopropylbenzene	30,000,000	NL	880	ND	ND	ND	ND	ND	ND
Sec-Butylbenzene	350,000,000	NL	ND	ND	ND	ND	ND	ND	ND
Para-Isopropyltoluene	NL	NL	2,300	ND	300	ND	ND	ND	ND
N-Butylbenzene	180,000,000	NL	1,400	ND	310	ND	ND	ND	ND
Naphthalene	1,700,000	10,000,000	4,000	ND	740	ND	ND	ND	ND

**Analysis:**

Samples analyzed by U.S. EPA Office of Environmental Measurement and Evaluation (OEME) using EPA Region I Standard Operating Procedure (SOP) EIASOP-VOAGCMS9, VOAs in Soil High Level Method.

**Note:**

- 1) All Results in micrograms per Kilogram (µg/Kg). Results reported on a dry weight basis.
- 2) ND = Not detected at concentrations exceeding reporting limits.
- 3) ft = feet
- 4) EPA RML = EPA Removal Management Levels for Industrial Soil. Used RML table where Hazard Quotient (HQ) = 3 and Target Risk (TR) =  $10^{-4}$ . Units in µg/Kg.
- 5) \* Sample SB-102D is a duplicate of Sample SB-02D.
- 6) \*\* Sample SB-106B is a duplicate of Sample SB-06B.
- 7) \*\*\* Sample SB-109A is a duplicate of Sample SB-09A.
- 8) ME RAG = Maine Remedial Action Guidelines for a Commercial Worker Exposure Scenario.
- 9) Values bolded and shaded in yellow indicate compounds exceeding ME RAGs for Commercial Soil.
- 10) Values bolded and shaded in red indicate compounds exceeding EPA RML (HQ = 3) for Industrial Soil.
- 11) The EPA RML Industrial Soil value for m-Xylene was used for M/P Xylene.
- 12) NL = Not Listed.
- 13) A compound is listed only if it was detected in at least one of the samples. Compounds that were analyzed for, but not detected, have been omitted.

TABLE 6

**SUMMARY OF VOLATILE ORGANIC COMPOUNDS CONFIRMATION RESULTS**  
**SOIL SAMPLES**  
**LEBLANC CLEANERS**  
**LEWISTON, MAINE**

SAMPLE LOCATION:			SS-04	SS-05	SS-06				
SAMPLE ID:			0091MH-0059	0091MH-0060	0091MH-0061				
SAMPLE DEPTH:			0 - 6 in	0 - 6 in	0 - 6 in				
COMPOUND	EPA RML (HQ=3) Industrial Soil	ME RAG Commercial Soil	µg/Kg						
cis-1,2-Dichloroethylene	7,000,000	3,400,000	ND	ND	ND				
1,3,5-Trimethylbenzene	35,000,000	NL	ND	ND	ND				
1,2,4-Trimethylbenzene	730,000	NL	ND	ND	ND				
Methylene Chloride	9,500,000	10,000,000	ND	ND	ND				
2-Propanone (acetone)	2,000,000,000	10,000,000	330	1,000	570				
Trans-1,2-Dichloroethylene	70,000,000	10,000,000	ND	ND	ND				
Tetrachloroethylene (PCE)	1,200,000	10,000,000	ND	2,000	1,100				
Trichloroethylene (TCE)	56,000	850,000	ND	ND	ND				
M/P Xylene	7,100,000	10,000,000	ND	ND	ND				
Isopropylbenzene	30,000,000	NL	ND	ND	ND				
Sec-Butylbenzene	350,000,000	NL	ND	ND	ND				
Para-Isopropyltoluene	NL	NL	2,100	2,400	5,300				
N-Butylbenzene	180,000,000	NL	ND	ND	ND				
Naphthalene	1,700,000	10,000,000	ND	ND	ND				

**Analysis:**

Samples analyzed by U.S. EPA Office of Environmental Measurement and Evaluation (OEME) using EPA Region I Standard Operating Procedure (SOP) EIASOP-VOAGCMS9, VOAs in Soil High Level Method.

**Note:**

- 1) All Results in micrograms per Kilogram (µg/Kg). Results reported on a dry weight basis.
- 2) ND = Not detected at concentrations exceeding reporting limits.
- 3) ft = feet
- 4) EPA RML = EPA Removal Management Levels for Industrial Soil. Used RML table where Hazard Quotient (HQ) = 3 and Target Risk (TR) =  $10^{-4}$ . Units in µg/Kg.
- 5) \* Sample SB-102D is a duplicate of Sample SB-02D.
- 6) \*\* Sample SB-106B is a duplicate of Sample SB-06B.
- 7) \*\*\* Sample SB-109A is a duplicate of Sample SB-09A.
- 8) ME RAG = Maine Remedial Action Guidelines for a Commercial Worker Exposure Scenario.
- 9) Values bolded and shaded in yellow indicate compounds exceeding ME RAGs for Commercial Soil.
- 10) Values bolded and shaded in red indicate compounds exceeding EPA RML (HQ = 3) for Industrial Soil.
- 11) The EPA RML Industrial Soil value for m-Xylene was used for M/P Xylene.
- 12) NL = Not Listed.
- 13) A compound is listed only if it was detected in at least one of the samples. Compounds that were analyzed for, but not detected, have been omitted.

TABLE 7

**SUMMARY OF SEMIVOLATILE ORGANIC COMPOUNDS CONFIRMATION RESULTS  
SOIL SAMPLES  
LEBLANC CLEANERS  
LEWISTON, MAINE**

SAMPLE LOCATION:	SB-01A	SB-01B	SB-01C	SB-01D	SB-02A	SB-02B	SB-02C	EPA RML (HQ=3) Industrial Soil	ME RAG Commercial Soil
SAMPLE ID	0091MH-0001	0091MH-0002	0091MH-0003	0091MH-0004	0091MH-0005	0091MH-0006	0091MH-0007		
SAMPLE DEPTH:	0 - 1 ft	1 - 2 ft	2 - 3 ft	3 - 4 ft	0 - 1 ft	1 - 2 ft	2 - 3 ft		
<b>COMPOUND</b>									
Acenaphthylene	ND	ND	ND	ND	ND	ND	ND	NL	10,000,000
Benzoic acid	ND	ND	ND	ND	ND	ND	ND	9,800,000,000	10,000,000
Naphthalene	ND	460	ND	900	ND	ND	ND	1,700,000	10,000,000
2-Methylnaphthalene	ND	ND	ND	1,100	ND	ND	ND	9,000,000	360,000
1-Methylnaphthalene	ND	ND	ND	820	ND	ND	ND	7,300,000	NL
Acenaphthene	ND	ND	ND	ND	ND	ND	ND	1,400,000,000	10,000,000
Fluorene	ND	ND	ND	ND	ND	ND	ND	90,000,000	10,000,000
Phenanthrene	ND	ND	ND	ND	ND	ND	ND	NL	10,000,000
Anthracene	ND	ND	ND	ND	ND	ND	ND	680,000,000	10,000,000
Carbazole	ND	ND	ND	ND	ND	ND	ND	NL	140,000
Fluoranthene	ND	ND	ND	ND	ND	ND	ND	90,000,000	10,000,000
Pyrene	300	ND	ND	ND	ND	ND	ND	68,000,000	10,000,000
Butylbenzylphthalate	ND	ND	ND	ND	ND	ND	ND	120,000,000	10,000,000
Benzo(a)anthracene	ND	ND	ND	ND	ND	ND	ND	290,000	35,000
Chrysene	ND	ND	ND	ND	ND	ND	ND	29,000,000	350,000
Bis(2-ethylhexyl)phthalate	1,400	ND	ND	ND	ND	380	ND	16,000,000	210,000
Di-n-octyl phthalate	ND	ND	ND	ND	ND	ND	ND	25,000,000	10,000,000
Benzo(b)fluoranthene	ND	ND	ND	ND	ND	ND	ND	290,000	35,000
Benzo(k)fluoranthene	ND	ND	ND	ND	ND	ND	ND	2,900,000	3,500,000
Benzo(a)pyrene	ND	ND	ND	ND	ND	ND	ND	29,000	3,500
Indeno(1,2,3-cd)pyrene	ND	ND	ND	ND	ND	ND	ND	290,000	35,000
Benzo(g,h,i)perylene	ND	410	ND	ND	ND	ND	ND	NL	10,000,000

**NOTES:**

- 1) Samples analyzed by U.S. EPA Office of Environmental Measurement and Evaluation (OEME) using EPA Region I Standard Operating Procedure (SOP) EIASOP-BNAS3, BNAs in Soil Medium Level.
- 2) All Results in micrograms per Kilogram (µg/Kg). Results reported on a dry weight basis.
- 3) ND = Not detected above reporting limit.
- 4) ft = feet
- 5) EPA RML = EPA Removal Management Levels for Industrial Soil. Used RML table where Hazard Quotient (HQ) = 3 and Target Risk (TR) =  $10^4$ . Units in µg/Kg.
- 6) \* Sample SB-102D is a duplicate of Sample SB-02D.
- 7) \*\* Sample SB-106B is a duplicate of Sample SB-06B.
- 8) \*\*\* Sample SB-109A is a duplicate of Sample SB-09A.
- 9) ME RAG = Maine Remedial Action Guidelines for a Commercial Soil Worker.
- 10) Values bolded and shaded in yellow indicate compounds exceeding ME RAGs for Commercial Soil.
- 11) Values bolded and shaded in red indicate compounds exceeding EPA RML (HQ = 3) for Industrial Soil.
- 12) NL = Not Listed.
- 13) L = Estimated value is below the calibration range.
- 14) A compound is listed only if it was detected in at least one of the samples. Compounds that were analyzed for, but not detected, have been omitted.

**TABLE 7**  
**SUMMARY OF SEMIVOLATILE ORGANIC COMPOUNDS CONFIRMATION RESULTS**  
**SOIL SAMPLES**  
**LEBLANC CLEANERS**  
**LEWISTON, MAINE**

SAMPLE LOCATION:	SB-02D	SB-02E	SB-02F	SB-02H	SB-03A	SB-03B	SB-03C	EPA RML (HQ=3) Industrial Soil	ME RAG Commercial Soil
SAMPLE ID	0091MH-0008	0091MH-0009	0091MH-0010	0091MH-0012	0091MH-0013	0091MH-0014	0091MH-0015		
SAMPLE DEPTH:	3 - 4 ft	4 - 5 ft	5 - 6 ft	6 - 7 ft	0 - 1 ft	1 - 2 ft	2 - 3 ft		
<b>COMPOUND</b>									
Acenaphthylene	ND	ND	ND	ND	ND	ND	220	NL	10,000,000
Benzoic acid	ND	ND	ND	ND	ND	ND	ND	9,800,000,000	10,000,000
Naphthalene	ND	ND	ND	660	ND	ND	340	1,700,000	10,000,000
2-Methylnaphthalene	ND	ND	ND	580	ND	ND	ND	9,000,000	360,000
1-Methylnaphthalene	ND	ND	ND	390	ND	ND	ND	7,300,000	NL
Acenaphthene	ND	ND	ND	ND	ND	ND	ND	1,400,000,000	10,000,000
Fluorene	ND	ND	ND	ND	ND	ND	230	90,000,000	10,000,000
Phenanthrene	ND	ND	ND	ND	ND	720	1,300	NL	10,000,000
Anthracene	ND	ND	ND	ND	ND	ND	350	680,000,000	10,000,000
Carbazole	ND	ND	ND	ND	ND	ND	ND	NL	140,000
Fluoranthene	ND	ND	ND	ND	ND	1,400	2,500	90,000,000	10,000,000
Pyrene	ND	ND	ND	ND	ND	1,700	2,800	68,000,000	10,000,000
Butylbenzylphthalate	ND	ND	ND	ND	ND	ND	ND	120,000,000	10,000,000
Benzo(a)anthracene	ND	ND	ND	ND	ND	710	1,300	290,000	35,000
Chrysene	ND	ND	ND	ND	ND	870	1,600	29,000,000	350,000
Bis(2-ethylhexyl)phthalate	ND	590	ND	ND	ND	ND	ND	16,000,000	210,000
Di-n-octyl phthalate	ND	ND	ND	ND	ND	ND	ND	25,000,000	10,000,000
Benzo(b)fluoranthene	ND	ND	ND	ND	ND	870	1,600	290,000	35,000
Benzo(k)fluoranthene	ND	ND	ND	ND	ND	780	1,600	2,900,000	3,500,000
Benzo(a)pyrene	ND	ND	ND	ND	ND	770	1,500	29,000	3,500
Indeno(1,2,3-cd)pyrene	ND	ND	ND	ND	ND	ND	690	290,000	35,000
Benzo(g,h,i)perylene	ND	ND	ND	ND	ND	ND	800	NL	10,000,000

**NOTES:**

- 1) Samples analyzed by U.S. EPA Office of Environmental Measurement and Evaluation (OEME) using EPA Region I Standard Operating Procedure (SOP) EIASOP-BNAS3, BNAs in Soil Medium Level.
- 2) All Results in micrograms per Kilogram (µg/Kg). Results reported on a dry weight basis.
- 3) ND = Not detected above reporting limit.
- 4) ft = feet
- 5) EPA RML = EPA Removal Management Levels for Industrial Soil. Used RML table where Hazard Quotient (HQ) = 3 and Target Risk (TR) = 10<sup>-4</sup>. Units in µg/Kg.
- 6) \* Sample SB-102D is a duplicate of Sample SB-02D.
- 7) \*\* Sample SB-106B is a duplicate of Sample SB-06B.
- 8) \*\*\* Sample SB-109A is a duplicate of Sample SB-09A.
- 9) ME RAG = Maine Remedial Action Guidelines for a Commercial Soil Worker.
- 10) Values bolded and shaded in yellow indicate compounds exceeding ME RAGs for Commercial Soil.
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**TABLE 7**  
**SUMMARY OF SEMIVOLATILE ORGANIC COMPOUNDS CONFIRMATION RESULTS**  
**SOIL SAMPLES**  
**LEBLANC CLEANERS**  
**LEWISTON, MAINE**

SAMPLE LOCATION:	SB-03D	SB-04A	SB-04B	SB-04C	SB-04D	SB-04F	SB-05A	EPA RML (HQ=3) Industrial Soil	ME RAG Commercial Soil
SAMPLE ID	0091MH-0016	0091MH-0017	0091MH-0018	0091MH-0019	0091MH-0020	0091MH-0022	0091MH-0023		
SAMPLE DEPTH:	3 - 4 ft	0 - 1 ft	1 - 2 ft	2 - 3 ft	3 - 4 ft	5 - 6 ft	0 - 1 ft		
<b>COMPOUND</b>									
Acenaphthylene	ND	ND	ND	ND	250	ND	ND	NL	10,000,000
Benzoic acid	ND	ND	ND	ND	ND	ND	ND	9,800,000,000	10,000,000
Naphthalene	ND	ND	480	630	410	480	ND	1,700,000	10,000,000
2-Methylnaphthalene	ND	ND	280	380	ND	210	ND	9,000,000	360,000
1-Methylnaphthalene	ND	ND	ND	ND	ND	ND	ND	7,300,000	NL
Acenaphthene	ND	ND	ND	ND	ND	ND	ND	1,400,000,000	10,000,000
Fluorene	ND	ND	ND	ND	ND	ND	ND	90,000,000	10,000,000
Phenanthrene	290	ND	520	670	990	ND	ND	NL	10,000,000
Anthracene	ND	ND	ND	ND	ND	ND	ND	680,000,000	10,000,000
Carbazole	ND	ND	ND	ND	ND	ND	ND	NL	140,000
Fluoranthene	380	ND	970	870	1,600	ND	ND	90,000,000	10,000,000
Pyrene	400	ND	900	860	1,500	ND	ND	68,000,000	10,000,000
Butylbenzylphthalate	ND	ND	ND	ND	ND	ND	ND	120,000,000	10,000,000
Benzo(a)anthracene	ND	ND	440	350	690	ND	ND	290,000	35,000
Chrysene	240	ND	630	520	970	ND	ND	29,000,000	350,000
Bis(2-ethylhexyl)phthalate	ND	ND	ND	ND	ND	ND	ND	16,000,000	210,000
Di-n-octyl phthalate	ND	ND	ND	ND	ND	ND	ND	25,000,000	10,000,000
Benzo(b)fluoranthene	260	ND	650	560	1,000	ND	ND	290,000	35,000
Benzo(k)fluoranthene	220	ND	530	460	920	ND	ND	2,900,000	3,500,000
Benzo(a)pyrene	220	ND	560	420	870	ND	ND	29,000	3,500
Indeno(1,2,3-cd)pyrene	ND	ND	350	280	ND	ND	ND	290,000	35,000
Benzo(g,h,i)perylene	ND	ND	440	360	ND	ND	ND	NL	10,000,000

**NOTES:**

- 1) Samples analyzed by U.S. EPA Office of Environmental Measurement and Evaluation (OEME) using EPA Region I Standard Operating Procedure (SOP) EIASOP-BNAS3, BNAs in Soil Medium Level.
- 2) All Results in micrograms per Kilogram (µg/Kg). Results reported on a dry weight basis.
- 3) ND = Not detected above reporting limit.
- 4) ft = feet
- 5) EPA RML = EPA Removal Management Levels for Industrial Soil. Used RML table where Hazard Quotient (HQ) = 3 and Target Risk (TR) = 10<sup>-4</sup>. Units in µg/Kg.
- 6) \* Sample SB-102D is a duplicate of Sample SB-02D.
- 7) \*\* Sample SB-106B is a duplicate of Sample SB-06B.
- 8) \*\*\* Sample SB-109A is a duplicate of Sample SB-09A.
- 9) ME RAG = Maine Remedial Action Guidelines for a Commercial Soil Worker.
- 10) Values bolded and shaded in yellow indicate compounds exceeding ME RAGs for Commercial Soil.
- 11) Values bolded and shaded in red indicate compounds exceeding EPA RML (HQ = 3) for Industrial Soil.
- 12) NL = Not Listed.
- 13) L = Estimated value is below the calibration range.
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TABLE 7

**SUMMARY OF SEMIVOLATILE ORGANIC COMPOUNDS CONFIRMATION RESULTS  
SOIL SAMPLES  
LEBLANC CLEANERS  
LEWISTON, MAINE**

SAMPLE LOCATION:	SB-05B	SB-05C	SB-05D	SB-06A	SB-06B	SB-06C	SB-06D	EPA RML (HQ=3) Industrial Soil	ME RAG Commercial Soil
SAMPLE ID	0091MH-0024	0091MH-0025	0091MH-0026	0091MH-0027	0091MH-0028	0091MH-0029	0091MH-0030		
SAMPLE DEPTH:	4 - 6 ft	2 - 3 ft	3 - 4 ft	0 - 1 ft	1 - 2 ft	2 - 3 ft	3 - 4 ft		
<b>COMPOUND</b>									
Acenaphthylene	ND	ND	ND	ND	ND	ND	ND	NL	10,000,000
Benzoic acid	ND	ND	ND	ND	ND	ND	ND	9,800,000,000	10,000,000
Naphthalene	330	ND	ND	3,400	ND	ND	ND	1,700,000	10,000,000
2-Methylnaphthalene	ND	ND	ND	720	ND	ND	ND	9,000,000	360,000
1-Methylnaphthalene	ND	ND	ND	ND	ND	ND	ND	7,300,000	NL
Acenaphthene	ND	ND	ND	ND	ND	ND	ND	1,400,000,000	10,000,000
Fluorene	ND	ND	ND	ND	ND	ND	ND	90,000,000	10,000,000
Phenanthrene	ND	ND	ND	ND	520	ND	ND	NL	10,000,000
Anthracene	ND	ND	ND	ND	ND	ND	ND	680,000,000	10,000,000
Carbazole	ND	ND	ND	ND	ND	ND	ND	NL	140,000
Fluoranthene	310	570	ND	ND	960	ND	ND	90,000,000	10,000,000
Pyrene	300	460	ND	ND	1,300	ND	ND	68,000,000	10,000,000
Butylbenzylphthalate	ND	ND	ND	ND	ND	ND	ND	120,000,000	10,000,000
Benzo(a)anthracene	ND	ND	ND	ND	500	ND	ND	290,000	35,000
Chrysene	ND	ND	ND	ND	770	ND	ND	29,000,000	350,000
Bis(2-ethylhexyl)phthalate	ND	ND	ND	ND	ND	ND	ND	16,000,000	210,000
Di-n-octyl phthalate	ND	ND	ND	ND	ND	ND	ND	25,000,000	10,000,000
Benzo(b)fluoranthene	ND	ND	ND	ND	980	ND	ND	290,000	35,000
Benzo(k)fluoranthene	ND	ND	ND	ND	790	ND	ND	2,900,000	3,500,000
Benzo(a)pyrene	ND	ND	ND	ND	730	ND	ND	29,000	3,500
Indeno(1,2,3-cd)pyrene	ND	ND	ND	ND	590	ND	ND	290,000	35,000
Benzo(g,h,i)perylene	ND	ND	ND	ND	810	ND	ND	NL	10,000,000

**NOTES:**

- 1) Samples analyzed by U.S. EPA Office of Environmental Measurement and Evaluation (OEME) using EPA Region I Standard Operating Procedure (SOP) EIASOP-BNAS3, BNAs in Soil Medium Level.
- 2) All Results in micrograms per Kilogram (µg/Kg). Results reported on a dry weight basis.
- 3) ND = Not detected above reporting limit.
- 4) ft = feet
- 5) EPA RML = EPA Removal Management Levels for Industrial Soil. Used RML table where Hazard Quotient (HQ) = 3 and Target Risk (TR) =  $10^4$ . Units in µg/Kg.
- 6) \* Sample SB-102D is a duplicate of Sample SB-02D.
- 7) \*\* Sample SB-106B is a duplicate of Sample SB-06B.
- 8) \*\*\* Sample SB-109A is a duplicate of Sample SB-09A.
- 9) ME RAG = Maine Remedial Action Guidelines for a Commercial Soil Worker.
- 10) Values bolded and shaded in yellow indicate compounds exceeding ME RAGs for Commercial Soil.
- 11) Values bolded and shaded in red indicate compounds exceeding EPA RML (HQ = 3) for Industrial Soil.
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**TABLE 7**  
**SUMMARY OF SEMIVOLATILE ORGANIC COMPOUNDS CONFIRMATION RESULTS**  
**SOIL SAMPLES**  
**LEBLANC CLEANERS**  
**LEWISTON, MAINE**

SAMPLE LOCATION:	SB-07A	SB-07B	SB-07C	SB-07D	SB-07EF	SB-07GH	SB-08A	EPA RML (HQ=3) Industrial Soil	ME RAG Commercial Soil
SAMPLE ID	0091MH-0031	0091MH-0032	0091MH-0033	0091MH-0034	0091MH-0035	0091MH-0036	0091MH-0037		
SAMPLE DEPTH:	0 - 1 ft	1 - 2 ft	2 - 3 ft	3 - 4 ft	4 - 5.5 ft	5.5 - 7 ft	0 - 1 ft		
<b>COMPOUND</b>									
Acenaphthylene	ND	ND	ND	ND	ND	ND	520	NL	10,000,000
Benzoic acid	ND	ND	ND	ND	ND	ND	470 L	9,800,000,000	10,000,000
Naphthalene	ND	ND	ND	ND	ND	ND	ND	1,700,000	10,000,000
2-Methylnaphthalene	ND	ND	ND	ND	ND	ND	ND	9,000,000	360,000
1-Methylnaphthalene	ND	ND	ND	ND	ND	ND	ND	7,300,000	NL
Acenaphthene	ND	ND	ND	ND	ND	ND	ND	1,400,000,000	10,000,000
Fluorene	ND	ND	ND	ND	ND	ND	270	90,000,000	10,000,000
Phenanthrene	830	ND	ND	ND	ND	ND	4,200	NL	10,000,000
Anthracene	ND	ND	280	ND	ND	ND	730	680,000,000	10,000,000
Carbazole	ND	ND	ND	ND	ND	ND	560	NL	140,000
Fluoranthene	2,100	290	480	ND	ND	ND	6,700	90,000,000	10,000,000
Pyrene	1,800	260	450	ND	ND	ND	6,500	68,000,000	10,000,000
Butylbenzylphthalate	260	ND	ND	ND	ND	ND	1,600	120,000,000	10,000,000
Benzo(a)anthracene	980	ND	330	ND	ND	ND	2,700	290,000	35,000
Chrysene	1,300	320	470	ND	ND	ND	3,100	29,000,000	350,000
Bis(2-ethylhexyl)phthalate	ND	ND	ND	ND	ND	ND	22,000	16,000,000	210,000
Di-n-octyl phthalate	ND	ND	ND	ND	ND	ND	1,200	25,000,000	10,000,000
Benzo(b)fluoranthene	1,300	420	580	ND	ND	ND	2,400	290,000	35,000
Benzo(k)fluoranthene	1,200	340	470	ND	ND	ND	2,300	2,900,000	3,500,000
Benzo(a)pyrene	1,100	270	420	ND	ND	ND	2,300	29,000	3,500
Indeno(1,2,3-cd)pyrene	600	240	260	ND	ND	ND	900	290,000	35,000
Benzo(g,h,i)perylene	660	280	290	ND	ND	ND	800	NL	10,000,000

**NOTES:**

- 1) Samples analyzed by U.S. EPA Office of Environmental Measurement and Evaluation (OEME) using EPA Region I Standard Operating Procedure (SOP) EIASOP-BNAS3, BNAs in Soil Medium Level.
- 2) All Results in micrograms per Kilogram (µg/Kg). Results reported on a dry weight basis.
- 3) ND = Not detected above reporting limit.
- 4) ft = feet
- 5) EPA RML = EPA Removal Management Levels for Industrial Soil. Used RML table where Hazard Quotient (HQ) = 3 and Target Risk (TR) = 10<sup>-4</sup>. Units in µg/Kg.
- 6) \* Sample SB-102D is a duplicate of Sample SB-02D.
- 7) \*\* Sample SB-106B is a duplicate of Sample SB-06B.
- 8) \*\*\* Sample SB-109A is a duplicate of Sample SB-09A.
- 9) ME RAG = Maine Remedial Action Guidelines for a Commercial Soil Worker.
- 10) Values bolded and shaded in yellow indicate compounds exceeding ME RAGs for Commercial Soil.
- 11) Values bolded and shaded in red indicate compounds exceeding EPA RML (HQ = 3) for Industrial Soil.
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TABLE 7

**SUMMARY OF SEMIVOLATILE ORGANIC COMPOUNDS CONFIRMATION RESULTS  
SOIL SAMPLES  
LEBLANC CLEANERS  
LEWISTON, MAINE**

SAMPLE LOCATION:	SB-08B	SB-08C	SB-08D	SB-08EF	SB-08GH	SB-09A	SB-09B	EPA RML (HQ=3) Industrial Soil	ME RAG Commercial Soil
SAMPLE ID	0091MH-0038	0091MH-0039	0091MH-0040	0091MH-0041	0091MH-0042	0091MH-0043	0091MH-0044		
SAMPLE DEPTH:	1 - 2 ft	2 - 3 ft	3 - 4 ft	4 - 5.5 ft	5.5 - 7 ft	0 - 1 ft	1 - 2 ft		
<b>COMPOUND</b>									
Acenaphthylene	ND	ND	ND	ND	ND	290	ND	NL	10,000,000
Benzoic acid	ND	ND	ND	ND	ND	ND	ND	9,800,000,000	10,000,000
Naphthalene	ND	ND	450	ND	ND	ND	340	1,700,000	10,000,000
2-Methylnaphthalene	ND	ND	300	ND	ND	ND	ND	9,000,000	360,000
1-Methylnaphthalene	ND	ND	ND	ND	ND	ND	ND	7,300,000	NL
Acenaphthene	ND	ND	ND	ND	ND	ND	ND	1,400,000,000	10,000,000
Fluorene	ND	ND	ND	ND	ND	ND	ND	90,000,000	10,000,000
Phenanthrene	1,700	820	ND	ND	ND	1,400	340	NL	10,000,000
Anthracene	ND	ND	ND	ND	ND	ND	ND	680,000,000	10,000,000
Carbazole	ND	ND	ND	ND	ND	310	ND	NL	140,000
Fluoranthene	1,800	1,100	ND	ND	ND	2,800	460	90,000,000	10,000,000
Pyrene	1,800	1,100	ND	ND	ND	2,100	350	68,000,000	10,000,000
Butylbenzylphthalate	470	ND	ND	ND	ND	1,200	ND	120,000,000	10,000,000
Benzo(a)anthracene	540	380	ND	ND	ND	970	ND	290,000	35,000
Chrysene	940	520	ND	ND	ND	1,300	ND	29,000,000	350,000
Bis(2-ethylhexyl)phthalate	1,900	ND	ND	4,700	ND	2,100	340	16,000,000	210,000
Di-n-octyl phthalate	ND	ND	ND	ND	ND	ND	ND	25,000,000	10,000,000
Benzo(b)fluoranthene	880	520	ND	ND	ND	1,600	ND	290,000	35,000
Benzo(k)fluoranthene	820	470	ND	ND	ND	1,400	ND	2,900,000	3,500,000
Benzo(a)pyrene	750	500	ND	ND	ND	1,300	ND	29,000	3,500
Indeno(1,2,3-cd)pyrene	440	360	ND	ND	ND	930	ND	290,000	35,000
Benzo(g,h,i)perylene	560	630	ND	ND	ND	1,000	ND	NL	10,000,000

**NOTES:**

- 1) Samples analyzed by U.S. EPA Office of Environmental Measurement and Evaluation (OEME) using EPA Region I Standard Operating Procedure (SOP) EIASOP-BNAS3, BNAs in Soil Medium Level.
- 2) All Results in micrograms per Kilogram (µg/Kg). Results reported on a dry weight basis.
- 3) ND = Not detected above reporting limit.
- 4) ft = feet
- 5) EPA RML = EPA Removal Management Levels for Industrial Soil. Used RML table where Hazard Quotient (HQ) = 3 and Target Risk (TR) = 10<sup>-4</sup>. Units in µg/Kg.
- 6) \* Sample SB-102D is a duplicate of Sample SB-02D.
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- 9) ME RAG = Maine Remedial Action Guidelines for a Commercial Soil Worker.
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**SUMMARY OF SEMIVOLATILE ORGANIC COMPOUNDS CONFIRMATION RESULTS**  
**SOIL SAMPLES**  
**LEBLANC CLEANERS**  
**LEWISTON, MAINE**

SAMPLE LOCATION:	SB-09C	SB-09D	SB-09EF	SB-09GH	SB-10A	SB-10B	SB-10C	EPA RML (HQ=3) Industrial Soil	ME RAG Commercial Soil
SAMPLE ID	0091MH-0045	0091MH-0046	0091MH-0047	0091MH-0048	0091MH-0049	0091MH-0050	0091MH-0051		
SAMPLE DEPTH:	2 - 3 ft	3 - 4 ft	4 - 6 ft	6 - 8 ft	0 - 1 ft	1 - 2 ft	2 - 3 ft		
<b>COMPOUND</b>									
Acenaphthylene	ND	ND	ND	ND	ND	ND	ND	NL	10,000,000
Benzoic acid	ND	ND	ND	ND	ND	ND	ND	9,800,000,000	10,000,000
Naphthalene	ND	2,100	540	ND	ND	ND	310	1,700,000	10,000,000
2-Methylnaphthalene	ND	1,600	400	ND	ND	ND	ND	9,000,000	360,000
1-Methylnaphthalene	ND	480	ND	ND	ND	ND	ND	7,300,000	NL
Acenaphthene	ND	ND	ND	ND	ND	ND	ND	1,400,000,000	10,000,000
Fluorene	ND	ND	ND	ND	ND	ND	ND	90,000,000	10,000,000
Phenanthrene	ND	530	ND	ND	710	ND	ND	NL	10,000,000
Anthracene	ND	ND	ND	ND	ND	ND	ND	680,000,000	10,000,000
Carbazole	ND	ND	ND	ND	ND	ND	ND	NL	140,000
Fluoranthene	520	770	ND	ND	1,800	ND	ND	90,000,000	10,000,000
Pyrene	430	680	ND	ND	1,600	ND	ND	68,000,000	10,000,000
Butylbenzylphthalate	ND	ND	ND	ND	ND	ND	ND	120,000,000	10,000,000
Benzo(a)anthracene	ND	ND	ND	ND	960	ND	ND	290,000	35,000
Chrysene	ND	380	ND	ND	1,300	ND	ND	29,000,000	350,000
Bis(2-ethylhexyl)phthalate	ND	530	ND	ND	530	ND	ND	16,000,000	210,000
Di-n-octyl phthalate	ND	ND	ND	ND	ND	ND	ND	25,000,000	10,000,000
Benzo(b)fluoranthene	550	360	ND	ND	1,500	ND	ND	290,000	35,000
Benzo(k)fluoranthene	440	ND	ND	ND	1,400	ND	ND	2,900,000	3,500,000
Benzo(a)pyrene	480	330	ND	ND	1,200	ND	ND	29,000	3,500
Indeno(1,2,3-cd)pyrene	370	ND	ND	ND	760	ND	ND	290,000	35,000
Benzo(g,h,i)perylene	410	ND	ND	ND	1,100	ND	ND	NL	10,000,000

**NOTES:**

- 1) Samples analyzed by U.S. EPA Office of Environmental Measurement and Evaluation (OEME) using EPA Region I Standard Operating Procedure (SOP) EIASOP-BNAS3, BNAs in Soil Medium Level.
- 2) All Results in micrograms per Kilogram (µg/Kg). Results reported on a dry weight basis.
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- 9) ME RAG = Maine Remedial Action Guidelines for a Commercial Soil Worker.
- 10) Values bolded and shaded in yellow indicate compounds exceeding ME RAGs for Commercial Soil.
- 11) Values bolded and shaded in red indicate compounds exceeding EPA RML (HQ = 3) for Industrial Soil.
- 12) NL = Not Listed.
- 13) L = Estimated value is below the calibration range.
- 14) A compound is listed only if it was detected in at least one of the samples. Compounds that were analyzed for, but not detected, have been omitted.

**TABLE 7**  
**SUMMARY OF SEMIVOLATILE ORGANIC COMPOUNDS CONFIRMATION RESULTS**  
**SOIL SAMPLES**  
**LEBLANC CLEANERS**  
**LEWISTON, MAINE**

SAMPLE LOCATION:	SB-10D	SB-102D*	SB-106B**	SB-109A***	SS-01	SS-02	SS-03	EPA RML (HQ=3) Industrial Soil	ME RAG Commercial Soil
SAMPLE ID	0091MH-0052	0091MH-0053	0091MH-0054	0091MH-0055	0091MH-0056	0091MH-0057	0091MH-0058		
SAMPLE DEPTH:	3 - 4 ft	3 - 4 ft	1 - 2 ft	0 - 1 ft	0 - 6 in	0 - 6 in	0 - 6 in		
<b>COMPOUND</b>									
Acenaphthylene	ND	ND	ND	ND	3,900	ND	ND	NL	10,000,000
Benzoic acid	ND	ND	ND	770	ND	ND	940	9,800,000,000	10,000,000
Naphthalene	2,000	ND	3,900	ND	ND	ND	ND	1,700,000	10,000,000
2-Methylnaphthalene	490	ND	ND	ND	ND	ND	ND	9,000,000	360,000
1-Methylnaphthalene	290	ND	ND	ND	ND	ND	ND	7,300,000	NL
Acenaphthene	ND	ND	ND	ND	ND	ND	ND	1,400,000,000	10,000,000
Fluorene	ND	ND	ND	ND	ND	ND	ND	90,000,000	10,000,000
Phenanthrene	ND	ND	ND	1,000	13,000	6,700	1,700	NL	10,000,000
Anthracene	ND	ND	ND	ND	ND	ND	ND	680,000,000	10,000,000
Carbazole	ND	ND	ND	ND	ND	ND	ND	NL	140,000
Fluoranthene	ND	ND	ND	2,300	25,000	16,000	3,700	90,000,000	10,000,000
Pyrene	ND	ND	1,400	2,000	35,000	18,000	3,000	68,000,000	10,000,000
Butylbenzylphthalate	ND	ND	ND	2,400	ND	3,800	680	120,000,000	10,000,000
Benzo(a)anthracene	ND	ND	ND	770	12,000	8,600	1,400	290,000	35,000
Chrysene	ND	ND	ND	1,100	17,000	9,700	2,000	29,000,000	350,000
Bis(2-ethylhexyl)phthalate	ND	ND	ND	ND	ND	6,000	640	16,000,000	210,000
Di-n-octyl phthalate	ND	ND	ND	ND	ND	ND	ND	25,000,000	10,000,000
Benzo(b)fluoranthene	ND	ND	ND	1,100	10,000	9,700	2,100	290,000	35,000
Benzo(k)fluoranthene	ND	ND	ND	1,000	9,200	9,900	1,800	2,900,000	3,500,000
Benzo(a)pyrene	ND	ND	ND	920	11,000	8,900	1,600	29,000	3,500
Indeno(1,2,3-cd)pyrene	ND	ND	ND	810	6,600	6,200	900	290,000	35,000
Benzo(g,h,i)perylene	ND	ND	ND	950	9,300	7,100	990	NL	10,000,000

**NOTES:**

- 1) Samples analyzed by U.S. EPA Office of Environmental Measurement and Evaluation (OEME) using EPA Region I Standard Operating Procedure (SOP) EIASOP-BNAS3, BNAs in Soil Medium Level.
- 2) All Results in micrograms per Kilogram (µg/Kg). Results reported on a dry weight basis.
- 3) ND = Not detected above reporting limit.
- 4) ft = feet
- 5) EPA RML = EPA Removal Management Levels for Industrial Soil. Used RML table where Hazard Quotient (HQ) = 3 and Target Risk (TR) = 10<sup>-4</sup>. Units in µg/Kg.
- 6) \* Sample SB-102D is a duplicate of Sample SB-02D.
- 7) \*\* Sample SB-106B is a duplicate of Sample SB-06B.
- 8) \*\*\* Sample SB-109A is a duplicate of Sample SB-09A.
- 9) ME RAG = Maine Remedial Action Guidelines for a Commercial Soil Worker.
- 10) Values bolded and shaded in yellow indicate compounds exceeding ME RAGs for Commercial Soil.
- 11) Values bolded and shaded in red indicate compounds exceeding EPA RML (HQ = 3) for Industrial Soil.
- 12) NL = Not Listed.
- 13) L = Estimated value is below the calibration range.
- 14) A compound is listed only if it was detected in at least one of the samples. Compounds that were analyzed for, but not detected, have been omitted.

**TABLE 7**  
**SUMMARY OF SEMIVOLATILE ORGANIC COMPOUNDS CONFIRMATION RESULTS**  
**SOIL SAMPLES**  
**LEBLANC CLEANERS**  
**LEWISTON, MAINE**

SAMPLE LOCATION:	SS-04	SS-05	SS-06					EPA RML (HQ=3) Industrial Soil	ME RAG Commercial Soil
SAMPLE ID	0091MH-0059	0091MH-0060	0091MH-0061						
SAMPLE DEPTH:	0 - 6 in	0 - 6 in	0 - 6 in						
COMPOUND									
Acenaphthylene	ND	ND	ND					NL	10,000,000
Benzoic acid	ND	ND	ND					9,800,000,000	10,000,000
Naphthalene	ND	ND	ND					1,700,000	10,000,000
2-Methylnaphthalene	ND	ND	ND					9,000,000	360,000
1-Methylnaphthalene	ND	ND	ND					7,300,000	NL
Acenaphthene	ND	ND	ND					1,400,000,000	10,000,000
Fluorene	ND	ND	ND					90,000,000	10,000,000
Phenanthrene	5,700	2,200	14,000					NL	10,000,000
Anthracene	ND	ND	ND					680,000,000	10,000,000
Carbazole	ND	ND	ND					NL	140,000
Fluoranthene	12,000	4,700	19,000					90,000,000	10,000,000
Pyrene	9,100	5,100	16,000					68,000,000	10,000,000
Butylbenzylphthalate	ND	420	ND					120,000,000	10,000,000
Benzo(a)anthracene	4,900	1,700	7,600					290,000	35,000
Chrysene	6,000	2,300	8,300					29,000,000	350,000
Bis(2-ethylhexyl)phthalate	ND	ND	ND					16,000,000	210,000
Di-n-octyl phthalate	ND	ND	ND					25,000,000	10,000,000
Benzo(b)fluoranthene	5,500	2,300	6,900					290,000	35,000
Benzo(k)fluoranthene	5,600	2,000	6,800					2,900,000	3,500,000
Benzo(a)pyrene	4,500	1,800	6,300					29,000	3,500
Indeno(1,2,3-cd)pyrene	ND	ND	ND					290,000	35,000
Benzo(g,h,i)perylene	ND	ND	3,200					NL	10,000,000

**NOTES:**

- 1) Samples analyzed by U.S. EPA Office of Environmental Measurement and Evaluation (OEME) using EPA Region I Standard Operating Procedure (SOP) EIASOP-BNAS3, BNAs in Soil Medium Level.
- 2) All Results in micrograms per Kilogram (µg/Kg). Results reported on a dry weight basis.
- 3) ND = Not detected above reporting limit.
- 4) ft = feet
- 5) EPA RML = EPA Removal Management Levels for Industrial Soil. Used RML table where Hazard Quotient (HQ) = 3 and Target Risk (TR) = 10<sup>-4</sup>. Units in µg/Kg.
- 6) \* Sample SB-102D is a duplicate of Sample SB-02D.
- 7) \*\* Sample SB-106B is a duplicate of Sample SB-06B.
- 8) \*\*\* Sample SB-109A is a duplicate of Sample SB-09A.
- 9) ME RAG = Maine Remedial Action Guidelines for a Commercial Soil Worker.
- 10) Values bolded and shaded in yellow indicate compounds exceeding ME RAGs for Commercial Soil.
- 11) Values bolded and shaded in red indicate compounds exceeding EPA RML (HQ = 3) for Industrial Soil.
- 12) NL = Not Listed.
- 13) L = Estimated value is below the calibration range.
- 14) A compound is listed only if it was detected in at least one of the samples. Compounds that were analyzed for, but not detected, have been omitted.



TABLE 8

**SUMMARY OF METALS CONFIRMATION RESULTS  
SOIL SAMPLES  
LEBLANC CLEANERS  
LEWISTON, MAINE**

SAMPLE LOCATION:	SB-01B	SB-03B	SB-04A	SB-04C	SB-05D	SB-06B	SB-07C	EPA RML (HQ=3) Industrial Soil	ME RAG Commercial Soil
SAMPLE ID	0091MH-0002	0091MH-0014	0091MH-0017	0091MH-0019	0091MH-0026	0091MH-0028	0091MH-0033		
SAMPLE DEPTH:	1 - 2 ft	1 - 2 ft	0 - 1 ft	2 - 3 ft	3 - 4 ft	1 - 2 ft	2 - 3 ft		
METAL	mg/Kg								
Silver	7.6	1.7	ND	4.3	ND	4.2	ND	18,000	850
Aluminum	20,000	18,000	9,700	13,000	26,000	11,000	23,000	340,000	1,000,000
Arsenic	15	14	10	13	9.7	18	14	300	4.2
Barium	460	210	36	160	150	250	170	650,000	10,000
Beryllium	1.4	1.0	ND	ND	ND	1.0	ND	7,300	340
Calcium	17,000	4,500	3,300	4,100	5,300	4,100	4,300	6,900	NL
Cadmium	2.4	ND	ND	ND	ND	1.6	ND	2,900	94
Cobalt	8.9	14	26	8.9	12	9.4	13	1,000	510
Chromium	57	39	21	41	47	40	51	630	10000 <sup>†</sup>
Copper	140	50	17	87	78	120	69	140,000	10,000
Iron	20,000	22,000	12,000	19,000	30,000	18,000	29,000	2,500,000	1,000,000
Magnesium	5,900	5,400	3,300	4,200	6,700	3,000	6,900	NL	NL
Manganese	690	330	200	310	410	230	420	77,000	10,000
Nickel	27	29	22	26	30	25	36	NL	5,100
Lead	580	120	4.7	190	2,300	220	150	800	1,100
Antimony	2 J1	ND	ND	ND	ND	ND	ND	1,400	680
Vanadium	39	40	21	35	51	31	51	17,000	10,000
Zinc	610	170	26	220	300	280	250	1,100,000	10,000

**NOTES:**

- 1) Samples analyzed by U.S. EPA Office of Environmental Measurement and Evaluation (OEME) using EPA Region I Standard Operating Procedure (SOP) EIASOP-OPTIMAS0, Metals in Soil Medium Level by ICP.
- 2) All results in milligrams per Kilogram (mg/Kg). Results reported on a dry weight basis.
- 3) ND = Not detected above reporting limit.
- 4) ft = feet
- 5) in = inches
- 6) <sup>†</sup> = ME RAG value for chromium listed is for chromium (+3) while the EPA RML value for chromium listed is for hexavalent chromium. However, analysis performed was for total chromium.
- 7) EPA RML = EPA Removal Management Levels for Industrial Soil. Used RML table where Hazard Quotient (HQ) = 3 and Target Risk (TR) = 10<sup>-4</sup>. Units converted to mg/Kg.
- 8) \*\* Sample SB-106B is a duplicate of Sample SB-06B.
- 9) ME RAG = Maine Remedial Action Guidelines for a Commercial Worker Exposure Scenario.
- 10) Values bolded and shaded in yellow indicate compounds exceeding ME RAGs for Commercial Soil.
- 11) Values bolded and shaded in red indicate compounds exceeding EPA RML (HQ = 3) for Industrial Soil.
- 12) NL = Not Listed.
- 13) A metal is listed only if it was detected in at least one of the samples. Compounds that were analyzed for, but not detected, have been omitted.
- 14) J1 = Estimated value due to MS recovery outside acceptance criteria.

TABLE 8

**SUMMARY OF METALS CONFIRMATION RESULTS  
SOIL SAMPLES  
LEBLANC CLEANERS  
LEWISTON, MAINE**

SAMPLE LOCATION:	SB-08B	SB-09B	SB-10A	SB-10D	SB-106B**	SS-01		EPA RML (HQ=3) Industrial Soil	ME RAG Commercial Soil
SAMPLE ID	0091MH-0038	0091MH-0044	0091MH-0049	0091MH-0052	0091MH-0054	0091MH-0056			
SAMPLE DEPTH:	1 - 2 ft	1 - 2 ft	0 - 1 ft	3 - 4 ft	1 - 2 ft	0 - 6 in			
METAL	mg/Kg								
Silver	3.0	10	ND	ND	3.4	ND		18,000	850
Aluminum	23,000	18,000	13,000	15,000	11,000	11,000		340,000	1,000,000
Arsenic	11	12	ND	7.8	17	13		300	4.2
Barium	190	260	240	60	230	46		650,000	10,000
Beryllium	ND	1.0	ND	ND	1.0	ND		7,300	340
Calcium	3,800	3,700	7,300	2,500	4,100	2,300		6,900	NL
Cadmium	ND	3.4	ND	ND	1.5	ND		2,900	94
Cobalt	11	10	ND	10	9.0	5.4		1,000	510
Chromium	53	68	250	35	37	41		630	10,000
Copper	100	110	350	21	130	28		140,000	10,000
Iron	25,000	23,000	20,000	18,000	16,000	17,000		2,500,000	1,000,000
Magnesium	7,000	8,200	4,000	5,200	2,900	3,600		NL	NL
Manganese	400	360	210	220	190	180		77,000	10,000
Nickel	33	33	25	28	24	21		NL	5,100
Lead	170	430	660	16	210	500		800	1,100
Antimony	ND	ND	ND	ND	ND	ND		1,400	680
Vanadium	47	42	28	36	30	46		17,000	10,000
Zinc	330	550	8,100	160	260	610		1,100,000	10,000

**NOTES:**

- 1) Samples analyzed by U.S. EPA Office of Environmental Measurement and Evaluation (OEME) using EPA Region I Standard Operating Procedure (SOP) EIASOP-OPTIMAS0, Metals in Soil Medium Level by ICP.
- 2) All results in milligrams per Kilogram (mg/Kg). Results reported on a dry weight basis.
- 3) ND = Not detected above reporting limit.
- 4) ft = feet
- 5) in = inches
- 6) <sup>†</sup> = ME RAG value for chromium listed is for chromium (+3) while the EPA RML value for chromium listed is for hexavalent chromium. However, analysis performed was for total chromium.
- 7) EPA RML = EPA Removal Management Levels for Industrial Soil. Used RML table where Hazard Quotient (HQ) = 3 and Target Risk (TR) = 10<sup>-4</sup>. Units converted to mg/Kg.
- 8) \*\* Sample SB-106B is a duplicate of Sample SB-06B.
- 9) ME RAG = Maine Remedial Action Guidelines for a Commercial Worker Exposure Scenario.
- 10) Values bolded and shaded in yellow indicate compounds exceeding ME RAGs for Commercial Soil.
- 11) Values bolded and shaded in red indicate compounds exceeding EPA RML (HQ = 3) for Industrial Soil.
- 12) NL = Not Listed.
- 13) A metal is listed only if it was detected in at least one of the samples. Compounds that were analyzed for, but not detected, have been omitted.
- 14) J1 = Estimated value due to MS recovery outside acceptance criteria.

TABLE 9

**SUMMARY OF VOLATILE ORGANIC COMPOUNDS RESULTS  
DRUM PRODUCT SAMPLES  
LEBLANC CLEANERS  
LEWISTON, MAINE**

SAMPLE LOCATION:	DP-01	DP-02	DP-03	DP-04	DP-05		
SAMPLE ID	0091MH-0090	0091MH-0091	0091MH-0092	0091MH-0093	0091MH-0094		
COMPOUND	µg/Kg						
2-Propanone (acetone)	ND	19,000	ND	ND	ND		
Tetrachloroethylene (PCE)	ND	190,000	ND	ND	ND		

**NOTES:**

- 1) Samples analyzed by U.S. EPA Office of Environmental Measurement and Evaluation (OEME) using EPA Region I Standard Operating Procedure (SOP) EIASOP-VOAGCMS9, VOAs in Soil High Level Method.
- 2) All Results in micrograms per Kilogram (µg/Kg).
- 3) ND = Not detected.
- 4) A compound is listed only if it was detected in at least one of the samples. Compounds that were analyzed for, but not detected, have been omitted.

TABLE 10

**SUMMARY OF SEMIVOLATILE ORGANIC COMPOUNDS RESULTS  
DRUM PRODUCT SAMPLES  
LEBLANC CLEANERS  
LEWISTON, MAINE**

SAMPLE LOCATION:	DP-01	DP-02	DP-03	DP-04	DP-05		
SAMPLE ID	0091MH-0090	0091MH-0091	0091MH-0092	0091MH-0093	0091MH-0094		
COMPOUND	mg/Kg						
Butylbenzylphthalate	ND	ND	ND	ND	88		
Benzo(b)fluoranthene	ND	ND	ND	ND	120		
Benzo(k)fluoranthene	ND	ND	ND	ND	83		

**NOTES:**

- 1) Samples analyzed by U.S. EPA Office of Environmental Measurement and Evaluation (OEME) using EPA Region I Standard Operating Procedure (SOP) EIASOP-BNAP3, BNAs in Product.
- 2) All Results in milligrams per Kilogram (mg/Kg).
- 3) ND = Not detected.
- 4) A compound is listed only if it was detected in at least one of the samples. Compounds that were analyzed for, but not detected, have been omitted.

## Appendix C

### Photodocumentation Log

**PHOTODOCUMENTATION LOG**  
**LeBlanc Cleaners • Lewiston, Maine**



**SCENE:** View of sub-slab soil gas well SG-01.

**DATE:** 28 April 2016

**PHOTOGRAPHER:** K. Robinson

**TIME:** 0947 hours

**CAMERA:** iPhone 6



**SCENE:** View of sub-slab soil gas well SG-01.

**DATE:** 28 April 2016

**PHOTOGRAPHER:** K. Robinson

**TIME:** 0947 hours

**CAMERA:** iPhone 6



**PHOTODOCUMENTATION LOG**  
**LeBlanc Cleaners • Lewiston, Maine**



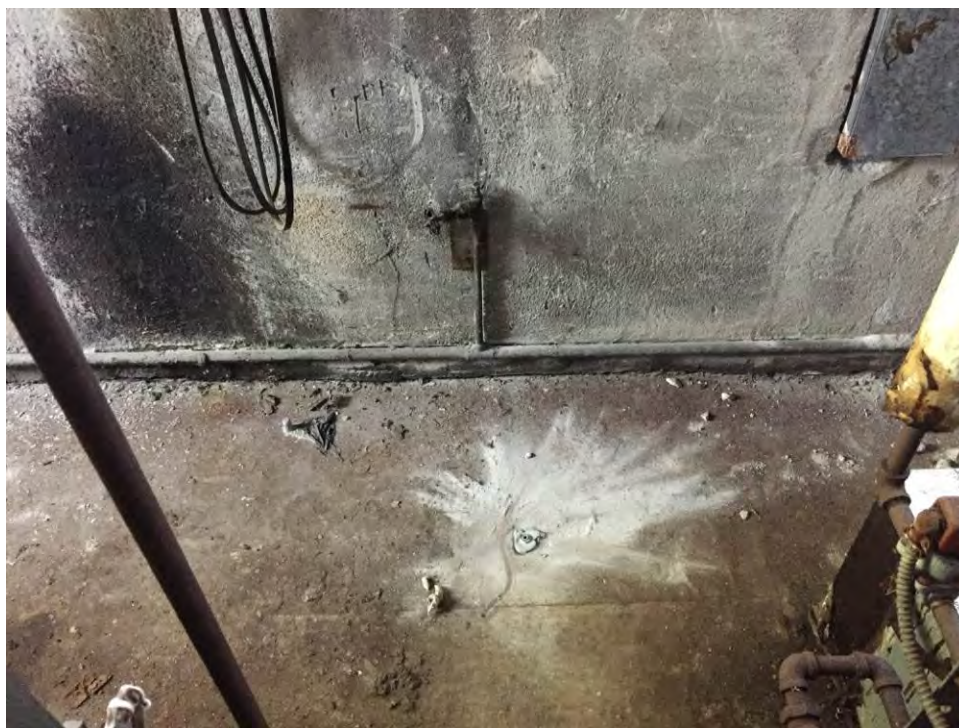
**SCENE:** View of sub-slab soil gas well SG-02.

**DATE:** 28 April 2016

**PHOTOGRAPHER:** K. Robinson

**TIME:** 1007 hours

**CAMERA:** iPhone 6



**SCENE:** View of sub-slab soil gas well SG-03.

**DATE:** 28 April 2016

**PHOTOGRAPHER:** K. Robinson

**TIME:** 1026 hours

**CAMERA:** iPhone 6



**PHOTODOCUMENTATION LOG**  
**LeBlanc Cleaners • Lewiston, Maine**



**SCENE:** View of soil boring location SB-02.

**DATE:** 28 April 2016

**PHOTOGRAPHER:** C. Dupree

**TIME:** 1028 hours

**CAMERA:** iPhone 6



**SCENE:** View of soil boring location SB-03.

**DATE:** 28 April 2016

**PHOTOGRAPHER:** C. Dupree

**TIME:** 1028 hours

**CAMERA:** iPhone 6

**PHOTODOCUMENTATION LOG**  
**LeBlanc Cleaners • Lewiston, Maine**



**SCENE:** View of soil boring location SB-04.

**DATE:** 28 April 2016

**PHOTOGRAPHER:** C. Dupree

**TIME:** 1028 hours

**CAMERA:** iPhone 6



**SCENE:** View of soil boring location SB-05.

**DATE:** 28 April 2016

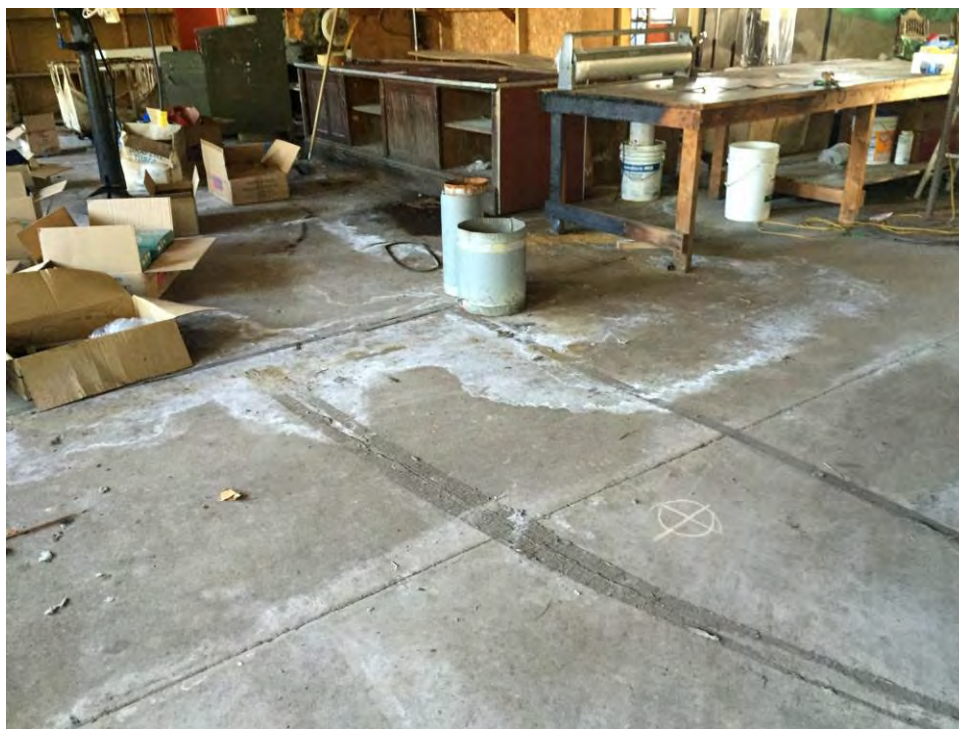
**PHOTOGRAPHER:** C. Dupree

**TIME:** 1029 hours

**CAMERA:** iPhone 6



**PHOTODOCUMENTATION LOG**  
**LeBlanc Cleaners • Lewiston, Maine**



**SCENE:** View of soil boring location SB-06.

**DATE:** 28 April 2016

**PHOTOGRAPHER:** C. Dupree

**TIME:** 1029 hours

**CAMERA:** iPhone 6



**SCENE:** View of sub-slab soil gas well SG-04.

**DATE:** 28 April 2016

**PHOTOGRAPHER:** K. Robinson

**TIME:** 1043 hours

**CAMERA:** iPhone 6



**PHOTODOCUMENTATION LOG**  
**LeBlanc Cleaners • Lewiston, Maine**



**SCENE:** View of sub-slab soil gas well SG-05.

**DATE:** 28 April 2016

**PHOTOGRAPHER:** K. Robinson

**TIME:** 1043 hours

**CAMERA:** iPhone 6



**SCENE:** View of soil boring SB-10 during soil classification and sampling activities. Photograph taken facing north.

**DATE:** 28 April 2016

**PHOTOGRAPHER:** A. Danikas

**TIME:** 1547 hours

**CAMERA:** iPhone 6



**PHOTODOCUMENTATION LOG**  
**LeBlanc Cleaners • Lewiston, Maine**



**SCENE:** View of the interior of the dry cleaning building. Photograph taken facing north.

**DATE:** 28 April 2016

**PHOTOGRAPHER:** A. Danikas

**TIME:** 1603 hours

**CAMERA:** iPhone 6



**SCENE:** View of the interior of the dry cleaning building. Photograph taken facing north

**DATE:** 28 April 2016

**PHOTOGRAPHER:** A. Danikas

**TIME:** 1603 hours

**CAMERA:** iPhone 6

**PHOTODOCUMENTATION LOG**  
**LeBlanc Cleaners • Lewiston, Maine**



**SCENE:** View of the interior of the dry cleaning building. Photograph taken facing northeast.

**DATE:** 28 April 2016

**PHOTOGRAPHER:** A. Danikas

**TIME:** 1603 hours

**CAMERA:** iPhone 6



**SCENE:** View of the interior of the dry cleaning building. Photograph taken facing east.

**DATE:** 28 April 2016

**PHOTOGRAPHER:** A. Danikas

**TIME:** 1603 hours

**CAMERA:** iPhone 6



**PHOTODOCUMENTATION LOG**  
**LeBlanc Cleaners • Lewiston, Maine**



**SCENE:** View of the interior of the dry cleaning building. Photograph taken facing southeast.

**DATE:** 28 April 2016

**PHOTOGRAPHER:** A. Danikas

**TIME:** 1603 hours

**CAMERA:** iPhone 6



**SCENE:** View of the boiler room. Photograph taken facing northwest.

**DATE:** 28 April 2016

**PHOTOGRAPHER:** A. Danikas

**TIME:** 1603 hours

**CAMERA:** iPhone 6



**PHOTODOCUMENTATION LOG**  
**LeBlanc Cleaners • Lewiston, Maine**



**SCENE:** View of the various drums, containers and aboveground storage tanks (ASTs) in the boiler room. Photograph taken facing southwest.

**DATE:** 28 April 2016

**PHOTOGRAPHER:** A. Danikas

**TIME:** 1603 hours

**CAMERA:** iPhone 6



**SCENE:** View of drum product sample location DP-01. Photograph taken facing northwest.

**DATE:** 28 April 2016

**PHOTOGRAPHER:** A. Danikas

**TIME:** 1604 hours

**CAMERA:** iPhone 6

**PHOTODOCUMENTATION LOG**  
**LeBlanc Cleaners • Lewiston, Maine**



**SCENE:** View of drum product sample location DP-02 and various containers of solvents and detergents adjacent to the dry cleaning machines.

**DATE:** 28 April 2016

**PHOTOGRAPHER:** A. Danikas

**TIME:** 1605 hours

**CAMERA:** iPhone 6



**SCENE:** View of one of the containers with a “tetrachloroethylene” label.

**DATE:** 28 April 2016

**PHOTOGRAPHER:** A. Danikas

**TIME:** 1606 hours

**CAMERA:** iPhone 6



**PHOTODOCUMENTATION LOG**  
**LeBlanc Cleaners • Lewiston, Maine**



**SCENE:** View of drum product sample location DP-03 next to the dry cleaning machines. Photograph taken facing northwest.

**DATE:** 28 April 2016

**PHOTOGRAPHER:** A. Danikas

**TIME:** 1606 hours

**CAMERA:** iPhone 6



**SCENE:** View of the overpacked containers of solvents that included tetrachloroethylene. Photograph taken facing north.

**DATE:** 28 April 2016

**PHOTOGRAPHER:** A. Danikas

**TIME:** 1608 hours

**CAMERA:** iPhone 6

**PHOTODOCUMENTATION LOG**  
**LeBlanc Cleaners • Lewiston, Maine**



**SCENE:** View of the interior of the dry cleaning building. Photograph taken facing southeast.

**DATE:** 28 April 2016

**PHOTOGRAPHER:** A. Danikas

**TIME:** 1608 hours

**CAMERA:** iPhone 6



**SCENE:** View of the southeast corner of the dry cleaning building. Photograph taken facing northeast.

**DATE:** 28 April 2016

**PHOTOGRAPHER:** A. Danikas

**TIME:** 1613 hours

**CAMERA:** iPhone 6



**PHOTODOCUMENTATION LOG**  
**LeBlanc Cleaners • Lewiston, Maine**



**SCENE:** View of the northeastern side of the dry cleaning building. Photograph taken facing northwest.

**DATE:** 28 April 2016

**PHOTOGRAPHER:** A. Danikas

**TIME:** 1614 hours

**CAMERA:** iPhone 6



**SCENE:** View of the northwestern side of the dry cleaning building. Photograph taken facing southwest.

**DATE:** 28 April 2016

**PHOTOGRAPHER:** A. Danikas

**TIME:** 1614 hours

**CAMERA:** iPhone 6



**PHOTODOCUMENTATION LOG**  
**LeBlanc Cleaners • Lewiston, Maine**



**SCENE:** View of the storage shed on the southwestern side of the site. Photograph taken facing north.

**DATE:** 29 April 2016

**PHOTOGRAPHER:** A. Danikas

**TIME:** 0759 hours

**CAMERA:** iPhone 6



**SCENE:** View of the northwestern side of the boiler room building and storage shed. Photograph taken facing northeast.

**DATE:** 29 April 2016

**PHOTOGRAPHER:** A. Danikas

**TIME:** 0900 hours

**CAMERA:** iPhone 6

**PHOTODOCUMENTATION LOG**  
**LeBlanc Cleaners • Lewiston, Maine**



**SCENE:** View of drum product sample DP-04.

**DATE:** 29 April 2016

**PHOTOGRAPHER:** K. Robinson

**TIME:** 0907 hours

**CAMERA:** iPhone 6



**SCENE:** View of drum product sample DP-05.

**DATE:** 29 April 2016

**PHOTOGRAPHER:** K. Robinson

**TIME:** 0907 hours

**CAMERA:** iPhone 6



**PHOTODOCUMENTATION LOG**  
**LeBlanc Cleaners • Lewiston, Maine**



**SCENE:** View of the driveway/parking area between the storage shed and the dry cleaning building. Photograph taken facing southwest.

**DATE:** 29 April 2016

**PHOTOGRAPHER:** K. Robinson

**TIME:** 0908 hours

**CAMERA:** iPhone 6



**SCENE:** View of soil boring location SB-07 along the northwestern side of the dry cleaning building. Photograph taken facing northeast.

**DATE:** DD April 2016

**PHOTOGRAPHER:** A. Danikas

**TIME:** 0919 hours

**CAMERA:** iPhone 6



**PHOTODOCUMENTATION LOG**  
**LeBlanc Cleaners • Lewiston, Maine**



**SCENE:** View of surface soil sample SS-10. Photograph taken facing southeast.

**DATE:** 29 April 2016

**PHOTOGRAPHER:** A. Danikas

**TIME:** 0936 hours

**CAMERA:** iPhone 6



**SCENE:** View of the floor drain in the boiler room from which air sample Sewer-01 was collected. Photograph taken facing southwest.

**DATE:** 29 April 2016

**PHOTOGRAPHER:** A. Danikas

**TIME:** 1215 hours

**CAMERA:** iPhone 6

**PHOTODOCUMENTATION LOG**  
**LeBlanc Cleaners • Lewiston, Maine**



**SCENE:** View of the storm drain in the driveway from which air sample Sewer-02 was collected. Photograph taken facing southeast.

**DATE:** 29 April 2016

**PHOTOGRAPHER:** A. Danikas

**TIME:** 1216 hours

**CAMERA:** iPhone 6

## Appendix D

### Boring Logs

Project	LeBlanc Cleaners		Boring ID	SB-01	Groundwater Levels		
Location	Lewiston, Maine		Well ID	NA	Date	Depth	
Date Drilled	April 27, 2016		Drilling Method	Direct Push	NA	NA	
Drilling Company	Weston Solutions, Inc.		Sampling Method	4-ft. Macrocore			
Operator	E. Ackerman/K. Robinson		Completion Depth	24 inches			
Drill Rig	Pneumatic Hammer		Surface Elevation	NA			
Logged by	Andrew Danikas - Weston, Superfund Technical Assessment and Response Team (START)						
Depth (ft bgs)	Recovery (inches)	Soil Description*			Sample Number	PID Reading (ppm)	PCE/TCE Field Screening Results (ppb)
1_	30	0 - 4" Yellow and gray, coarse-to-medium SAND, some medium gravel. Dry.			SB-01A (3 inch)**	9.3	PCE = 4,630
2_		4 - 10" Brown and gray SILT.			SB-01B (11 inch)**		TCE = 517
3_		10 - 15" Brown and black SILT and medium-to-fine SAND, little organics (peat). Wet.			SB-01C (19 inch)**		PCE = 4,330
4_		15 - 23" Blue and gray CLAY. Strong petroleum odor.			SB-01D (26 inch)**		TCE = 133
							PCE = 823
							TCE = 40
							PCE = ND (20)
							TCE = ND (40)

Notes:

\* = Burmister Soil Classification System  
 \*\* = VOC sample collected from this interval  
 PCE = Tetrachloroethylene  
 TCE = Trichloroethylene  
 ppb = parts per billion  
 ppm = parts per million  
 ND (XX) = Not detected with reporting limit in parentheses  
 NA = Not Applicable  
 PID = MultiRAE Systems Photoionization Detector  
 NERL = New England Regional Laboratory

Proportions used by Dry Weight
0 to 10% = TRACE
>10 to 20% = LITTLE
>20 to 35% = SOME
>35 to 50% = AND
> 50% = MAJOR

Confirmation samples for volatile organic compounds (VOCs) collected from:

NERL SB-01A, SB-01B, SB-01C, SB-01D

Confirmation samples for metals collected from:

NERL SB-01A, SB-01B, SB-01C, SB-01D

Project	LeBlanc Cleaners	Boring ID	SB-02	Groundwater Levels	
Location	Lewiston, Maine	Well ID	NA	Date	Depth
Date Drilled	April 27, 2016	Drilling Method	Direct Push	NA	NA
Drilling Company	Weston Solutions, Inc.	Sampling Method	4-ft. Macrocore		
Operator	E. Ackerman/K. Robinson	Completion Depth	62 inches		
Drill Rig	Pneumatic Hammer	Surface Elevation	NA		

Logged by Andrew Danikas - Weston, Superfund Technical Assessment and Response Team (START)

Depth (ft bgs)	Recovery (inches)	Soil Description*	Sample Number	PID Reading (ppm)	PCE/TCE Field Screening Results (ppb)
1_	30	0 - 16" Brown and yellow, medium-to-fine SAND, little coarse gravel. Dry. 16 - 30" Brown and yellow, coarse-to-medium SAND, trace coarse gravel. Dry.	SB-02A (7.5 inch)**	0	PCE = 1,780 TCE = ND (40)
2_			SB-02B (15 inch)**		PCE = 1,080 TCE = ND (40)
3_			SB-02C (22.5 inch)**		PCE = 1,760 TCE = ND (40)
4_			SB-02D (30 inch)**		PCE = 5,820 TCE = 245
5_	32	0 - 12" Brown and yellow, medium SAND, little fine sand, trace coarse gravel. Wet. 12 - 18" Gray, SILT, little fine sand. 18 - 32" Blue and gray, CLAY, trace silt.	SB-02E (8 inch)**	400	PCE = 4,610 TCE = 109
6_			SB-02F (16 inch)**		PCE = 163,000 TCE = 4,890
7_			SB-02G (24 inch)**		PCE = 116,000 TCE = 5,310
8_			SB-02H (32 inch)**		PCE = 71,500 TCE = 4,330
-End of Boring = 7 feet below ground surface-					

Notes:

\* = Burmister Soil Classification System  
 \*\* = VOC sample collected from this interval  
 PCE = Tetrachloroethylene  
 TCE = Trichloroethylene  
 ppb = parts per billion  
 ppm = parts per million  
 ND (XX) = Not detected with reporting limit in parentheses  
 NA = Not Applicable  
 PID = MultiRAE Systems Photoionization Detector  
 NERL = New England Regional Laboratory  
 mL = Milliliter

Confirmation samples for volatile organic compounds (VOCs) collected from:

NERL SB-02A, SB-02B, SB-02C, SB-02D

Confirmation samples for metals collected from:

NERL SB-02A, SB-02B, SB-02C, SB-02D

Duplicate collected on D interval: SB-102D

Proportions used  
by Dry Weight

0 to 10% = TRACE  
 >10 to 20% = LITTLE  
 >20 to 35% = SOME  
 >35 to 50% = AND  
 > 50% = MAJOR



Project	LeBlanc Cleaners	Boring ID	SB-03	Groundwater Levels		
Location	Lewiston, Maine	Well ID	NA	Date	Depth	
Date Drilled	April 27, 2016	Drilling Method	Direct Push	NA	NA	
Drilling Company	Weston Solutions, Inc.	Sampling Method	4-ft. Macrocore			
Operator	E. Ackerman/K. Robinson	Completion Depth	26 inches			
Drill Rig	Pneumatic Hammer	Surface Elevation	NA			
Logged by	Andrew Danikas - Weston, Superfund Technical Assessment and Response Team (START)					
Depth (ft bgs)	Recovery (inches)	Soil Description*		Sample Number	PID Reading (ppm)	PCE/TCE Field Screening Results (ppb)
1_	26	0 - 4" Yellow and gray, medium-to-fine SAND, little coarse gravel.		SB-03A (6 inch)**	0	PCE = 55,400 TCE = 9,670
2_		4 - 9" Black and gray, SILT, trace medium gravel, trace organics (wood debris).		SB-03B (12 inch)**		PCE = 93,100 TCE = 22,900
3_		9 - 12" Black and gray, GRAVEL (slag and ash).		SB-03C (18 inch)**		PCE = 477,000 TCE = 57,300
4_		12 - 15" Black and gray, SILT, trace fine sand, trace organics (wood debris).				PCE = 24,500 TCE = 20,700
		15 - 19" White and gray, medium SAND and coarse gravel.		SB-03D (24 inch)**		
		19 - 21" Brown and gray, SILT, some fine sand.				
		20 - 23" White and gray, coarse-to-medium SAND and coarse gravel.				
		23 - 26" Brown and gray, SILT, some fine sand.				
		-End of Boring = 4 feet below ground surface-				

Notes:

\* = Burmister Soil Classification System

\*\* = VOC sample collected from this interval

PCE = Tetrachloroethylene

TCE = Trichloroethylene

ppb = parts per billion

ppm = parts per million

ND (XX) = Not detected with reporting limit in parentheses

NA = Not Applicable

PID = MultiRAE Systems Photoionization Detector

NERL = New England Regional Laboratory

Proportions used by Dry Weight

0 to 10% = TRACE

>10 to 20% = LITTLE

>20 to 35% = SOME

>35 to 50% = AND

> 50% = MAJOR

Confirmation samples for volatile organic compounds (VOCs) collected from:

NERL SB-03A, SB-03B, SB-03C, SB-03D

Confirmation samples for metals collected from:

NERL SB-03A, SB-03B, SB-03C, SB-03D



Weston Solutions, Inc.			SOIL BORING LOG		Page 1 of 1	
Project	LeBlanc Cleaners		Boring ID	SB-04	Groundwater Levels	
Location	Lewiston, Maine		Well ID	NA	Date	Depth
Date Drilled	April 27, 2016		Drilling Method	Direct Push	NA	NA
Drilling Company	Weston Solutions, Inc.		Sampling Method	4-ft. Macrocore		
Operator	E. Ackerman/K. Robinson		Completion Depth	46 inches		
Drill Rig	Pneumatic Hammer		Surface Elevation	NA		
Logged by	Andrew Danikas - Weston, Superfund Technical Assessment and Response Team (START)					
Depth (ft bgs)	Recovery (inches)	Soil Description*		Sample Number	PID Reading (ppm)	PCE/TCE Field Screening Results (ppb)
1_	28	0 - 9" Yellow and brown, medium-to-fine SAND, trace coarse gravel.		SB-04A (7 inch)**	0	PCE = 108 TCE = ND (40)
2_		9 - 14" Brown and gray, SILT, trace fine sand.		SB-04B (14 inch)**		PCE = 7,240 TCE = 634
3_		14 - 16" Black and gray, GRAVEL (slag and ash), some medium-to-fine sand.		SB-04C (21 inch)**		PCE = 2,790 TCE = 467
4_		16 - 23" Brown and gray, SILT, trace gravel (brick, nails, glass). 23 - 28" Brown and gray, SILT, trace fine sand. Moist.		SB-04D (28 inch)**		PCE = 1,380 TCE = 353
5_	18	0 - 4" Brown and gray, medium-to-fine SAND, little coarse gravel. Wet.		SB-04E (9 inch)**	0	PCE = 21 TCE = ND (40)
6_		4 - 13" Gray and blue, SILT and fine SAND. Moist.		SB-04F (18 inch)**		PCE = ND (20) TCE = ND (40)
7_		13 - 18" Gray and blue, SILT and fine SAND trace medium sand. Moist. Mild petroleum odor.				
8_						
-End of Boring = 6 feet below ground surface-						
<div><div><div><b>Notes:</b> * = Burmister Soil Classification System ** = VOC sample collected from this interval PCE = Tetrachloroethylene TCE = Trichloroethylene ppb = parts per billion ppm = parts per million ND (XX) = Not detected with reporting limit in parentheses NA = Not Applicable PID = MultiRAE Systems Photoionization Detector NERL = New England Regional Laboratory mL = Milliliter <b>Confirmation samples for volatile organic compounds (VOCs) collected from:</b> NERL SB-04A, SB-04B, SB-04C, SB-04D <b>Confirmation samples for metals collected from:</b> NERL SB-04A, SB-04B, SB-04C, SB-04D</div><div><div><b>Proportions used by Dry Weight</b></div><div>0 to 10% = TRACE &gt;10 to 20% = LITTLE &gt;20 to 35% = SOME &gt;35 to 50% = AND &gt; 50% = MAJOR</div></div></div></div>						

Project	LeBlanc Cleaners		Boring ID	SB-05	Groundwater Levels		
Location	Lewiston, Maine		Well ID	NA	Date	Depth	
Date Drilled	April 28, 2016		Drilling Method	Direct Push	NA	NA	
Drilling Company	Weston Solutions, Inc.		Sampling Method	4-ft. Macrocore			
Operator	E. Ackerman/K. Robinson		Completion Depth	36 inches			
Drill Rig	Pneumatic Hammer		Surface Elevation	NA			
Logged by	Andrew Danikas - Weston, Superfund Technical Assessment and Response Team (START)						
Depth (ft bgs)	Recovery (inches)	Soil Description*			Sample Number	PID Reading (ppm)	PCE/TCE Field Screening Results (ppb)
1_	36	0 - 4" Yellow and gray, medium-to-fine SAND, some coarse gravel.			SB-05A (9 inch)**	0	PCE = 223 TCE = ND (80)
2_		4 - 17" Dark gray, SILT, trace gravel (slag and ash), trace coarse gravel. Moist.			SB-05B (18 inch)**		PCE = 227 TCE = ND (80)
3_		17 - 21" Yellow and brown, fine SAND. Wet.			SB-05C (27 inch)**		PCE = 476 TCE = ND (80)
4_		21 - 22" Black and medium SAND, trace gravel (nails and glass). Wet.			SB-05D (36 inch)**		PCE = ND (40) TCE = ND (80)
		22 - 32" Gray, SILT, little medium gravel, trace organics.					
		32 - 36" Blue and gray, SILT, trace clay.					
		-End of Boring = 4 feet below ground surface-					

Notes:

\* = Burmister Soil Classification System  
 \*\* = VOC sample collected from this interval  
 PCE = Tetrachloroethylene  
 TCE = Trichloroethylene  
 ppb = parts per billion  
 ppm = parts per million  
 ND (XX) = Not detected with reporting limit in parentheses  
 NA = Not Applicable  
 PID = MultiRAE Systems Photoionization Detector  
 NERL = New England Regional Laboratory

Proportions used by Dry Weight
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0 to 10% = TRACE >10 to 20% = LITTLE >20 to 35% = SOME >35 to 50% = AND > 50% = MAJOR
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Confirmation samples for volatile organic compounds (VOCs) collected from:

NERL SB-05A, SB-05B, SB-05C, SB-05D

Confirmation samples for metals collected from:

NERL SB-05A, SB-05B, SB-05C, SB-05D

Project	LeBlanc Cleaners	Boring ID	SB-06	Groundwater Levels		
Location	Lewiston, Maine	Well ID	NA	Date	Depth	
Date Drilled	April 28, 2016	Drilling Method	Direct Push	NA	NA	
Drilling Company	Weston Solutions, Inc.	Sampling Method	4-ft. Macrocore			
Operator	E. Ackerman/K. Robinson	Completion Depth	38 inches			
Drill Rig	Pneumatic Hammer	Surface Elevation	NA			
Logged by	Andrew Danikas - Weston, Superfund Technical Assessment and Response Team (START)					
Depth (ft bgs)	Recovery (inches)	Soil Description*		Sample Number	PID Reading (ppm)	PCE/TCE Field Screening Results (ppb)
1_	38	0 - 6" Yellow, coarse-to-medium SAND, trace coarse gravel. Wet.		SB-06A (7 inch)**	115	PCE = ND (40)
		6 - 8" Gray and brown, SILT and fine SAND.		SB-06B (24 inch)**		TCE = ND (80)
2_		8 - 14" Gray and brown, fine SAND and SILT, trace medium gravel, trace organics. Strong solvent odor.		SB-06C (30 inch)**		PCE = 297
3_		14 - 20" Brown and gray, fine SAND, trace silt, trace organics, trace gravel (slag).		SB-06D (38 inch)**		TCE = ND (80)
		20 - 22" Black and gray, medium GRAVEL and fine SAND.				PCE = ND (40)
4_		22 - 38" Blue and gray, SILT, little clay, trace organics. Strong petroleum odor.				TCE = ND (80)
		-End of Boring = 4 feet below ground surface-				

Notes:

\* = Burmister Soil Classification System  
 \*\* = VOC sample collected from this interval  
 PCE = Tetrachloroethylene  
 TCE = Trichloroethylene  
 ppb = parts per billion  
 ppm = parts per million  
 ND (XX) = Not detected with reporting limit in parentheses  
 NA = Not Applicable  
 PID = MultiRAE Systems Photoionization Detector  
 NERL = New England Regional Laboratory

Proportions used by Dry Weight
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0 to 10% = TRACE >10 to 20% = LITTLE >20 to 35% = SOME >35 to 50% = AND > 50% = MAJOR
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Confirmation samples for volatile organic compounds (VOCs) collected from:

NERL SB-06A, SB-06B, SB-06C, SB-06D

Confirmation samples for metals collected from:

NERL SB-06A, SB-06B, SB-06C, SB-06D

Duplicate collected on B interval: SB-106B

Weston Solutions, Inc.			SOIL BORING LOG		Page 1 of 1	
Project	LeBlanc Cleaners		Boring ID	SB-07	Groundwater Levels	
Location	Lewiston, Maine		Well ID	NA	Date	Depth
Date Drilled	April 28, 2016		Drilling Method	Direct Push	NA	NA
Drilling Company	Weston Solutions, Inc.		Sampling Method	4-ft. Macrocore		
Operator	E. Ackerman/K. Robinson		Completion Depth	79 inches		
Drill Rig	Pneumatic Hammer		Surface Elevation	NA		
Logged by	Andrew Danikas - Weston, Superfund Technical Assessment and Response Team (START)					
Depth (ft bgs)	Recovery (inches)	Soil Description*		Sample Number	PID Reading (ppm)	PCE/TCE Field Screening Results (ppb)
1_	45	0 - 4" Brown and gray, SILT and fine SAND, little organics (roots), trace fine gravel.		SB-07A (11 inch)**	170	PCE = 340 TCE = ND (40)
2_		4 - 20" Brown and gray, SILT and fine SAND, trace gravel (brick and ash), trace organics.		SB-07B (22 inch)**		PCE = 3,870 TCE = 149
3_		20 - 30" Brown and gray, SILT and coarse SAND.		SB-07C (33 inch)**		PCE = 4,490 TCE = 330
4_		30 - 36" Brown and gray, SILT and fine SAND, trace fine gravel. Wet.		SB-07D (44 inch)**		PCE = 1,470 TCE = 1,153
5_		36 - 41" Brown and gray, SILT and fine SAND, trace organics.				
6_	34	41 - 45" Blue and gray, SILT and CLAY, trace organics. Strong petroleum odor.			76	PCE = 1,560 TCE = 575
7_		0 - 8" Gray, SILT and fine SAND. Very wet.		SB-07EF (17 inch)**		PCE = 5,470 TCE = 1,414
8_		8 - 34" Blue and gray, SILT and fine SAND. Strong petroleum odor.		SB-07GH (34 inch)**		
-End of Boring = 7 feet below ground surface-						
<div><div><div><div><div>Notes:</div><div>* = Burmister Soil Classification System</div><div>** = VOC sample collected from this interval</div><div>PCE = Tetrachloroethylene</div><div>TCE = Trichloroethylene</div><div>ppb = parts per billion</div><div>ppm = parts per million</div><div>ND (XX) = Not detected with reporting limit in parentheses</div><div>NA = Not Applicable</div><div>PID = MultiRAE Systems Photoionization Detector</div><div>NERL = New England Regional Laboratory</div><div>mL = Milliliter</div><div>Confirmation samples for volatile organic compounds (VOCs) collected from:</div><div>NERL SB-07A, SB-07B, SB-07C, SB-07D</div><div>Confirmation samples for metals collected from:</div><div>NERL SB-07A, SB-07B, SB-07C, SB-07D</div><div>Matrix spike/Matrix spike duplicate collected on C interval</div></div><div><div>Proportions used by Dry Weight</div><div>0 to 10% = TRACE</div><div>&gt;10 to 20% = LITTLE</div><div>&gt;20 to 35% = SOME</div><div>&gt;35 to 50% = AND</div><div>&gt; 50% = MAJOR</div></div></div></div></div>						

Weston Solutions, Inc.			SOIL BORING LOG		Page 1 of 1	
Project	LeBlanc Cleaners		Boring ID	SB-08	Groundwater Levels	
Location	Lewiston, Maine		Well ID	NA	Date	Depth
Date Drilled	April 28, 2016		Drilling Method	Direct Push	NA	NA
Drilling Company	Weston Solutions, Inc.		Sampling Method	4-ft. Macrocore		
Operator	E. Ackerman/K. Robinson		Completion Depth	66 inches		
Drill Rig	Pneumatic Hammer		Surface Elevation	NA		
Logged by	Andrew Danikas - Weston, Superfund Technical Assessment and Response Team (START)					
Depth (ft bgs)	Recovery (inches)	Soil Description*		Sample Number	PID Reading (ppm)	PCE/TCE Field Screening Results (ppb)
1_	32	0 - 6" Yellow and brown, SILT and fine SAND, trace fabric debris, trace organics.		SB-08A (8 inch)**	0	PCE = 517 TCE = ND (100)
2_		6 - 10" Brown and gray, SILT, trace fine sand.		SB-08B (16 inch)**		PCE = 1,660 TCE = ND (100)
3_		10 - 17" Black and brown, SILT, trace fine sand.		SB-08C (24 inch)**		PCE = 1,900 TCE = ND (100)
4_		17 - 30" Dark gray, SILT, trace fine sand, trace organics. 30 - 32" Yellow and brown, coarse SAND and SILT. Wet.		SB-08D (32 inch)**		PCE = 1,770 TCE = 166
5_	34	0 - 8" Gray, SILT and fine sand. Very wet.		SB-08EF (17 inch)**	0.5	PCE = 2,920 TCE = 433
6_		8 - 24" Brown and gray, SILT and fine SAND.		SB-08GH (34 inch)**		PCE = ND (25) TCE = ND (100)
7_		24 - 32" Blue and gray, SILT and medium SAND, trace coarse gravel.				
8_		32 - 34" Brown and yellow, coarse SAND and SILT, trace medium gravel.				
-End of Boring = 7 feet below ground surface-						
<div><div><div>Notes:</div><div>* = Burmister Soil Classification System</div><div>** = VOC sample collected from this interval</div><div>PCE = Tetrachloroethylene</div><div>TCE = Trichloroethylene</div><div>ppb = parts per billion</div><div>ppm = parts per million</div><div>ND (XX) = Not detected with reporting limit in parentheses</div><div>NA = Not Applicable</div><div>PID = MultiRAE Systems Photoionization Detector</div><div>NERL = New England Regional Laboratory</div><div>mL = Milliliter</div><div>Confirmation samples for volatile organic compounds (VOCs) collected from:</div><div>NERL SB-08A, SB-08B, SB-08C, SB-08D</div><div>Confirmation samples for metals collected from:</div><div>NERL SB-08A, SB-08B, SB-08C, SB-08D</div></div><div><div>Proportions used by Dry Weight</div><div>0 to 10% = TRACE</div><div>&gt;10 to 20% = LITTLE</div><div>&gt;20 to 35% = SOME</div><div>&gt;35 to 50% = AND</div><div>&gt; 50% = MAJOR</div></div></div>						

Weston Solutions, Inc.			SOIL BORING LOG		Page 1 of 1		
Project	LeBlanc Cleaners		Boring ID	SB-09		Groundwater Levels	
Location	Lewiston, Maine		Well ID	NA		Date	Depth
Date Drilled	April 28, 2016		Drilling Method	Direct Push		NA	NA
Drilling Company	Weston Solutions, Inc.		Sampling Method	4-ft. Macrocore			
Operator	E. Ackerman/K. Robinson		Completion Depth	69 inches			
Drill Rig	Pneumatic Hammer		Surface Elevation	NA			
Logged by	Andrew Danikas - Weston, Superfund Technical Assessment and Response Team (START)						
Depth (ft bgs)	Recovery (inches)	Soil Description*			Sample Number	PID Reading (ppm)	PCE/TCE Field Screening Results (ppb)
1_	37	0 - 10" Gray and brown, SILT and fine SAND, trace coarse gravel, trace organics.			SB-09A (9 inch)**	0	PCE = 5,770
2_		10 - 17" Brown and black SILT and fine SAND, trace organics, trace gravel (slag).			SB-09B (18 inch)**		TCE = 1,360
3_		17 - 37" Brown and gray, SILT and fine SAND, trace coarse gravel, trace organics, trace gravel (glass and metal).			SB-09C (27 inch)**		PCE = 2,730
4_		30 - 32" Yellow and brown, coarse SAND and SILT. Wet.			SB-09D (36 inch)**		TCE = ND (100)
5_	32	0 - 9" Black and gray, medium SAND, trace organics, trace coarse gravel. Very wet.			SB-09EF (16 inch)**	0	PCE = 1,520
6_		9 - 22" Gray and brown, SILT and fine SAND, trace organics.			SB-09GH (32 inch)**		TCE = 1,060
7_		22 - 27" Gray and brown, SILT, little coarse gravel.					PCE = 5,730
8_		27 - 32" Red and brown, medium SAND and SILT, trace coarse gravel.					TCE = ND (100)
-End of Boring = 8 feet below ground surface-							
<div><div><p><b>Notes:</b></p><p>* = Burmister Soil Classification System</p><p>** = VOC sample collected from this interval</p><p>PCE = Tetrachloroethylene</p><p>TCE = Trichloroethylene</p><p>ppb = parts per billion</p><p>ppm = parts per million</p><p>ND (XX) = Not detected with reporting limit in parentheses</p><p>NA = Not Applicable</p><p>PID = MultiRAE Systems Photoionization Detector</p><p>NERL = New England Regional Laboratory</p><p>mL = Milliliter</p><p><b>Confirmation samples for volatile organic compounds (VOCs) collected from:</b></p><p>NERL SB-09A, SB-09B, SB-09C, SB-09D</p><p><b>Confirmation samples for metals collected from:</b></p><p>NERL SB-09A, SB-09B, SB-09C, SB-09D</p><p>Duplicate sample collected on A interval: SB-109A.</p></div><div><p><b>Proportions used by Dry Weight</b></p><p>0 to 10% = TRACE</p><p>&gt;10 to 20% = LITTLE</p><p>&gt;20 to 35% = SOME</p><p>&gt;35 to 50% = AND</p><p>&gt; 50% = MAJOR</p></div></div>							

Weston Solutions, Inc.		SOIL BORING LOG		Page 1 of 1	
Project	LeBlanc Cleaners	Boring ID	SB-10	Groundwater Levels	
Location	Lewiston, Maine	Well ID	NA	Date	Depth
Date Drilled	April 28, 2016	Drilling Method	Direct Push	NA	NA
Drilling Company	Weston Solutions, Inc.	Sampling Method	4-ft. Macrocore		
Operator	E. Ackerman/K. Robinson	Completion Depth	36 inches		
Drill Rig	Pneumatic Hammer	Surface Elevation	NA		
Logged by	Andrew Danikas - Weston, Superfund Technical Assessment and Response Team (START)				
Depth (ft bgs)	Recovery (inches)	Soil Description*	Sample Number	PID Reading (ppm)	PCE/TCE Field Screening Results (ppb)
1_	36	0 - 10" Brown and black, SILT and fine SAND, little coarse gravel, trace gravel (ash).	SB-10A (9 inch)**	485	PCE = ND (25) TCE = ND (100)
2_		10 - 25" Brown and gray, SILT and fine SAND, trace organics, trace coarse gravel.	SB-10B (18 inch)**		PCE = ND (25) TCE = ND (100)
3_		25 - 36" Blue and gray, SILT and fine SAND, trace coarse gravel, trace organics. Strong petroleum odor.	SB-10C (27 inch)**		PCE = ND (25) TCE = ND (100)
4_			SB-10D (36 inch)**		PCE = ND (25) TCE = ND (100)
		-End of Boring = 4 feet below ground surface-			
<div> <div> <b>Notes:</b>  * = Burmister Soil Classification System  ** = VOC sample collected from this interval  PCE = Tetrachloroethylene  TCE = Trichloroethylene  ppb = parts per billion  ppm = parts per million  ND (XX) = Not detected with reporting limit in parentheses  NA = Not Applicable  PID = MultiRAE Systems Photoionization Detector  NERL = New England Regional Laboratory </div> <div> <b>Proportions used by Dry Weight</b>  0 to 10% = TRACE  &gt;10 to 20% = LITTLE  &gt;20 to 35% = SOME  &gt;35 to 50% = AND  &gt; 50% = MAJOR </div> </div> <div> <b>Confirmation samples for volatile organic compounds (VOCs) collected from:</b>  NERL SB-10A, SB-10B, SB-10C, SB-10D  <b>Confirmation samples for metals collected from:</b>  NERL SB-10A, SB-10B, SB-10C, SB-10D </div>					



## Appendix E

### Site Conceptual Model

## **CONCEPTUAL SITE MODEL**

A Conceptual Site Model (CSM) was developed for the LeBlanc Cleaners Site, located in Lewiston, Maine based on data collected during the U.S. Environmental Protection Agency (EPA) Preliminary Assessment/Site Investigation (PA/SI) and from previous investigations conducted at the site.

The topography of the site is generally flat. Based on a well survey conducted following the installation of monitoring wells on the site, the topography on the site slopes slightly (approximately 1 foot) from east to west. The topography in the area surrounding the site generally slopes downward to the north, towards the Jepson Brook. Based on the Lewiston, Maine United States Geological Survey (USGS) Quadrangle map, the general elevation of the site is approximately 248 feet above mean sea level.

Based on previous investigations, the soils at the site and in the immediate vicinity of the site have been classified as Hartland. Hartland soil generally consists of very fine sandy loam, having moderate infiltration rates. Soils are moderately well to well-drained with moderately coarse textures. Surficial soils have been described as glacial till, generally characterized as a heterogeneous mixture of sand, silt, clay, and gravel.

Bedrock beneath the site has been identified as the Silurian age Sangerville Formation, a marble and calcium-bearing silicate rock. The depth and configuration of bedrock surface beneath the site is unknown.

Based on previous investigation reports, the site appears to be located within same watershed as Jepson Brook, and based on the regional topography, the localized groundwater flow is presumed to be generally to the north/northeast, towards Jepson Brook. However, groundwater flow direction at the site cannot be confirmed without a groundwater elevation survey. Shallow groundwater flow may also be influenced by underground utilities, heterogeneous subsurface soil strata, and/or other subsurface structures, which may act as preferential pathways. Storm drains, water lines, and sewer lines run beneath Lafayette Street.

Well survey data from monitoring wells that were installed on the site during a previous investigation indicate that depths to groundwater beneath the site range from approximately 4.5 to 9.0 feet bgs; and that the primary flow of groundwater is to the west towards the Androscoggin River. However, the well survey data contradicts this statement, and indicates that the primary direction of groundwater flow is toward the east.

Contaminants of concern at the site are primarily volatile organic compounds (VOCs), mainly tetrachloroethylene (PCE), trichloroethylene (TCE), and cis-1,2 dichloroethylene (cis-1,2-DCE). The primary area of concern is the former location of the dry cleaning machines located at the rear of the main building. A release of PCE and possibly other chlorinated VOCs occurred in the main building where the dry cleaning machines were located and outside of the rear portion of the main building. During the PA/SI investigation, PCE, TCE, and cis-1,2-DCE-soil contamination was found to depths of 8 feet below the floor surface inside the main building. This contamination occurs in the vadose zone and within the saturated zone. Sub-slab soil gas data collected during the PA/SI also identified an area of PCE, TCE, and cis-1,2-DCE

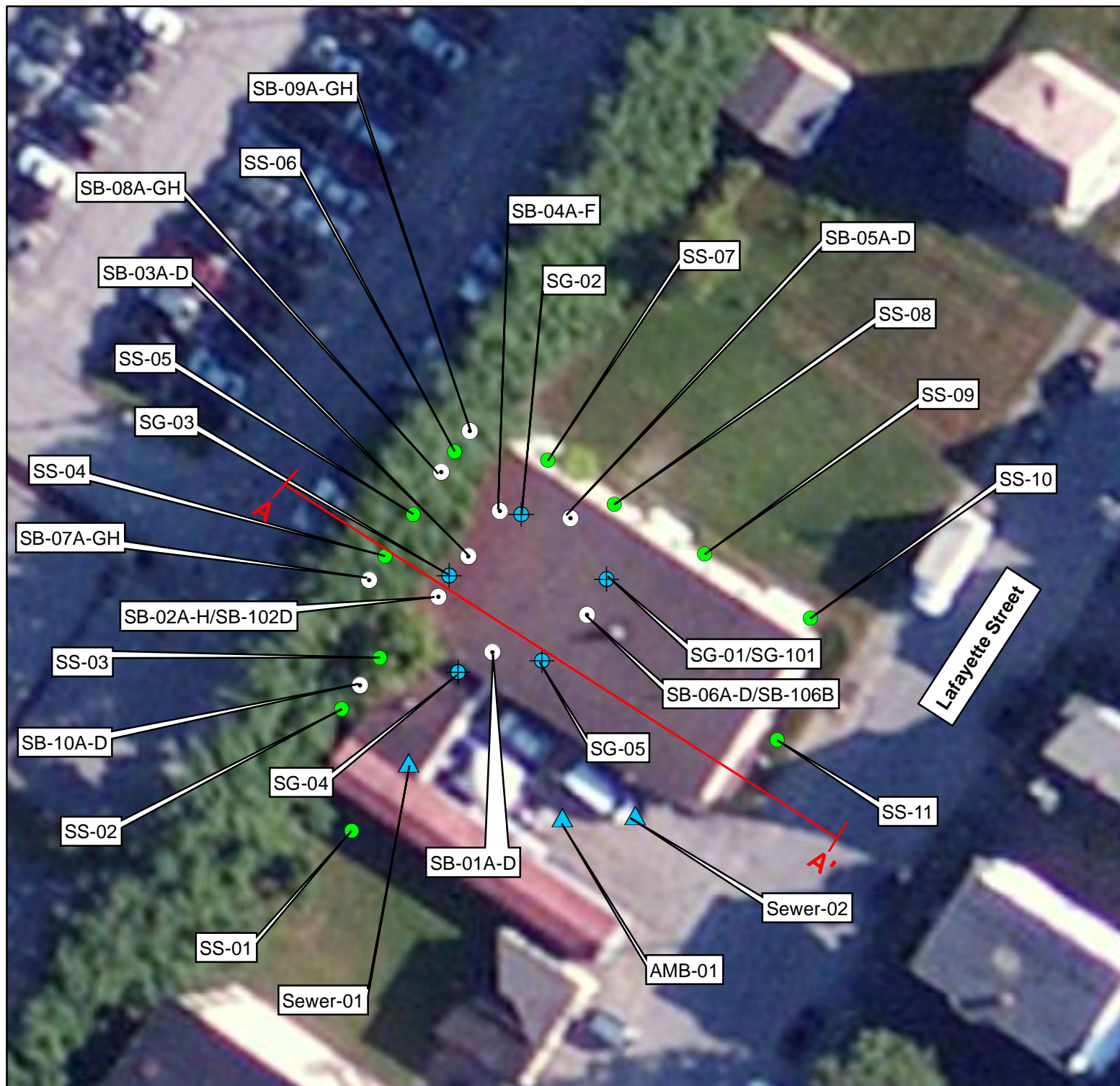
contamination toward the rear of the main building, in the same location as the former dry cleaning machines.

VOCs detected in groundwater beneath the site include PCE; TCE; cis-1,2-DCE; trans-1,2-dichloroethylene (trans-1,2-DCE), and vinyl chloride. Several non-chlorinated VOCs were also detected in groundwater in an area southwest of the main building. These are most likely a result of the USTs that were historically located behind and in front of the current boiler room which were used for fuel oil storage. Based on the limited groundwater quality data available, the migration of VOCs in groundwater could not be determined.

An indoor air sample collected during a previous investigation indicated that six chlorinated VOCs (PCE; TCE; cis-1,2-DCE; trans-1,2-DCE; 1,2-dichloroethane (1,2-DCA), and vinyl chloride) were detected in the sample. PCE was detected at concentrations exceeding the Maine Indoor Air Commercial values.

Due to the presence of cracks in the building foundation elevated concentrations of VOCs in the soil and groundwater, and the shallow position of the water table, it is likely that PCE, TCE and other VOCs are vaporizing and migrating upward in the building. VOCs are also vaporizing and migrating upward in the area behind the building.

A northwest-to-southeast cross section across the site was prepared to display the areas of known contamination. The line of section is shown in Figure A and the cross section is shown in Figure B. Releases of chlorinated VOCs have occurred at the site and have impacted surface and subsurface soil, groundwater, soil gas, and indoor air. The probable sources for the chlorinated VOCs are from the dry cleaning operations, handling and storage of dry cleaning solvents, and ventilation from the dry cleaning machines. The impacted locations include the concrete slab below the dry cleaning machines and other associated equipment inside the main building, and the area behind the main building where the dry cleaning machine vents are located.



**Figure A**

**A - A' Transect Map**

**LeBlanc Cleaners  
10 Lafayette Street  
Lewiston, Maine**

**EPA Region I  
Superfund Technical Assessment and  
Response Team (START) IV  
Contract No. EP-S3-15-01**

**TDD Number:** TO1-01-16-02-0003

**Created by:** A. Danikas

**Created on:** 22 February 2016

**Modified by:** K. Robinson

**Modified on:** 21 July 2016

**Legend**

- Surface Soil Sample
- Soil Boring Sample
- ⊕ Soil Gas Sample
- ▲ Air Sample

**A A'**  
Line of Section  
in Figure B

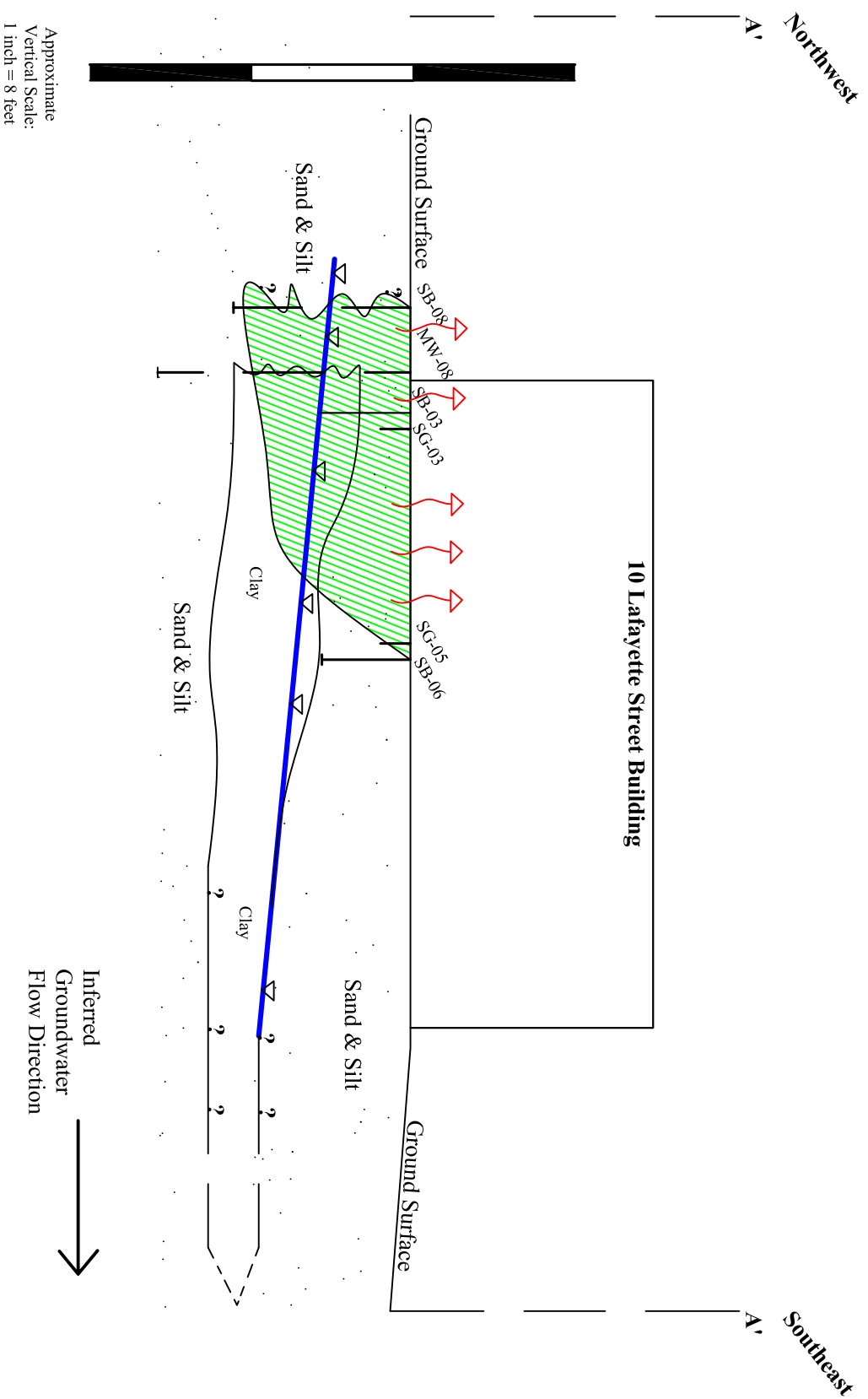


0 25 50  
Feet

**Data Sources:**

Imagery: ESRI, i-cubed, USDA FSA, USGS  
AEX, GeoEye, Getmapping, Aerogrid, IGP  
Topos: MicroPath  
All other data: START





**Figure B: A - A' Cross Section Diagram**  
**LeBlanc Cleaners**  
**Lewiston, Maine**


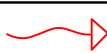



EPA Region 1  
 Superfund Technical Assessment and  
 Response Team (START) IV  
 Contract No. EP-S3-15-01

TDD:O1-16-02-0003  
 Created by: A. Danikas  
 Created on: 19 July 2016  
 Revised by: K. Robinson  
 Revised on: 21 July 2016



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## LEGEND

-  Top of Water Table
-  Potentially Contaminated Vapor
-  VOC Contaminated Soil, Soil Gas, and Groundwater
-  Sand & Silt
-  Unknown Limits

## NOTE

Vertical Exaggeration = 2.5

Ground surface elevation estimated.

See Figure A - A' Transect for aerial imagery.

Borings, monitoring wells, and soil gas well locations are projected.

## Appendix F

### Analytical Data and Chain-of-Custody Record