

VIA E-Mail

May 30, 2018

### City of Meriden

142 East Main Street Meriden, CT 06450

Attn: Ms. Juliet Burdelski

### RE: Focused Phase III Subsurface Investigation Report 69 East Main Street, Meriden, Connecticut Commission Number: 58ML701.009

Dear Ms. Burdelski:

This Focused Phase III Subsurface Investigation Report has been prepared by Loureiro Engineering Associates, Inc. (Loureiro) to present the results of the subsurface investigation activities completed in April 2018 at the property located at 69 East Main Street in Meriden, Connecticut (hereinafter referred to as "the Site"). The Site location is depicted on **Figure 1** attached to this report. The objective of completed activities was to delineate and/or further investigate impacts to soil and groundwater that were detected by Loureiro during a Limited Phase II Subsurface Investigation completed in October 2017. Activities were completed in general accordance with Connecticut Department of Energy and Environmental Protection (DEEP) standard of care, namely the DEEP Site Characterization Guidance Document (September 2007, rev. November 2010) (SCGD).

# 1.0 BACKGROUND

The Site is an approximately 0.253 acre parcel owned by the City of Meriden. The Site is currently vacant with no buildings and a fence surrounding the Site on three sides. The ground surface is covered with grass, four trees, and a crescent shaped mound adjacent to the trees. The Site was first developed in the 1890s for commercial use and was used for both commercial and residential purposes until the early 1990s.

# 1.1 PHASE I

Vanasse Hangen Brustlin, Inc. (VHB) completed a Phase I Environmental Site Assessment (ESA) in May 2017 identifying 3 recognized environmental conditions (RECs) at the Site. The completed assessment activities focused on REC-1 through REC-3. A list of the identified RECs is provided below.



- REC-1 Historic Dry Cleaning Operations
- REC-2 Historic Dye Works Operations
- REC-3 Historic Presence and Demolition of a Building Potentially Finished with Lead Based Paint (LBP)

# 1.2 LIMITED PHASE II

Based on the results of the Phase I ESA, a Limited Phase II Subsurface Investigation was conducted by Loureiro in October 2017. A total of six soil borings were advanced to evaluate the potential presence of a release to the subsurface attributable to the three RECs identified in the Phase I ESA.

Two shallow soil borings (LEA-02-01 and LEA-02-02) were advanced to evaluate potential impacts of lead to shallow soils around the footprint of the former building associated with the historic presence and demolition of a building potentially finished with LBP. Lead was detected in both of the shallow soil samples collected at concentrations of 14.5 milligrams per kilogram (mg/kg) and 22.9 mg/kg, respectively, which are below the DEEP Remediation Standard Regulations (RSR) Residential Direct Exposure Criteria (RDEC) of 400 mg/kg, and most likely attributed to naturally occurring conditions at the Site.

Soil borings LEA-01-01 through LEA-01-04 were used to evaluate the historic dry cleaning and dye works operations at the Site. Depths of these soil borings ranged from 12 to 16 feet below grade (fbg). One soil sample was collected from each of the four soil borings at varying depths, depending on apparent impacts based on elevated photoionization detector (PID) readings, staining, and/or odors, and were submitted to Tunxis Environmental Laboratories (Tunxis) of Plainville, Connecticut, for analysis of volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons (PAHs), extractable total petroleum hydrocarbons (ETPH), and metals.

The soil samples collected from LEA-01-01, LEA-01-02, and LEA-01-04 had no analytes detected above laboratory reporting limits with the exception of certain metals attributable to naturally occurring conditions at the Site. Black staining with a solvent-like odor was observed at a depth of 8 to 10 fbg at soil boring LEA-01-03, and ETPH was detected in the corresponding soil sample at a concentration of 2,100 mg/kg, which exceeds the RDEC of 500 mg/kg.

Soil borings LEA-01-01 through LEA-01-04 were advanced into the groundwater table and were completed as temporary groundwater monitoring wells. The temporary monitoring wells were purged until the groundwater visually appeared clear or water quality parameters stabilized, then a total of five grab groundwater samples (including 1 duplicate sample) were collected and submitted to Tunxis for analysis of VOCs, PAHs, ETPH, and metals.

Tetrachloroethylene (PCE), a commonly used dry cleaning chemical, was detected in each of the groundwater samples at concentrations ranging from 5.1 to 270 micrograms per liter ( $\mu$ g/L). The PCE concentration of 270  $\mu$ g/L detected at LEA-01-03 exceeds the DEEP Surface Water

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Protection Criteria (SWPC) of 88  $\mu$ g/L. Chlorinated VOCs trichloroethylene (TCE) and/or cis-1,2-dichloroethylene (cis-1,2-DCE), which are breakdown products of PCE, were detected at concentrations above laboratory reporting limits but below the SWPC in groundwater samples collected from locations LEA-01-01 and LEA-01-02.

ETPH was detected in the groundwater sample collected from location LEA-01-03 at a concentration of 0.19 mg/L, which is below the applicable DEEP RSR criteria of 0.25 mg/L. ETPH was not detected in any of the other groundwater samples collected during this investigation. Metals were detected above laboratory reporting limits in all of the groundwater samples, mostly at levels attributable to naturally occurring conditions at the Site. The groundwater samples collected from locations LEA-01-03 and LEA-01-04 had several metals concentrations that exceed the SWPC, but may be attributable to elevated turbidity within the collected groundwater samples.

# 2.0 FOCUSED PHASE III INVESTIGATION ACTIVITIES

Based on the results from the Limited Phase II Subsurface Investigation, Loureiro conducted a Focused Phase III Subsurface Investigation intended to delineate the extents of ETPH impacts in subsurface soils, and further assess the potential source of and extent of VOC-impacted groundwater, as detected during the completed Phase II activities.

#### 2.1 SOIL SAMPLING

On April 11, 2018, Loureiro advanced a total of five soil borings across the Site using directpush technology via a track-mounted drill rig in accordance with the Loureiro Standard Operating Procedure (SOP) entitled *Geoprobe*® *Probing and Sampling*. At each of the soil boring locations, borings were advanced under the supervision of a Loureiro geologist who prepared a field boring log documenting the visual classification of the soils encountered including the identification of fill materials. Soils were classified using a modified Burmeister soil classification system in accordance with the Loureiro SOP entitled *Geologic Logging of Unconsolidated Sedimentary Materials* and screened in the field using a hand-held PID for the presence of VOCs. Two soil samples were collected from each of the five soil borings at varying depths between 6 and 12 fbg, depending on apparent impacts based on elevated PID readings, staining, and/or odors.

Soil boring LEA-01-05 encountered refusal at 10.5 fbg due to tight geology. Four of the five soil borings (LEA-01-06 through LEA-01-09) were advanced to a depth of 16 fbg and completed as permanent groundwater monitoring wells (Section 2.2).

Soil boring logs are included as **Attachment A**. The locations of the advanced soil borings and associated groundwater monitoring wells are depicted on **Figure 2**.

A total of eleven soil samples (including one duplicate sample) were collected into laboratory supplied, pre-preserved sample bottles in accordance with the Loureiro SOP entitled *Soil Sample* 

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*Collection* and subsequently submitted under chain-of-custody control to Tunxis for the following analyses:

- VOCs by United States Environmental Protection Agency (EPA) Method 8260C; and,
- ETPH by the CT DEEP-approved Method.

### 2.2 GROUNDWATER SAMPLING

During the Focused Phase III Subsurface Investigation, four of the five soil borings were completed as permanent groundwater monitoring wells. Each monitoring well is constructed of 1.5-inch diameter schedule-40 PVC, screened from 7 to 17 fbg, and finished at grade with a steel flush-mounted road-box. A filter pack of zero-sand was used to fill the space around the screen to reduce sediment from entering the screen and ultimately the groundwater sample.

On April 12, 2018, Loureiro returned to the Site to develop the four monitoring wells. The wells were developed using a surge-rod and surge-block to push and pull formation groundwater in and out of the filter-pack to establish connectivity with the aquifer. Following surging, the monitoring wells were purged of at least three well volumes or when water quality parameters stabilized. All sampling locations were field surveyed during this site visit in order to obtain geographical location and elevation of each sampling location including the top of PVC of each monitoring well in order to define the direction of groundwater flow at the Site. Groundwater contours showing ground water flow direction at the Site are provided on **Figure 2**.

On April 16, 2018, Loureiro returned to the Site to low-flow sample the four newly-installed groundwater monitoring wells. Prior to groundwater sampling, a round of groundwater level measurements were collected at each monitoring well and ranged from 7.75 to 10.47 fbg.

Groundwater sampling activities were conducted in accordance with the current EPA Low-Flow sampling protocols detailed in the following document:

• USEPA – Region 1, 2010, Low-Stress (Low-Flow) Purging and Sampling Procedure for the Collection of Groundwater Samples from Monitoring Wells (EQASOP-GW 001), Revision No.3, dated January 19, 2010.

A total of five groundwater samples (including one duplicate sample) were collected into laboratory supplied, pre-preserved sample bottles and submitted to Tunxis for the following analyses:

- VOCs by United States EPA Method 8260C;
- ETPH by the CT DEEP-approved method; and,
- Metals (including antimony, arsenic, barium, beryllium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, thallium, vanadium, and zinc) using appropriate EPA 6000- and 7000- series Methods.



### 3.0 FOCUSED PHASE III INVESTIGATION RESULTS

The results of the Focused Phase III Subsurface Investigation, organized by environmental media, are discussed in this section.

During soil boring advancements, observed PID readings ranged from 0.0 to 0.3 parts per million (ppm). Dark brown/black staining was observed in the 9 to 11 fbg interval of LEA-01-07 with a PID reading of 0.1 ppm. Black staining was also observed in the 7 to 9.5 fbg interval of LEA-01-05 with a PID reading of 0.2 ppm. Since no observed impacts or elevated PID readings were noted in the boring logs for LEA-01-06, LEA-01-08, or LEA-01-09, soil samples were collected directly above and/or at the observed water table.

During the low-flow collection of groundwater samples from the four permanent monitoring wells, no observations were noted with regard to odors or sheen. Turbidity of the collected groundwater samples ranged from 3.01 to 4.36 nephelometric turbidity units (NTUs). Groundwater depths at the Site ranged from 7.75 to 10.47 fbg, and indicate that groundwater flows across the Site in a west-northwesterly direction.

Although the Site is not currently in a regulatory program, as such, is not subject to the regulatory requirements of the DEEP, for comparative evaluation purposes, the DEEP RSRs were used to evaluate analytical results of the collected soil and groundwater samples.

Based on the Site's GB groundwater classification, and current property use, the regulatory criteria used for the comparative evaluation included the following DEEP RSR criteria:

- Residential Direct Exposure Criteria (RDEC);
- Pollutant Mobility Criteria GB Areas (GBPMC); and
- Surface Water Protection Criteria (SWPC).

# 3.1 FOCUSED PHASE III SOIL ANALYTICAL DATA

Soil boring LEA-01-05 was used to further assess and delineate the presence of ETPH in soil that was previously detected at concentrations above the DEEP RSR criteria at soil boring LEA-01-03. ETPH was detected in the original soil sample collected from the 8 to 10 fbg interval at a concentration of 1,400 mg/kg, which exceeds the RDEC of 500 mg/kg. ETPH was not detected above the laboratory reporting limit of 81 mg/kg in the duplicate soil sample collected from this interval. Variability in detected concentrations between the original and duplicate soil samples is attributed to the heterogeneity of the collected soil samples from the discrete sampling interval. Naphthalene was detected in the soil sample collected from the 6 to 8 fbg interval at a concentration of 24 micrograms per kilogram ( $\mu$ g/kg), which is below DEEP RSR criteria.

Soil borings LEA-01-06 through LEA-01-09 were advanced to 16 fbg and completed as permanent groundwater monitoring wells. Locations LEA-01-06 through LEA-01-09 were advanced to facilitate the delineation and further assessment of the potential presence of ETPH and chlorinated VOCs impacts to soil and groundwater detected during the completed Phase II.

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No analyzed constituents of concern were detected above laboratory reporting limits from any of the soil samples collected from locations LEA-01-06, LEA-01-07, and LEA-01-08. Acetone was detected in the soil sample collected from the 6 to 8 fbg interval at soil boring location LEA-01-09, at a concentration below DEEP RSR criteria, and is likely attributed to laboratory contamination.

Table 1 includes a summary of the soil samples submitted for laboratory analyses and the requested analyses. Table 2 provides a summary of the constituents detected in soil. Table 3 provides a summary of all analytical results for soil. Table 4 shows which concentrations in soil exceeded DEEP RSR criteria.

# 3.2 FOCUSED PHASE III GROUNDWATER ANALYTICAL DATA

Five groundwater grab samples (including a duplicate sample) were collected from the four permanent monitoring wells installed at soil boring locations LEA-01-06 through LEA-01-09. The groundwater samples were collected to evaluate potential impacts to the groundwater from historic operations at the Site.

PCE was detected in groundwater samples collected from three of the four monitoring wells at concentrations above laboratory reporting limits but below DEEP RSR criteria, ranging in concentrations from 0.5 to 2.7  $\mu$ g/L. The highest concentration was detected in the most upgradient well (LEA-01-08) located at the southernmost corner of the property. This detected concentration of PCE in groundwater may be indicative of a potential upgradient, off-site source.

Chlorinated VOCs TCE and/or cis-1,2-DCE were detected at concentrations above laboratory reporting limits but below DEEP RSR criteria in groundwater samples collected from all four monitoring wells during this investigation. TCE and cis-1,2-DCE are breakdown products of PCE.

Benzene was detected at concentrations above laboratory reporting limits but below DEEP RSR criteria in groundwater samples collected from three of the four monitoring wells.

1,1-Dichloroethane (11DCA) was detected at concentrations above laboratory reporting limits but below DEEP RSR criteria in the groundwater sample collected from monitoring well LEA-01-07.

ETPH was not detected above laboratory reporting limits in any of the groundwater samples collected from the four newly-installed monitoring wells during this investigation.

Metals were detected above laboratory reporting limits in all of the groundwater samples collected from the four monitoring wells, at levels attributable to naturally occurring conditions at the Site.

**Table 5** includes a summary of the groundwater samples submitted for laboratory analyses and the requested analyses. **Table 6** provides a summary of the constituents detected in groundwater.



**Table 7** provides a summary of all analytical results for groundwater.
 **Table 8** shows which concentrations in groundwater exceeded applicable numeric criteria.

# 3.3 DATA QUALITY ASSURANCE / QUALITY CONTROL

Laboratory analytical reports for soil and groundwater analytical data are included as **Attachment B**. The quality assurance / quality control (QA/QC) analytical information were assessed and evaluated by Loureiro in accordance with the methodology for performing Data Quality Assessments (DQAs) and Data Usability Evaluations (DUEs) described in the *Laboratory Quality Assurance Quality Control, Data Quality Assessment, Data Usability Evaluation Guidance Document* (CTDEEP, 2009, revised 2010). Issues identified during the DQA did not affect the usability of the data generated during the investigation.

Based on the completed DUE, the data were deemed to be usable for their intended purpose.

# 4.0 SUMMARY DISCUSSION

The Focused Phase III subsurface investigation was conducted to evaluate the potential presence of a release to the subsurface attributable to REC-1 and REC-2 identified during the completed Phase I ESA, and to further delineate impacts to soil and groundwater that were identified during the completed Limited Phase II subsurface investigation activities. The constituents of concern consist of VOCs, ETPH and metals, which were selected based on the historical operations at the Site.

During the Focused Phase III, a total of five soil borings were advanced, four of which were completed as permanent groundwater monitoring wells. Sampling locations were chosen based on the historical dry cleaning and dye works operations conducted on the southern half of the Site, the locations of the observed impacts during the Limited Phase II investigation, and the anticipated westerly groundwater flow direction.

During soil boring advancements, observed PID readings ranged from 0.0 to 0.3 parts per million (ppm). Dark brown/black staining was observed in the 9 to 11 fbg interval of LEA-01-07 with a PID reading of 0.1 ppm. Black staining was also observed in the 7 to 9.5 fbg interval of LEA-01-05 with a PID reading of 0.2 ppm. Since no observed impacts or elevated PID readings were noted in the boring logs for LEA-01-06, LEA-01-08, or LEA-01-09, soil samples were collected directly above and/or at the observed water table.

Over the course of the Limited Phase II and Focused Phase II investigations, fill material was encountered at the following soil boring locations and corresponding depth intervals: LEA-01-01 (6'-8'), LEA-01-02 (8'-10'), LEA-01-03 (8'-10'), LEA-01-04 (4'-6'), LEA-01-05 (8'-10'), and LEA-01-07 (8'-11')/ The fill material was observed to consist of a heterogeneous sand and gravel soil matrix with black staining that contained varying quantities of crushed concrete, metal fragments, and/or pieces of wood.

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ETPH was detected at concentrations exceeding CT DEEP RSR criteria in soil samples collected from locations LEA-01-03 and LEA-01-05, which were collected during the Limited Phase II and the Focused Phase III, respectively. The ETPH impacts may be attributed to historical operations at the Site and/or with demolition of the former on-site building but are more likely attributable to the presence of the fill materials observed during soil boring advancement. Although the samples collected from LEA-01-03 and LEA-01-05 exhibited concentrations of ETPH that exceeded CT DEEP criteria, the duplicate samples collected from those locations as well as samples collected from the fill material at other boring locations did not contain detectable concentrations of ETPH.

VOCs were detected in groundwater samples from each of the four monitoring wells, all of which were below DEEP RSR criteria. Laboratory data indicates the presence of a low-level chlorinated and petroleum based VOC plume beneath the Site, containing PCE and its breakdown products TCE and cis-1,2-DCE, as well as 11DCA, and benzene. Select metals were detected in all of the groundwater samples at concentrations attributable to background conditions at the Site. The most upgradient monitoring well (LEA-01-08), which is located in the southernmost corner of the property, has the highest concentration of PCE, suggesting the possibility of contaminant migration onto the property from an upgradient, off-site source.

Evidence of releases to soil and groundwater at the Site, potentially attributable to the identified on-site RECs, was detected during the completed subsurface investigation activities.

Based on the results from the Limited Phase II and Focused Phase III activities, further evaluation of the fill material composition and its extent at the Site is recommended. Loureiro recommends additional soil borings for further characterize the composition of the observed fill materials and the delineation of its extent at the Site. In additionLoureiro recommends the completion of additionalgroundwater sampling for VOCs to further evaluate a potential on and/or off-site source of chlorinated VOC impacts to groundwater

Should you have any questions or if you would like to further discuss the results of the completed investigation activities please contact Kyle Zalaski or myself at 860-484-9187.

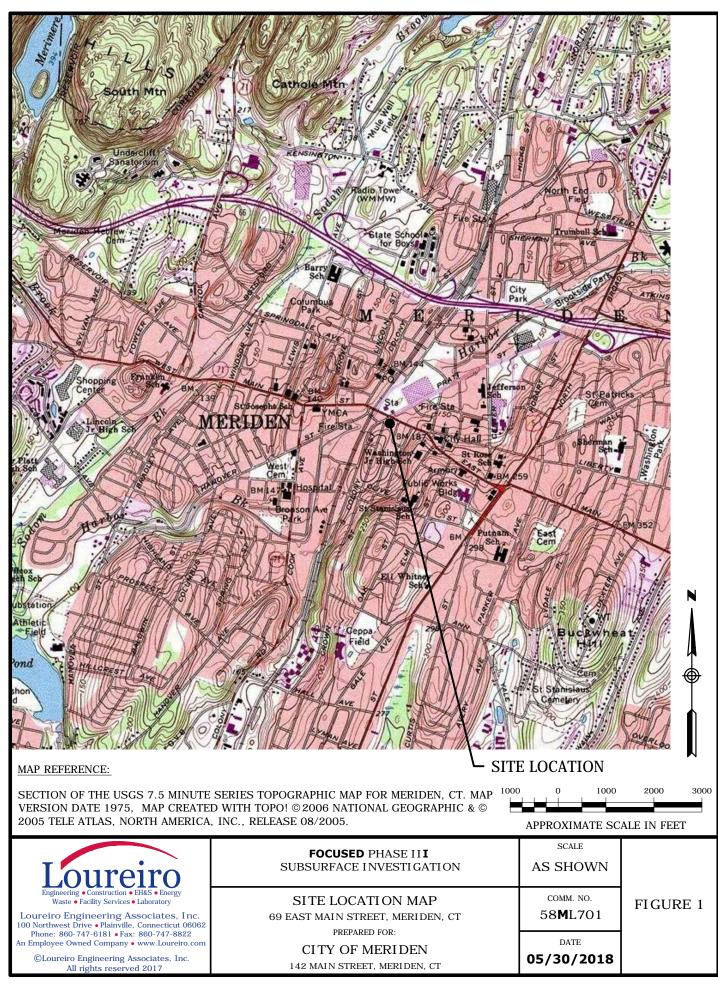
Sincerely,

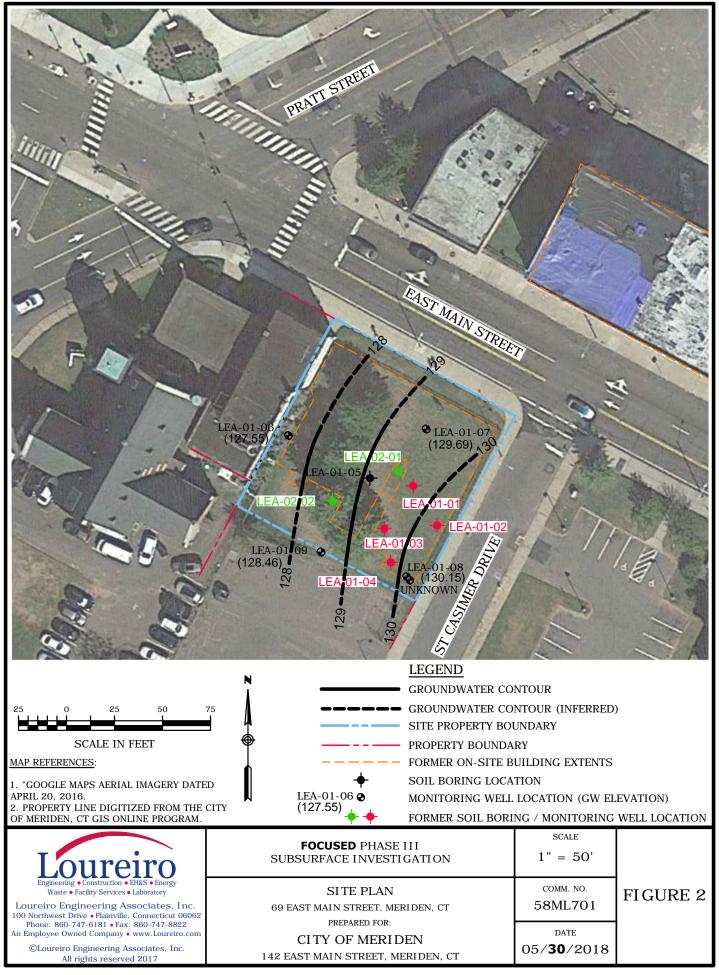
# LOUREIRO ENGINEERING ASSOCIATES, INC.

Adam Duskocy, P.G., L.E.P.

Attachments

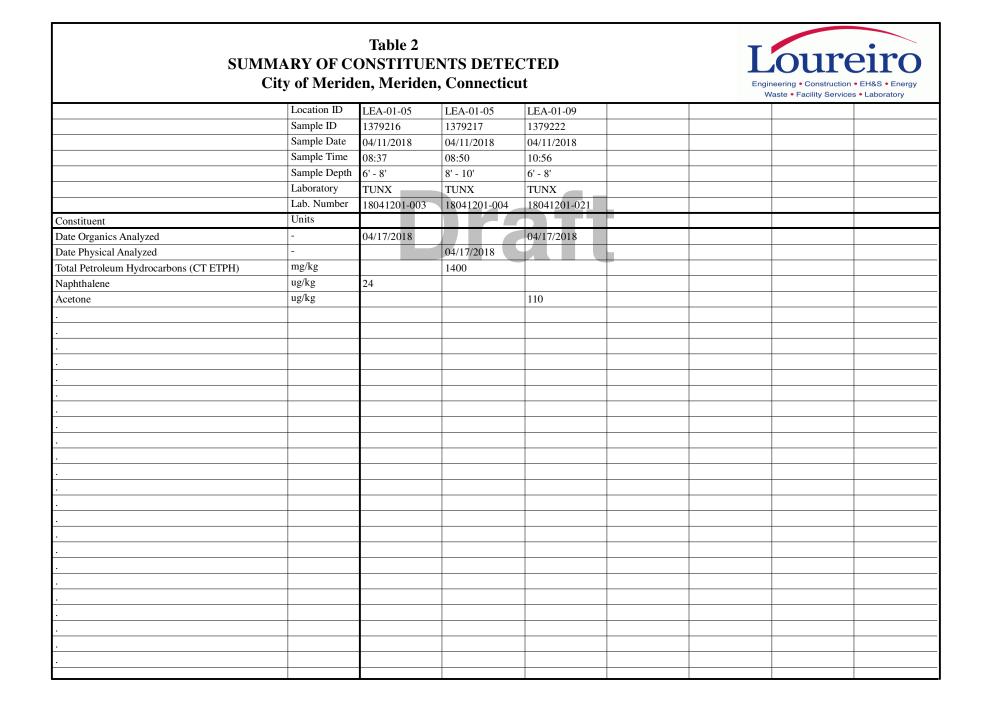
FIGURES





TABLES

	Same	la Information						Analysia I	nformation	Waste • Fac	ility Services •	Laboratory
Location ID	Samp Sample ID	le Information Sample Date	Sampled	Sample		Volatile	Semivolatile	Herbicides	nformation Pesticides/	Fuels/Oils	Metals	Miscellaneo
	-		Interval (ft)	Class	Lab.	Organics	Organics	Interorenatio	PCBs		Tretails	Analyses
EQUIPMENT	1379243	04/11/2018	( )	BKE		X				X		
LEA-01-05	1379216 1379217	04/11/2018	6 - 8	SB		Х				X		
LEA-01-05		04/11/2018	8 - 10	SB		X				X		
LEA-01-05	1379232	04/11/2018	8 - 10	SB		X				X		
LEA-01-06	1379220	04/11/2018	6 - 8	SB		X				X		
LEA-01-06	1379221	04/11/2018	8 - 10	SB		X				X		
LEA-01-07	1379218	04/11/2018	8 - 10	SB		X				X		
LEA-01-07	1379219	04/11/2018	10 - 12	SB		Х				X		
LEA-01-08	1379224	04/11/2018	8 - 10	SB		Х				X		
LEA-01-08	1379225	04/11/2018	10 - 12	SB		Х				x		
LEA-01-09	1379222	04/11/2018	6 - 8	SB		Х				x		
LEA-01-09	1379223	04/11/2018	8 - 10	SB		Х				x		
TRIP BLANK	1379233	04/11/2018		BKT		х						





	City of Meriden, Meriden, Connecticut											
	Location ID	EQUIPMENT	EQUIPMENT	LEA-01-05	LEA-01-05	LEA-01-05	LEA-01-05	LEA-01-05				
	Sample ID	1379243	1379243	1379216	1379216	1379217	1379217	1379232				
	Sample Date	04/11/2018	04/11/2018	04/11/2018	04/11/2018	04/11/2018	04/11/2018	04/11/2018				
	Sample Time	14:30	14:30	08:37	08:37	08:50	08:50	08:50				
	Sample Depth			6' - 8'	6' - 8'	8' - 10'	8' - 10'	8' - 10'				
	Laboratory	TUNX										
	Lab. Number	18041201-029	18041201-030	18041201-002	18041201-003	18041201-004	18041201-005	18041201-006				
Constituent	Units											
Date Organics Analyzed	-		04/16/2018		04/17/2018		04/17/2018					
Date Physical Analyzed	-	04/20/2018		04/17/2018		04/17/2018		04/17/2018				
Total Petroleum Hydrocarbons (CT ETPH)	mg/kg	< 0.07		<83		1400		<81				
Naphthalene	ug/kg		<0.5		24		<9.1					
1,2-Dichloropropane	ug/kg		<0.5		<6.6		<4.5					
Acetone	ug/kg		<10.0		<66.3		<45.4					
Acrylonitrile	ug/kg		<0.5		<6.6		<4.5					
Benzene	ug/kg		<0.5		<6.6		<4.5					
1,2,3-Trichlorobenzene	ug/kg		<0.5		<6.6		<4.5					
1,2,4-Trichlorobenzene	ug/kg		<0.5		<6.6		<4.5					
1,2,4-Trimethylbenzene	ug/kg		<0.5		<6.6		<4.5					
1,2-Dichlorobenzene	ug/kg		<0.5		<6.6		<4.5					
1,3,5-Trimethylbenzene	ug/kg		<0.5		<6.6		<4.5					
1,3-Dichlorobenzene	ug/kg		<0.5		<6.6		<4.5					
1,4-Dichlorobenzene	ug/kg		<0.5		<6.6		<4.5					
Bromobenzene	ug/kg		<0.5		<6.6		<4.5					
Chlorobenzene	ug/kg		<0.5		<6.6		<4.5					
Ethylbenzene	ug/kg		<0.5		<6.6		<4.5					
Isopropylbenzene (Cumene)	ug/kg		<0.5		<6.6		<4.5					
n-Propylbenzene	ug/kg		<0.5		<6.6		<4.5					
sec-Butylbenzene	ug/kg		<0.5		<6.6		<4.5					
tert-Butylbenzene	ug/kg		<0.5		<6.6		<4.5					
Hexachlorobutadiene	ug/kg		<0.4		<6.6		<4.5					
2-Butanone (MEK)	ug/kg		<2.0		<13		<9.1					
trans-1,4-Dichloro-2-Butene	ug/kg		<0.5		<6.6		<4.5					
Carbon Disulfide	ug/kg		<0.5		<6.6		<4.5					
Carbon Tetrachloride	ug/kg		<0.5		<6.6		<4.5					
4-Isopropyltoluene	ug/kg		<0.5		<6.6		<4.5					



	City of Meriden, Meriden, Connecticut											
	Location ID	EQUIPMENT	EQUIPMENT	LEA-01-05	LEA-01-05	LEA-01-05	LEA-01-05	LEA-01-05				
	Sample ID	1379243	1379243	1379216	1379216	1379217	1379217	1379232				
	Sample Date	04/11/2018	04/11/2018	04/11/2018	04/11/2018	04/11/2018	04/11/2018	04/11/2018				
	Sample Time	14:30	14:30	08:37	08:37	08:50	08:50	08:50				
	Sample Depth			6' - 8'	6' - 8'	8' - 10'	8' - 10'	8' - 10'				
	Laboratory	TUNX										
	Lab. Number	18041201-029	18041201-030	18041201-002	18041201-003	18041201-004	18041201-005	18041201-006				
Constituent	Units											
Dichlorodifluoromethane	ug/kg		<0.5		<6.6		<4.5					
1,1,1,2-Tetrachloroethane	ug/kg		<0.5		<6.6		<4.5					
1,1,1-Trichloroethane	ug/kg		<0.5		<6.6		<4.5					
1,1,2,2-Tetrachloroethane	ug/kg		<0.5		<6.6		<4.5					
1,1,2-Trichloroethane	ug/kg		<0.5		<6.6		<4.5					
1,1-Dichloroethane	ug/kg		<0.5		<6.6		<4.5					
Ethylene Dibromide	ug/kg		<0.5		<6.6		<4.5					
1,2-Dichloroethane	ug/kg		<0.5		<6.6		<4.5					
Chloroethane	ug/kg		<0.5		<6.6		<4.5					
Trichlorotrifluoroethane	ug/kg		<0.5		<6.6		<4.5					
Methyl tert-Butyl ether	ug/kg		<0.5		<6.6		<4.5					
1,1-Dichloroethylene	ug/kg		<0.5		<6.6		<4.5					
trans-1,2-Dichloroethylene	ug/kg		<0.5		<6.6		<4.5					
Vinyl Chloride	ug/kg		<0.5		<6.6		<4.5					
Tetrachloroethylene	ug/kg		<0.5		<6.6		<4.5					
Tetrahydrofuran	ug/kg		<0.5		<6.6		<4.5					
Hexanone, 2-	ug/kg		<1.0		<13		<9.1					
Bromomethane	ug/kg		<0.5		<6.6		<4.5					
Bromodichloromethane	ug/kg		<0.5		<6.6		<4.5					
Chloromethane	ug/kg		<0.5		<6.6		<4.5					
Dibromochloromethane	ug/kg		<0.5		<6.6		<4.5					
Methylene Dibromide	ug/kg		<0.5		<6.6		<4.5					
Methylene Chloride	ug/kg		<1.0		<13		<9.1					
Bromoform	ug/kg		<0.5		<6.6		<4.5					
Chloroform	ug/kg		<0.5		<6.6		<4.5					
Trichlorofluoromethane	ug/kg		<0.5		<6.6		<4.5					
Methyl Isobutyl ketone	ug/kg		<2.0		<13		<9.1					
1,2,3-Trichloropropane	ug/kg		<0.5		<6.6		<4.5					



	City of Meriden, Meriden, Connecticut										
	Location ID	EQUIPMENT	EQUIPMENT	LEA-01-05	LEA-01-05	LEA-01-05	LEA-01-05	LEA-01-05			
	Sample ID	1379243	1379243	1379216	1379216	1379217	1379217	1379232			
	Sample Date	04/11/2018	04/11/2018	04/11/2018	04/11/2018	04/11/2018	04/11/2018	04/11/2018			
	Sample Time	14:30	14:30	08:37	08:37	08:50	08:50	08:50			
	Sample Depth			6' - 8'	6' - 8'	8' - 10'	8' - 10'	8' - 10'			
	Laboratory	TUNX									
	Lab. Number	18041201-029	18041201-030	18041201-002	18041201-003	18041201-004	18041201-005	18041201-006			
Constituent	Units										
1,2-Dibromo-3-Chloropropane	ug/kg		<0.5		<6.6		<4.5				
1,3-Dichloropropane	ug/kg		<0.5		<6.6		<4.5				
sec-Dichloropropane	ug/kg		<0.5		<6.6		<4.5				
1,1-Dichloropropene	ug/kg		<0.5		<6.6		<4.5				
trans-1,3-Dichloropropene	ug/kg		<0.5		<6.6		<4.5				
cis-1,3-Dichloropropene	ug/kg		<0.5		<6.6		<4.5				
Styrene	ug/kg		<0.5		<6.6		<4.5				
Toluene	ug/kg		<0.5		<6.6		<4.5				
2-Chlorotoluene	ug/kg		<0.5		<6.6		<4.5				
4-Chlorotoluene	ug/kg		<0.5		<6.6		<4.5				
Total Trihalomethanes (Calc.)	ug/kg		<0.5		<6.6		<4.5				
Trichloroethylene	ug/kg		<0.5		<6.6		<4.5				
o-Xylene	ug/L		<0.5								
Xylenes, Total	ug/kg		<0.5		<20		<14				
Xylenes,m- & p-	ug/L		<0.5								
cis-1,2-Dichloroethylene	ug/kg		<0.5		<6.6		<4.5				
n-Butylbenzene	ug/kg		<0.5		<6.6		<4.5				
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	City of Merido	City of Meriden, Meriden, Connecticut											
	Location ID	LEA-01-05	LEA-01-06	LEA-01-06	LEA-01-06	LEA-01-06	LEA-01-07	LEA-01-07					
	Sample ID	1379232	1379220	1379220	1379221	1379221	1379218	1379218					
	Sample Date	04/11/2018	04/11/2018	04/11/2018	04/11/2018	04/11/2018	04/11/2018	04/11/2018					
	Sample Time	08:50	10:23	10:23	10:30	10:30	09:25	09:25					
	Sample Depth	8' - 10'	6' - 8'	6' - 8'	8' - 10'	8' - 10'	8' - 10'	8' - 10'					
	Laboratory	TUNX	TUNX	TUNX	TUNX	TUNX	TUNX	TUNX					
	Lab. Number	18041201-007	18041201-012	18041201-013	18041201-014	18041201-015	18041201-008	18041201-009					
Constituent	Units												
Date Organics Analyzed	-	04/17/2018		04/17/2018		04/17/2018		04/17/2018					
Date Physical Analyzed	-		04/17/2018		04/17/2018		04/17/2018						
Total Petroleum Hydrocarbons (CT ETPH)	mg/kg		<78		<78		<81						
Naphthalene	ug/kg	<8.0		<6.4		<6.4		<6.3					
1,2-Dichloropropane	ug/kg	<4.0		<3.2		<3.2		<3.1					
Acetone	ug/kg	<39.8		<32.1		<31.9		<31.3					
Acrylonitrile	ug/kg	<4.0		<3.2		<3.2		<3.1					
Benzene	ug/kg	<4.0		<3.2		<3.2		<3.1					
1,2,3-Trichlorobenzene	ug/kg	<4.0		<3.2		<3.2		<3.1					
1,2,4-Trichlorobenzene	ug/kg	<4.0		<3.2		<3.2		<3.1					
1,2,4-Trimethylbenzene	ug/kg	<4.0		<3.2		<3.2		<3.1					
1,2-Dichlorobenzene	ug/kg	<4.0		<3.2		<3.2		<3.1					
1,3,5-Trimethylbenzene	ug/kg	<4.0		<3.2		<3.2		<3.1					
1,3-Dichlorobenzene	ug/kg	<4.0		<3.2		<3.2		<3.1					
1,4-Dichlorobenzene	ug/kg	<4.0		<3.2		<3.2		<3.1					
Bromobenzene	ug/kg	<4.0		<3.2		<3.2		<3.1					
Chlorobenzene	ug/kg	<4.0		<3.2		<3.2		<3.1					
Ethylbenzene	ug/kg	<4.0		<3.2		<3.2		<3.1					
Isopropylbenzene (Cumene)	ug/kg	<4.0		<3.2		<3.2		<3.1					
n-Propylbenzene	ug/kg	<4.0		<3.2		<3.2		<3.1					
sec-Butylbenzene	ug/kg	<4.0		<3.2		<3.2		<3.1					
tert-Butylbenzene	ug/kg	<4.0		<3.2		<3.2		<3.1					
Hexachlorobutadiene	ug/kg	<4.0		<3.2		<3.2		<3.1					
2-Butanone (MEK)	ug/kg	<8.0		<6.4		<6.4		<6.3					
trans-1,4-Dichloro-2-Butene	ug/kg	<4.0		<3.2		<3.2		<3.1					
Carbon Disulfide	ug/kg	<4.0		<3.2		<3.2		<3.1					
Carbon Tetrachloride	ug/kg	<4.0		<3.2		<3.2		<3.1					
4-Isopropyltoluene	ug/kg	<4.0		<3.2		<3.2		<3.1					



	City of Meriden, Meriden, Connecticut										
	Location ID	LEA-01-05	LEA-01-06	LEA-01-06	LEA-01-06	LEA-01-06	LEA-01-07	LEA-01-07			
	Sample ID	1379232	1379220	1379220	1379221	1379221	1379218	1379218			
	Sample Date	04/11/2018	04/11/2018	04/11/2018	04/11/2018	04/11/2018	04/11/2018	04/11/2018			
	Sample Time	08:50	10:23	10:23	10:30	10:30	09:25	09:25			
	Sample Depth	8' - 10'	6' - 8'	6' - 8'	8' - 10'	8' - 10'	8' - 10'	8' - 10'			
	Laboratory	TUNX									
	Lab. Number	18041201-007	18041201-012	18041201-013	18041201-014	18041201-015	18041201-008	18041201-009			
Constituent	Units										
Dichlorodifluoromethane	ug/kg	<4.0		<3.2		<3.2		<3.1			
1,1,1,2-Tetrachloroethane	ug/kg	<4.0		<3.2		<3.2		<3.1			
1,1,1-Trichloroethane	ug/kg	<4.0		<3.2		<3.2		<3.1			
1,1,2,2-Tetrachloroethane	ug/kg	<4.0		<3.2		<3.2		<3.1			
1,1,2-Trichloroethane	ug/kg	<4.0		<3.2		<3.2		<3.1			
1,1-Dichloroethane	ug/kg	<4.0		<3.2		<3.2		<3.1			
Ethylene Dibromide	ug/kg	<4.0		<3.2		<3.2		<3.1			
1,2-Dichloroethane	ug/kg	<4.0		<3.2		<3.2		<3.1			
Chloroethane	ug/kg	<4.0		<3.2		<3.2		<3.1			
Trichlorotrifluoroethane	ug/kg	<4.0		<3.2		<3.2		<3.1			
Methyl tert-Butyl ether	ug/kg	<4.0		<3.2		<3.2		<3.1			
1,1-Dichloroethylene	ug/kg	<4.0		<3.2		<3.2		<3.1			
trans-1,2-Dichloroethylene	ug/kg	<4.0		<3.2		<3.2		<3.1			
Vinyl Chloride	ug/kg	<4.0		<3.2		<3.2		<3.1			
Tetrachloroethylene	ug/kg	<4.0		<3.2		<3.2		<3.1			
Tetrahydrofuran	ug/kg	<4.0		<3.2		<3.2		<3.1			
Hexanone, 2-	ug/kg	<8.0		<6.4		<6.4		<6.3			
Bromomethane	ug/kg	<4.0		<3.2		<3.2		<3.1			
Bromodichloromethane	ug/kg	<4.0		<3.2		<3.2		<3.1			
Chloromethane	ug/kg	<4.0		<3.2		<3.2		<3.1			
Dibromochloromethane	ug/kg	<4.0		<3.2		<3.2		<3.1			
Methylene Dibromide	ug/kg	<4.0		<3.2		<3.2		<3.1			
Methylene Chloride	ug/kg	<8.0		<6.4		<6.4		<6.3			
Bromoform	ug/kg	<4.0		<3.2		<3.2		<3.1			
Chloroform	ug/kg	<4.0		<3.2		<3.2		<3.1			
Trichlorofluoromethane	ug/kg	<4.0		<3.2		<3.2		<3.1			
Methyl Isobutyl ketone	ug/kg	<8.0		<6.4		<6.4		<6.3			
1,2,3-Trichloropropane	ug/kg	<4.0		<3.2		<3.2		<3.1			



	City of Meride	,	ı, Connecticı	ıt		E	Engineering • Construction • EH&S • Energy Waste • Facility Services • Laboratory		
	Location ID	LEA-01-05	LEA-01-06	LEA-01-06	LEA-01-06	LEA-01-06	LEA-01-07	LEA-01-07	
	Sample ID	1379232	1379220	1379220	1379221	1379221	1379218	1379218	
	Sample Date	04/11/2018	04/11/2018	04/11/2018	04/11/2018	04/11/2018	04/11/2018	04/11/2018	
	Sample Time	08:50	10:23	10:23	10:30	10:30	09:25	09:25	
	Sample Depth	8' - 10'	6' - 8'	6' - 8'	8' - 10'	8' - 10'	8' - 10'	8' - 10'	
	Laboratory	TUNX	TUNX	TUNX	TUNX	TUNX	TUNX	TUNX	
	Lab. Number	18041201-007	18041201-012	18041201-013	18041201-014	18041201-015	18041201-008	18041201-009	
Constituent	Units								
1,2-Dibromo-3-Chloropropane	ug/kg	<4.0		<3.2		<3.2		<3.1	
1,3-Dichloropropane	ug/kg	<4.0		<3.2		<3.2		<3.1	
sec-Dichloropropane	ug/kg	<4.0		<3.2		<3.2		<3.1	
1,1-Dichloropropene	ug/kg	<4.0		<3.2		<3.2		<3.1	
trans-1,3-Dichloropropene	ug/kg	<4.0		<3.2		<3.2		<3.1	
cis-1,3-Dichloropropene	ug/kg	<4.0		<3.2		<3.2		<3.1	
Styrene	ug/kg	<4.0		<3.2		<3.2		<3.1	
Toluene	ug/kg	<4.0		<3.2		<3.2		<3.1	
2-Chlorotoluene	ug/kg	<4.0		<3.2		<3.2		<3.1	
4-Chlorotoluene	ug/kg	<4.0		<3.2		<3.2		<3.1	
Total Trihalomethanes (Calc.)	ug/kg	<4.0		<3.2		<3.2		<3.1	
Trichloroethylene	ug/kg	<4.0		<3.2		<3.2		<3.1	
o-Xylene	ug/L								
Xylenes, Total	ug/kg	<12		<9.6		<9.6		<9.4	
Xylenes,m- & p-	ug/L								
cis-1,2-Dichloroethylene	ug/kg	<4.0		<3.2		<3.2		<3.1	
n-Butylbenzene	ug/kg	<4.0		<3.2		<3.2		<3.1	
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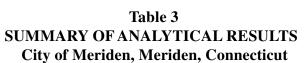
	City of Meriden, Meriden, Connecticut											
	Location ID	LEA-01-07	LEA-01-07	LEA-01-08	LEA-01-08	LEA-01-08	LEA-01-08	LEA-01-09				
	Sample ID	1379219	1379219	1379224	1379224	1379225	1379225	1379222				
	Sample Date	04/11/2018	04/11/2018	04/11/2018	04/11/2018	04/11/2018	04/11/2018	04/11/2018				
	Sample Time	09:25	09:25	11:49	11:49	11:49	11:49	10:56				
	Sample Depth	10' - 12'	10' - 12'	8' - 10'	8' - 10'	10' - 12'	10' - 12'	6' - 8'				
	Laboratory	TUNX										
	Lab. Number	18041201-010	18041201-011	18041201-024	18041201-025	18041201-026	18041201-027	18041201-020				
Constituent	Units											
Date Organics Analyzed	-		04/17/2018		04/17/2018		04/18/2018					
Date Physical Analyzed	-	04/17/2018		04/17/2018		04/17/2018		04/17/2018				
Total Petroleum Hydrocarbons (CT ETPH)	mg/kg	<83		<80		<79		<77				
Naphthalene	ug/kg		<9.2		<9.2		<9.2					
1,2-Dichloropropane	ug/kg		<4.6		<4.6		<4.6					
Acetone	ug/kg		<46.0		<46.2		<46.1					
Acrylonitrile	ug/kg		<4.6		<4.6		<4.6					
Benzene	ug/kg		<4.6		<4.6		<4.6					
1,2,3-Trichlorobenzene	ug/kg		<4.6		<4.6		<4.6					
1,2,4-Trichlorobenzene	ug/kg		<4.6		<4.6		<4.6					
1,2,4-Trimethylbenzene	ug/kg		<4.6		<4.6		<4.6					
1,2-Dichlorobenzene	ug/kg		<4.6		<4.6		<4.6					
1,3,5-Trimethylbenzene	ug/kg		<4.6		<4.6		<4.6					
1,3-Dichlorobenzene	ug/kg		<4.6		<4.6		<4.6					
1,4-Dichlorobenzene	ug/kg		<4.6		<4.6		<4.6					
Bromobenzene	ug/kg		<4.6		<4.6		<4.6					
Chlorobenzene	ug/kg		<4.6		<4.6		<4.6					
Ethylbenzene	ug/kg		<4.6		<4.6		<4.6					
Isopropylbenzene (Cumene)	ug/kg		<4.6		<4.6		<4.6					
n-Propylbenzene	ug/kg		<4.6		<4.6		<4.6					
sec-Butylbenzene	ug/kg		<4.6		<4.6		<4.6					
tert-Butylbenzene	ug/kg		<4.6		<4.6		<4.6					
Hexachlorobutadiene	ug/kg		<4.6		<4.6		<4.6					
2-Butanone (MEK)	ug/kg		<9.2		<9.2		<9.2					
trans-1,4-Dichloro-2-Butene	ug/kg		<4.6		<4.6		<4.6					
Carbon Disulfide	ug/kg		<4.6		<4.6		<4.6					
Carbon Tetrachloride	ug/kg		<4.6		<4.6		<4.6					
4-Isopropyltoluene	ug/kg		<4.6		<4.6		<4.6					



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	Location ID	LEA-01-07	LEA-01-07	LEA-01-08	LEA-01-08	LEA-01-08	LEA-01-08	LEA-01-09
	Sample ID	1379219	1379219	1379224	1379224	1379225	1379225	1379222
	Sample Date	04/11/2018	04/11/2018	04/11/2018	04/11/2018	04/11/2018	04/11/2018	04/11/2018
	Sample Time	09:25	09:25	11:49	11:49	11:49	11:49	10:56
	Sample Depth	10' - 12'	10' - 12'	8' - 10'	8' - 10'	10' - 12'	10' - 12'	6' - 8'
	Laboratory	TUNX	TUNX	TUNX	TUNX	TUNX	TUNX	TUNX
	Lab. Number	18041201-010	18041201-011	18041201-024	18041201-025	18041201-026	18041201-027	18041201-020
Constituent	Units							
Dichlorodifluoromethane	ug/kg		<4.6		<4.6		<4.6	
1,1,1,2-Tetrachloroethane	ug/kg		<4.6		<4.6		<4.6	
1,1,1-Trichloroethane	ug/kg		<4.6		<4.6		<4.6	
1,1,2,2-Tetrachloroethane	ug/kg		<4.6		<4.6		<4.6	
1,1,2-Trichloroethane	ug/kg		<4.6		<4.6		<4.6	
1,1-Dichloroethane	ug/kg		<4.6		<4.6		<4.6	
Ethylene Dibromide	ug/kg		<4.6		<4.6		<4.6	
1,2-Dichloroethane	ug/kg		<4.6		<4.6		<4.6	
Chloroethane	ug/kg		<4.6		<4.6		<4.6	
Trichlorotrifluoroethane	ug/kg		<4.6		<4.6		<4.6	
Methyl tert-Butyl ether	ug/kg		<4.6		<4.6		<4.6	
1,1-Dichloroethylene	ug/kg		<4.6		<4.6		<4.6	
trans-1,2-Dichloroethylene	ug/kg		<4.6		<4.6		<4.6	
Vinyl Chloride	ug/kg		<4.6		<4.6		<4.6	
Tetrachloroethylene	ug/kg		<4.6		<4.6		<4.6	
Tetrahydrofuran	ug/kg		<4.6		<4.6		<4.6	
Hexanone, 2-	ug/kg		<9.2		<9.2		<9.2	
Bromomethane	ug/kg		<4.6		<4.6		<4.6	
Bromodichloromethane	ug/kg		<4.6		<4.6		<4.6	
Chloromethane	ug/kg		<4.6		<4.6		<4.6	
Dibromochloromethane	ug/kg		<4.6		<4.6		<4.6	
Methylene Dibromide	ug/kg		<4.6		<4.6		<4.6	
Methylene Chloride	ug/kg		<9.2		<9.2		<9.2	
Bromoform	ug/kg		<4.6		<4.6		<4.6	
Chloroform	ug/kg		<4.6		<4.6		<4.6	
Trichlorofluoromethane	ug/kg		<4.6		<4.6		<4.6	
Methyl Isobutyl ketone	ug/kg		<9.2		<9.2		<9.2	
1,2,3-Trichloropropane	ug/kg		<4.6		<4.6		<4.6	



	City of Meriden, Meriden, Connecticut											
	Location ID	LEA-01-07	LEA-01-07	LEA-01-08	LEA-01-08	LEA-01-08	LEA-01-08	LEA-01-09				
	Sample ID	1379219	1379219	1379224	1379224	1379225	1379225	1379222				
	Sample Date	04/11/2018	04/11/2018	04/11/2018	04/11/2018	04/11/2018	04/11/2018	04/11/2018				
	Sample Time	09:25	09:25	11:49	11:49	11:49	11:49	10:56				
	Sample Depth	10' - 12'	10' - 12'	8' - 10'	8' - 10'	10' - 12'	10' - 12'	6' - 8'				
	Laboratory	TUNX										
	Lab. Number	18041201-010	18041201-011	18041201-024	18041201-025	18041201-026	18041201-027	18041201-020				
Constituent	Units											
1,2-Dibromo-3-Chloropropane	ug/kg		<4.6		<4.6		<4.6					
1,3-Dichloropropane	ug/kg		<4.6		<4.6		<4.6					
sec-Dichloropropane	ug/kg		<4.6		<4.6		<4.6					
1,1-Dichloropropene	ug/kg		<4.6		<4.6		<4.6					
trans-1,3-Dichloropropene	ug/kg		<4.6		<4.6		<4.6					
cis-1,3-Dichloropropene	ug/kg		<4.6		<4.6		<4.6					
Styrene	ug/kg		<4.6		<4.6		<4.6					
Toluene	ug/kg		<4.6		<4.6		<4.6					
2-Chlorotoluene	ug/kg		<4.6		<4.6		<4.6					
4-Chlorotoluene	ug/kg		<4.6		<4.6		<4.6					
Total Trihalomethanes (Calc.)	ug/kg		<4.6		<4.6		<4.6					
Trichloroethylene	ug/kg		<4.6		<4.6		<4.6					
o-Xylene	ug/L											
Xylenes, Total	ug/kg		<14		<14		<14					
Xylenes,m- & p-	ug/L											
cis-1,2-Dichloroethylene	ug/kg		<4.6		<4.6		<4.6					
n-Butylbenzene	ug/kg		<4.6		<4.6		<4.6					





	Location ID	LEA-01-09	LEA-01-09	LEA-01-09	TRIP BLANK						
	Sample ID	1379222	1379223	1379223	1379233						
	Sample Date	04/11/2018	04/11/2018	04/11/2018	04/11/2018						
	Sample Time	10:56	11:09	11:09	08:30						
	Sample Depth	6' - 8'	8' - 10'	8' - 10'							
	Laboratory	TUNX	TUNX	TUNX	TUNX						
	Lab. Number	18041201-021	18041201-022	18041201-023	18041201-001						
Constituent	Units										
Date Organics Analyzed	-	04/17/2018		04/17/2018	04/18/2018						
Date Physical Analyzed	-		04/17/2018								
Total Petroleum Hydrocarbons (CT ETPH)	mg/kg		<87								
Naphthalene	ug/kg	<6.7		<4.6	<10.0						
1,2-Dichloropropane	ug/kg	<3.3		<2.3	<5.0						
Acetone	ug/kg	110		<22.8	<50.0						
Acrylonitrile	ug/kg	<3.3		<2.3	<5.0						
Benzene	ug/kg	<3.3		<2.3	<5.0						
1,2,3-Trichlorobenzene	ug/kg	<3.3		<2.3	<5.0						
1,2,4-Trichlorobenzene	ug/kg	<3.3		<2.3	<5.0						
1,2,4-Trimethylbenzene	ug/kg	<3.3		<2.3	<5.0						
1,2-Dichlorobenzene	ug/kg	<3.3		<2.3	<5.0						
1,3,5-Trimethylbenzene	ug/kg	<3.3		<2.3	<5.0						
1,3-Dichlorobenzene	ug/kg	<3.3		<2.3	<5.0						
1,4-Dichlorobenzene	ug/kg	<3.3		<2.3	<5.0						
Bromobenzene	ug/kg	<3.3		<2.3	<5.0						
Chlorobenzene	ug/kg	<3.3		<2.3	<5.0						
Ethylbenzene	ug/kg	<3.3		<2.3	<5.0						
Isopropylbenzene (Cumene)	ug/kg	<3.3		<2.3	<5.0						
n-Propylbenzene	ug/kg	<3.3		<2.3	<5.0						
sec-Butylbenzene	ug/kg	<3.3		<2.3	<5.0						
tert-Butylbenzene	ug/kg	<3.3		<2.3	<5.0						
Hexachlorobutadiene	ug/kg	<3.3		<2.3	<5.0						
2-Butanone (MEK)	ug/kg	<6.7		<4.6	<10.0						
trans-1,4-Dichloro-2-Butene	ug/kg	<3.3		<2.3	<5.0						
Carbon Disulfide	ug/kg	<3.3		<2.3	<5.0						
Carbon Tetrachloride	ug/kg	<3.3		<2.3	<5.0						
4-Isopropyltoluene	ug/kg	<3.3		<2.3	<5.0						





	City of Meriden, Meriden, Connecticut										
	Location ID	LEA-01-09	LEA-01-09	LEA-01-09	TRIP BLANK						
	Sample ID	1379222	1379223	1379223	1379233						
	Sample Date	04/11/2018	04/11/2018	04/11/2018	04/11/2018						
	Sample Time	10:56	11:09	11:09	08:30						
	Sample Depth	6' - 8'	8' - 10'	8' - 10'							
	Laboratory	TUNX	TUNX	TUNX	TUNX						
	Lab. Number	18041201-021	18041201-022	18041201-023	18041201-001						
Constituent	Units										
Dichlorodifluoromethane	ug/kg	<3.3		<2.3	<5.0						
1,1,1,2-Tetrachloroethane	ug/kg	<3.3		<2.3	<5.0						
1,1,1-Trichloroethane	ug/kg	<3.3		<2.3	<5.0						
1,1,2,2-Tetrachloroethane	ug/kg	<3.3		<2.3	<5.0						
1,1,2-Trichloroethane	ug/kg	<3.3		<2.3	<5.0						
1,1-Dichloroethane	ug/kg	<3.3		<2.3	<5.0						
Ethylene Dibromide	ug/kg	<3.3		<2.3	<5.0						
1,2-Dichloroethane	ug/kg	<3.3		<2.3	<5.0						
Chloroethane	ug/kg	<3.3		<2.3	<5.0						
Trichlorotrifluoroethane	ug/kg	<3.3		<2.3	<5.0						
Methyl tert-Butyl ether	ug/kg	<3.3		<2.3	<5.0						
1,1-Dichloroethylene	ug/kg	<3.3		<2.3	<5.0						
trans-1,2-Dichloroethylene	ug/kg	<3.3		<2.3	<5.0						
Vinyl Chloride	ug/kg	<3.3		<2.3	<5.0						
Tetrachloroethylene	ug/kg	<3.3		<2.3	<5.0						
Tetrahydrofuran	ug/kg	<3.3		<2.3	<5.0						
Hexanone, 2-	ug/kg	<6.7		<4.6	<10.0						
Bromomethane	ug/kg	<3.3		<2.3	<5.0						
Bromodichloromethane	ug/kg	<3.3		<2.3	<5.0						
Chloromethane	ug/kg	<3.3		<2.3	<5.0						
Dibromochloromethane	ug/kg	<3.3		<2.3	<5.0						
Methylene Dibromide	ug/kg	<3.3		<2.3	<5.0						
Methylene Chloride	ug/kg	<6.7		<4.6	<10.0						
Bromoform	ug/kg	<3.3		<2.3	<5.0						
Chloroform	ug/kg	<3.3		<2.3	<5.0						
Trichlorofluoromethane	ug/kg	<3.3		<2.3	<5.0						
Methyl Isobutyl ketone	ug/kg	<6.7		<4.6	<10.0						
1,2,3-Trichloropropane	ug/kg	<3.3		<2.3	<5.0						



	Engineering • Construction • EH&S • Energy Waste • Facility Services • Laboratory					
	Location ID	LEA-01-09	LEA-01-09	LEA-01-09	TRIP BLANK	
	Sample ID	1379222	1379223	1379223	1379233	
	Sample Date	04/11/2018	04/11/2018	04/11/2018	04/11/2018	
	Sample Time	10:56	11:09	11:09	08:30	
	Sample Depth	6' - 8'	8' - 10'	8' - 10'		
	Laboratory	TUNX	TUNX	TUNX	TUNX	
	Lab. Number	18041201-021	18041201-022	18041201-023	18041201-001	
Constituent	Units					
1,2-Dibromo-3-Chloropropane	ug/kg	<3.3		<2.3	<5.0	
1,3-Dichloropropane	ug/kg	<3.3		<2.3	<5.0	
sec-Dichloropropane	ug/kg	<3.3		<2.3	<5.0	
1,1-Dichloropropene	ug/kg	<3.3		<2.3	<5.0	
trans-1,3-Dichloropropene	ug/kg	<3.3		<2.3	<5.0	
cis-1,3-Dichloropropene	ug/kg	<3.3		<2.3	<5.0	
Styrene	ug/kg	<3.3		<2.3	<5.0	
Toluene	ug/kg	<3.3		<2.3	<5.0	
2-Chlorotoluene	ug/kg	<3.3		<2.3	<5.0	
4-Chlorotoluene	ug/kg	<3.3		<2.3	<5.0	
Total Trihalomethanes (Calc.)	ug/kg	<3.3		<2.3	<5.0	
Trichloroethylene	ug/kg	<3.3		<2.3	<5.0	
o-Xylene	ug/L					
Xylenes, Total	ug/kg	<10		<6.8	<15	
Xylenes,m- & p-	ug/L					
cis-1,2-Dichloroethylene	ug/kg	<3.3		<2.3	<5.0	
n-Butylbenzene	ug/kg	<3.3		<2.3	<5.0	

Table 4 EXCEEDANCES City of Meriden, Meriden, Connecticut							Locureiro Engineering • Construction • EH&S • Energy Waste • Facility Services • Laboratory			
	Location ID	LEA-01-05								
	Sample ID	1379217								
	Sample Date	04/11/2018								
	Sample Time	08:50								
		8' - 10'								
	Laboratory	TUNX								
	Lab. Number	18041201-004			_					
Constituent	Units									
Date Physical Analyzed	-	04/17/2018								
Total Petroleum Hydrocarbons (CT ETPH)	mg/kg	1400								
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Summary OF SAMPLING AND ANALYTICAL INFORMATION City of Meriden, Meriden, Connecticut										Engineering • Construction • EH&S • Energy Waste • Facility Services • Laboratory			
Sample Information													
Location ID	Sample ID	Sample Date	Sampled Interval (ft)	Sample Class	LEAAnalyt. Lab.	Volatile Organics	Semivolatile Organics	Herbicides	Pesticides/ PCBs	Fuels/Oils	Metals	Miscellaneo Analyses	
EQUIPMENT	1379238	04/16/2018		BKE		х				x	Х		
LEA-01-06	1379236	04/16/2018	7.00 - 17.00	GWS		Х				x	Х		
EA-01-07	1379237	04/16/2018	7.00 - 17.00	GWS		Х				x	Х		
EA-01-08	1379234	04/16/2018	7.00 - 17.00	GWS	_	X				x	Х		
EA-01-09	1379235	04/16/2018	7.00 - 17.00	GWS		X				x	Х		
EA-01-09	1379240	04/16/2018	7.00 - 17.00	GWS		X				x	Х		
FRIP BLANK	1379241	04/16/2018		BKT		x							

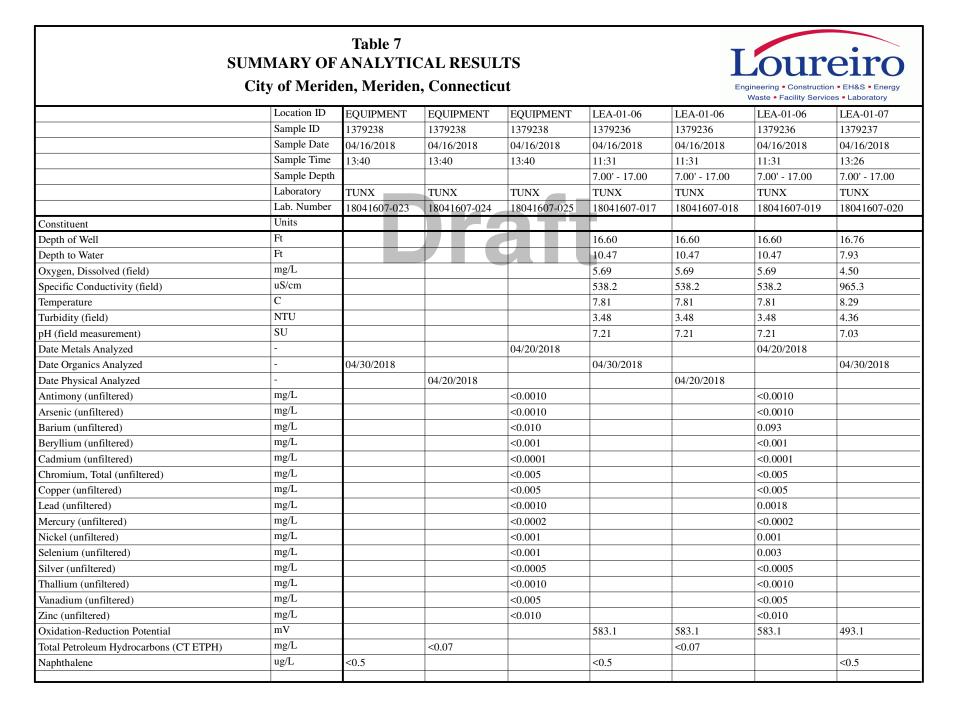
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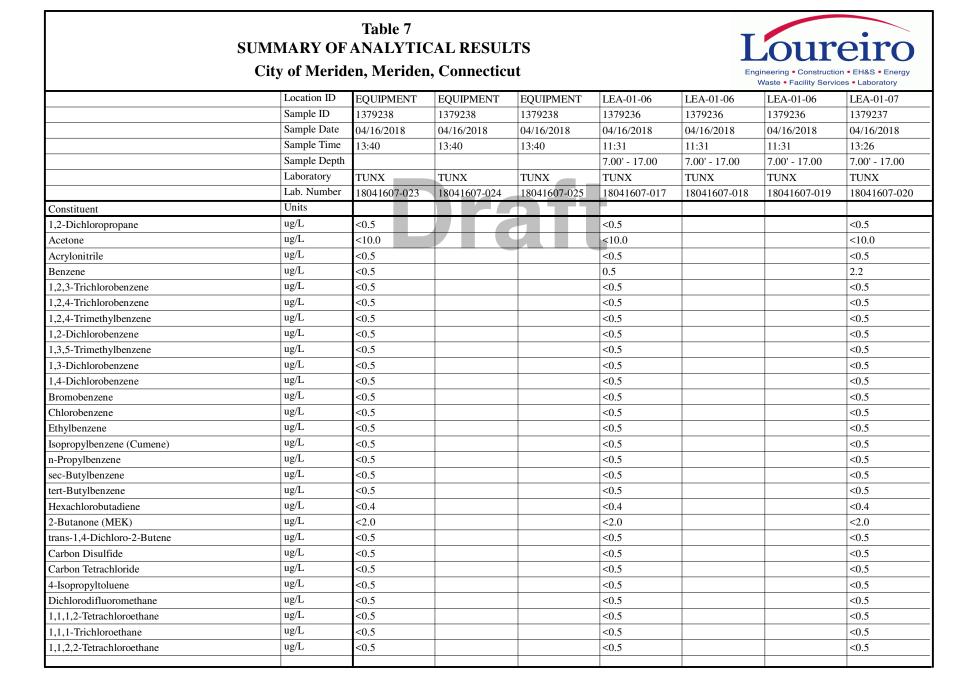


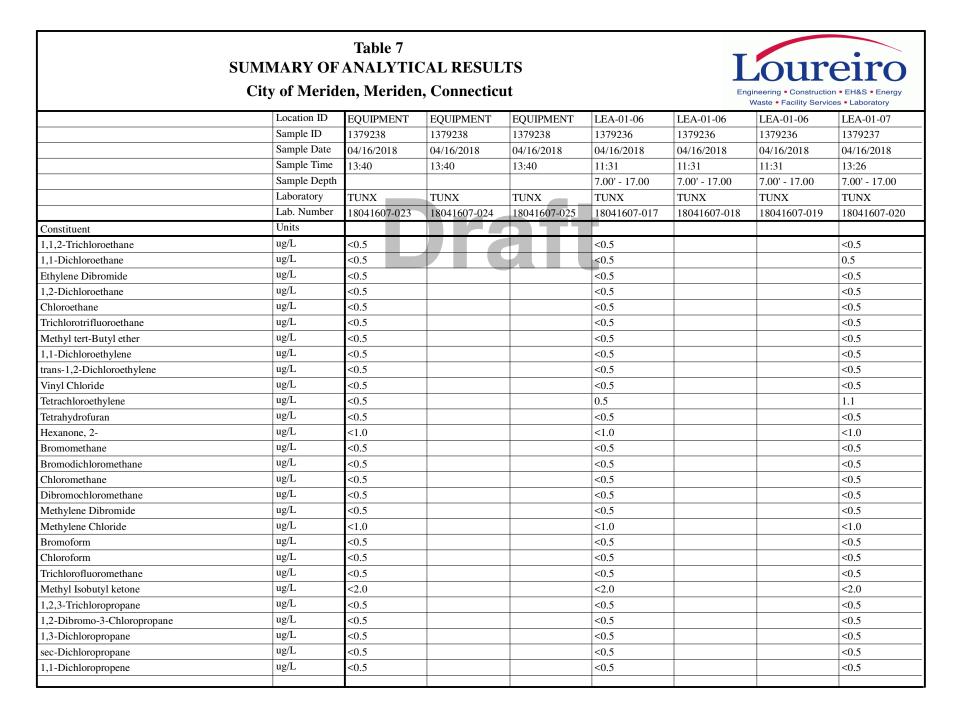
	En	Engineering • Construction • EH&S • Energy						
	City of Meride	en, wiel luen	, Connecticu	lt			Waste • Facility Service	
	Location ID	LEA-01-06	LEA-01-06	LEA-01-07	LEA-01-07	LEA-01-08	LEA-01-08	LEA-01-09
	Sample ID	1379236	1379236	1379237	1379237	1379234	1379234	1379235
	Sample Date	04/16/2018	04/16/2018	04/16/2018	04/16/2018	04/16/2018	04/16/2018	04/16/2018
	Sample Time	11:31	11:31	13:26	13:26	08:16	08:16	09:31
	Sample Depth	7.00' - 17.00	7.00' - 17.00	7.00' - 17.00	7.00' - 17.00	7.00' - 17.00	7.00' - 17.00	7.00' - 17.00
	Laboratory	TUNX	TUNX	TUNX	TUNX	TUNX	TUNX	TUNX
	Lab. Number	18041607-017	18041607-019	18041607-020	18041607-022	18041607-002	18041607-004	18041607-011
Constituent	Units							
Depth of Well	Ft	16.60	16.60	16.76	16.76	16.80	16.80	16.51
Depth to Water	Ft	10.47	10.47	7.93	7.93	7.75	7.75	8.77
Oxygen, Dissolved (field)	mg/L	5.69	5.69	4.50	4.50	1.65	1.65	2.01
Specific Conductivity (field)	uS/cm	538.2	538.2	965.3	965.3	1135.3	1135.3	1252.1
Temperature	С	7.81	7.81	8.29	8.29	6.33	6.33	7.11
Turbidity (field)	NTU	3.48	3.48	4.36	4.36	3.42	3.42	3.01
pH (field measurement)	SU	7.21	7.21	7.03	7.03	7.00	7.00	7.02
Date Metals Analyzed	-		04/20/2018		04/20/2018		04/20/2018	
Date Organics Analyzed	-	04/30/2018		04/30/2018		04/30/2018		04/30/2018
Antimony (unfiltered)	mg/L						0.0015	
Arsenic (unfiltered)	mg/L				0.0022			
Barium (unfiltered)	mg/L		0.093		0.171		0.213	
Cadmium (unfiltered)	mg/L						0.0001	
Chromium, Total (unfiltered)	mg/L				0.009			
Copper (unfiltered)	mg/L				0.011			
Lead (unfiltered)	mg/L		0.0018		0.0050			
Nickel (unfiltered)	mg/L		0.001		0.012		0.004	
Selenium (unfiltered)	mg/L		0.003		0.002		0.003	
Vanadium (unfiltered)	mg/L				0.016			
Zinc (unfiltered)	mg/L				0.038			
Oxidation-Reduction Potential	mV	583.1	583.1	493.1	493.1	528.7	528.7	445.6
Benzene	ug/L	0.5		2.2				0.6
1,1-Dichloroethane	ug/L			0.5				
Tetrachloroethylene	ug/L	0.5		1.1		2.7		
Trichloroethylene	ug/L	0.5				2.7		2.1
cis-1,2-Dichloroethylene	ug/L			2.0				
•								

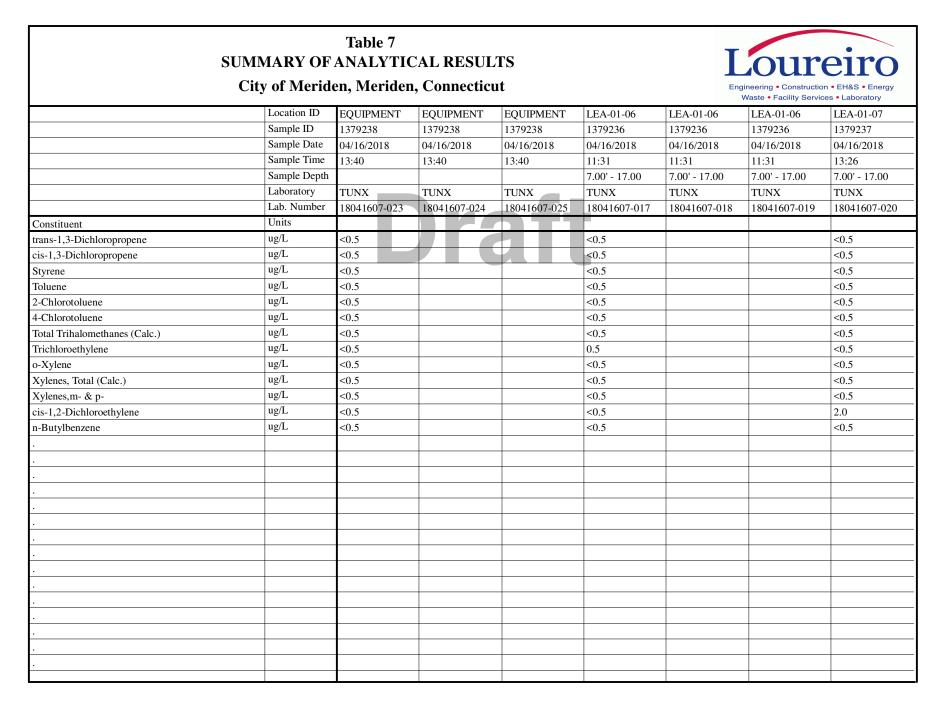
SUMMARY OF CONSTITUENTS DETECTED

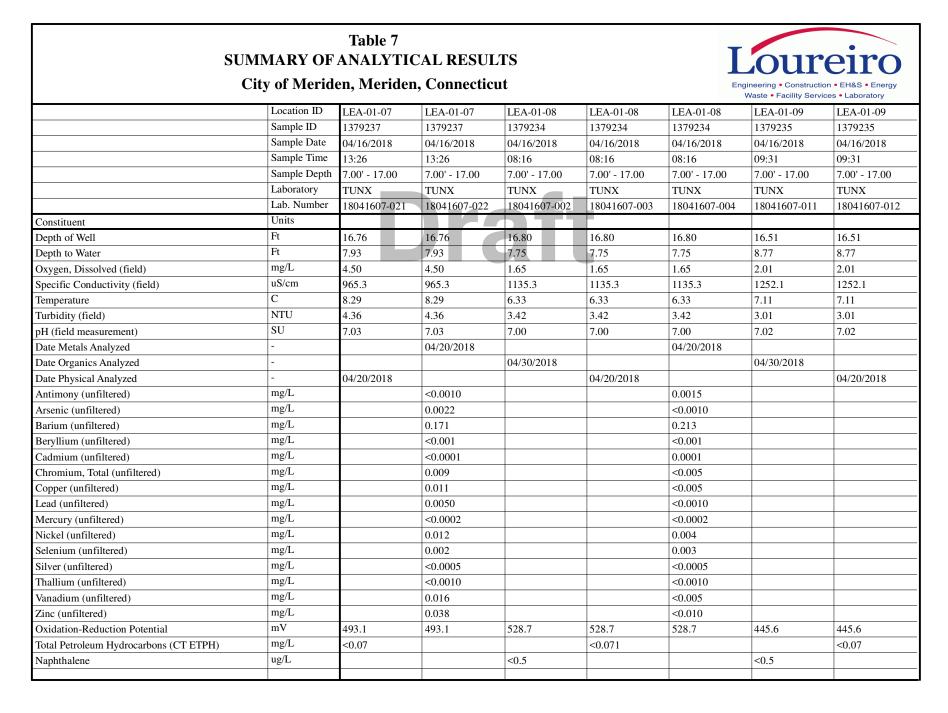


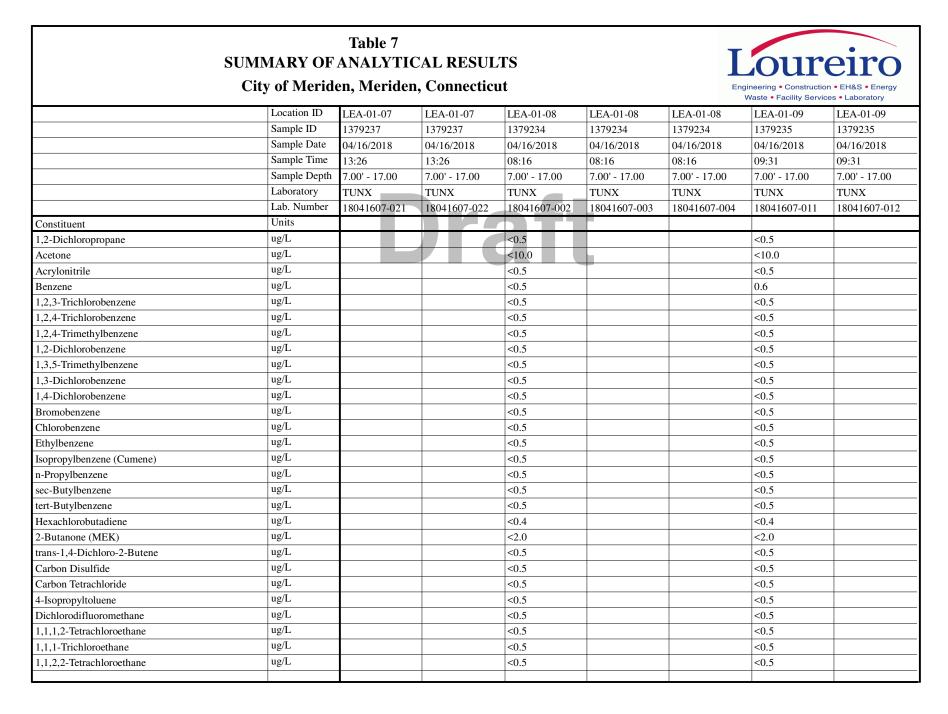


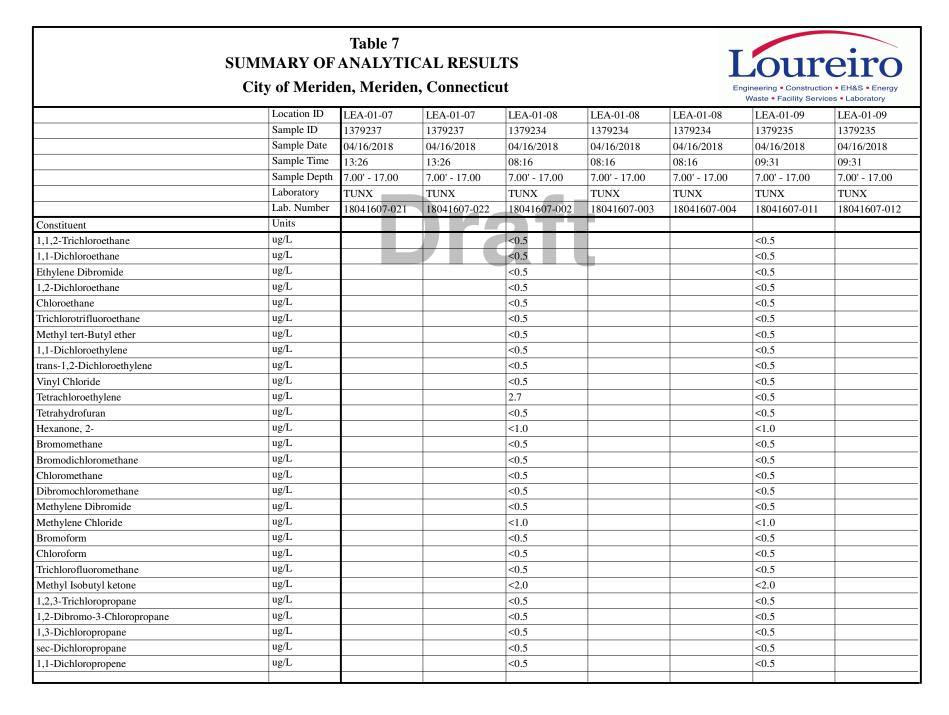












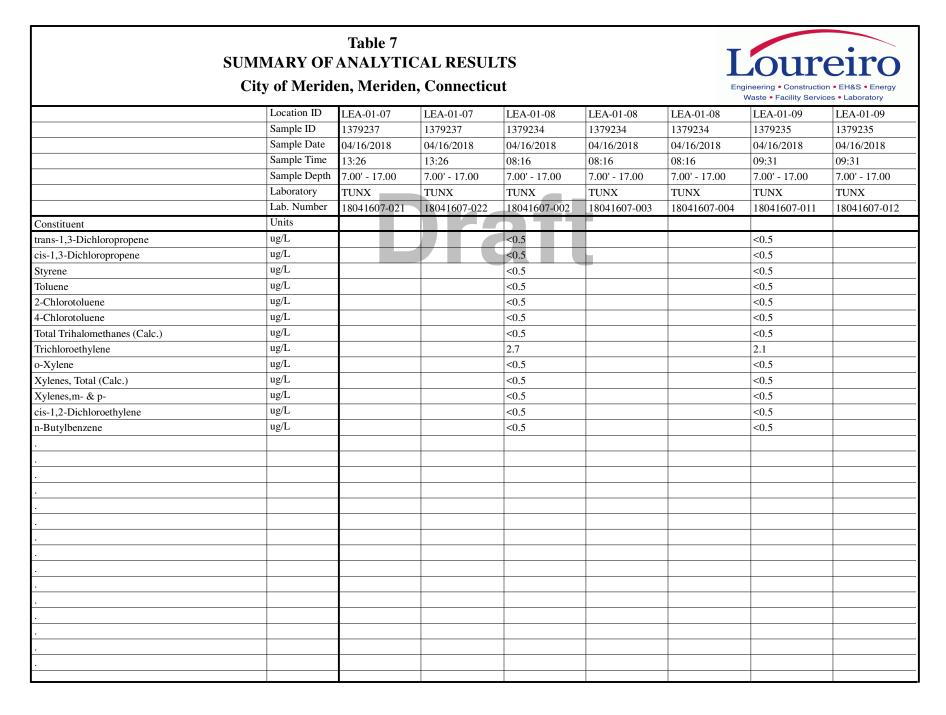


	Table 7         SUMMARY OF ANALYTICAL RESULTS         City of Meriden, Meriden, Connecticut									
	Location ID	LEA-01-09	LEA-01-09	LEA-01-09	LEA-01-09	TRIP BLANI	X			
	Sample ID	1379235	1379240	1379240	1379240	1379241				
	Sample Date	04/16/2018	04/16/2018	04/16/2018	04/16/2018	04/16/2018				
	Sample Time	09:31	09:31	09:31	09:31	06:55				
	Sample Depth	7.00' - 17.00	7.00' - 17.00	7.00' - 17.00	7.00' - 17.00					
	Laboratory	TUNX	TUNX	TUNX	TUNX	TUNX				
	Lab. Number	18041607-013	18041607-014	18041607-015	18041607-016	18041607-00	)1			
Constituent	Units									
Depth of Well	Ft	16.51	16.51	16.51	16.51					
Depth to Water	Ft	8.77	8.77	8.77	8.77					
Oxygen, Dissolved (field)	mg/L	2.01	2.01	2.01	2.01					
Specific Conductivity (field)	uS/cm	1252.1	1252.1	1252.1	1252.1					
Temperature	С	7.11	7.11	7.11	7.11					
Turbidity (field)	NTU	3.01	3.01	3.01	3.01					
pH (field measurement)	SU	7.02	7.02	7.02	7.02					
Date Metals Analyzed	-	04/20/2018			04/20/2018					
Date Organics Analyzed	-		04/30/2018			04/30/2018				
Date Physical Analyzed	-			04/20/2018						
Antimony (unfiltered)	mg/L	0.0062			0.0108					
Arsenic (unfiltered)	mg/L	< 0.0010			0.0010					
Barium (unfiltered)	mg/L	0.193			0.182					
Beryllium (unfiltered)	mg/L	< 0.001			< 0.001					
Cadmium (unfiltered)	mg/L	0.0001			0.0001					
Chromium, Total (unfiltered)	mg/L	0.005			0.010					
Copper (unfiltered)	mg/L	0.018			0.008					
Lead (unfiltered)	mg/L	0.0066			0.0158					
Mercury (unfiltered)	mg/L	< 0.0002			< 0.0002					
Nickel (unfiltered)	mg/L	0.005			0.007					
Selenium (unfiltered)	mg/L	0.003			0.003					
Silver (unfiltered)	mg/L	< 0.0005			< 0.0005					
Thallium (unfiltered)	mg/L	< 0.0010			<0.0010					
Vanadium (unfiltered)	mg/L	< 0.005			0.007					
Zinc (unfiltered)	mg/L	0.019			0.019					
Oxidation-Reduction Potential	mV	445.6	445.6	445.6	445.6					
Total Petroleum Hydrocarbons (CT ETPH)	mg/L			< 0.07						
Naphthalene	ug/L		<0.5			<0.5				
			<0.3			<0.5				

	Locureiro Engineering • Construction • EH&S • Energy Waste • Facility Services • Laboratory						
	Location ID	LEA-01-09	LEA-01-09	LEA-01-09	LEA-01-09	TRIP BLAN	K
	Sample ID	1379235	1379240	1379240	1379240	1379241	
	Sample Date	04/16/2018	04/16/2018	04/16/2018	04/16/2018	04/16/2018	
	Sample Time	09:31	09:31	09:31	09:31	06:55	
	Sample Depth	7.00' - 17.00	7.00' - 17.00	7.00' - 17.00	7.00' - 17.00		
	Laboratory	TUNX	TUNX	TUNX	TUNX	TUNX	
	Lab. Number	18041607-013	18041607-014	18041607-015	18041607-016	18041607-00	01
Constituent	Units						
1,2-Dichloropropane	ug/L		<0.5			<0.5	
Acetone	ug/L		<10.0			<10.0	
Acrylonitrile	ug/L		<0.5			<0.5	
Benzene	ug/L		0.5			<0.5	
1,2,3-Trichlorobenzene	ug/L		<0.5			<0.5	
1,2,4-Trichlorobenzene	ug/L		<0.5			<0.5	
1,2,4-Trimethylbenzene	ug/L		<0.5			<0.5	
1,2-Dichlorobenzene	ug/L		<0.5			<0.5	
1,3,5-Trimethylbenzene	ug/L		<0.5			<0.5	
1,3-Dichlorobenzene	ug/L		<0.5			<0.5	
1,4-Dichlorobenzene	ug/L		<0.5			<0.5	
Bromobenzene	ug/L		<0.5			<0.5	
Chlorobenzene	ug/L		<0.5			<0.5	
Ethylbenzene	ug/L		<0.5			<0.5	
Isopropylbenzene (Cumene)	ug/L		<0.5			<0.5	
n-Propylbenzene	ug/L		<0.5			<0.5	
sec-Butylbenzene	ug/L		<0.5			<0.5	
tert-Butylbenzene	ug/L		<0.5			<0.5	
Hexachlorobutadiene	ug/L		<0.4			<0.4	
2-Butanone (MEK)	ug/L		<2.0			<2.0	
trans-1,4-Dichloro-2-Butene	ug/L		<0.5			<0.5	
Carbon Disulfide	ug/L		<0.5			<0.5	
Carbon Tetrachloride	ug/L		<0.5			<0.5	
4-Isopropyltoluene	ug/L		<0.5			<0.5	
Dichlorodifluoromethane	ug/L		<0.5			<0.5	
1,1,1,2-Tetrachloroethane	ug/L		<0.5			<0.5	
1,1,1-Trichloroethane	ug/L		<0.5			<0.5	
1,1,2,2-Tetrachloroethane	ug/L		<0.5			<0.5	

	Table 7         SUMMARY OF ANALYTICAL RESULTS         City of Meriden, Meriden, Connecticut									
	Location ID	LEA-01-09	LEA-01-09	LEA-01-09	LEA-01-09	TRIP BLANK	K			
	Sample ID	1379235	1379240	1379240	1379240	1379241				
	Sample Date	04/16/2018	04/16/2018	04/16/2018	04/16/2018	04/16/2018				
	Sample Time	09:31	09:31	09:31	09:31	06:55				
	Sample Depth	7.00' - 17.00	7.00' - 17.00	7.00' - 17.00	7.00' - 17.00					
	Laboratory	TUNX	TUNX	TUNX	TUNX	TUNX				
	Lab. Number	18041607-013	18041607-014	18041607-015	18041607-016	18041607-00	)1			
Constituent	Units									
1,1,2-Trichloroethane	ug/L		<0.5			<0.5				
1,1-Dichloroethane	ug/L		<0.5			<0.5				
Ethylene Dibromide	ug/L		<0.5			<0.5				
1,2-Dichloroethane	ug/L		<0.5			<0.5				
Chloroethane	ug/L		<0.5			<0.5				
Trichlorotrifluoroethane	ug/L		<0.5			<0.5				
Methyl tert-Butyl ether	ug/L		<0.5			<0.5				
1,1-Dichloroethylene	ug/L		<0.5			<0.5				
trans-1,2-Dichloroethylene	ug/L		<0.5			<0.5				
Vinyl Chloride	ug/L		<0.5			<0.5				
Tetrachloroethylene	ug/L		<0.5			<0.5				
Tetrahydrofuran	ug/L		<0.5			<0.5				
Hexanone, 2-	ug/L		<1.0			<1.0				
Bromomethane	ug/L		<0.5			<0.5				
Bromodichloromethane	ug/L		<0.5			<0.5				
Chloromethane	ug/L		<0.5			<0.5				
Dibromochloromethane	ug/L		<0.5			<0.5				
Methylene Dibromide	ug/L		<0.5			<0.5				
Methylene Chloride	ug/L		<1.0			<1.0				
Bromoform	ug/L		<0.5			<0.5				
Chloroform	ug/L		<0.5			<0.5				
Trichlorofluoromethane	ug/L		<0.5			<0.5				
Methyl Isobutyl ketone	ug/L		<2.0			<2.0				
1,2,3-Trichloropropane	ug/L		<0.5			<0.5				
1,2-Dibromo-3-Chloropropane	ug/L		<0.5			<0.5				
1,3-Dichloropropane	ug/L		<0.5			<0.5				
sec-Dichloropropane	ug/L		<0.5			<0.5				
1,1-Dichloropropene	ug/L		<0.5			<0.5				



## City of Meriden, Meriden, Connecticut



	0109 01 110110	City of Meriden, Meriden, Connecticut							
	Location ID	LEA-01-09	LEA-01-09	LEA-01-09	LEA-01-09	TRIP BLANK			
	Sample ID	1379235	1379240	1379240	1379240	1379241			
	Sample Date	04/16/2018	04/16/2018	04/16/2018	04/16/2018	04/16/2018			
	Sample Time	09:31	09:31	09:31	09:31	06:55			
	Sample Depth	7.00' - 17.00	7.00' - 17.00	7.00' - 17.00	7.00' - 17.00				
	Laboratory	TUNX	TUNX	TUNX	TUNX	TUNX			
	Lab. Number	18041607-013	18041607-014	18041607-015	18041607-016	18041607-001			
Constituent	Units								
trans-1,3-Dichloropropene	ug/L		< 0.5			<0.5			
cis-1,3-Dichloropropene	ug/L		<0.5			<0.5			
Styrene	ug/L		<0.5			<0.5			
Toluene	ug/L		<0.5			<0.5			
2-Chlorotoluene	ug/L		<0.5			<0.5			
4-Chlorotoluene	ug/L		<0.5			<0.5			
Total Trihalomethanes (Calc.)	ug/L		<0.5			<0.5			
Trichloroethylene	ug/L		2.3			<0.5			
o-Xylene	ug/L		<0.5			<0.5			
Xylenes, Total (Calc.)	ug/L		<0.5			<0.5			
Xylenes,m- & p-	ug/L		<0.5			<0.5			
cis-1,2-Dichloroethylene	ug/L		<0.5			<0.5			
n-Butylbenzene	ug/L		<0.5			<0.5			
•									
•									
•									
•									
•									
•									
•									
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Ci	Engineering • Construction • EH&S • Energy Waste • Facility Services • Laboratory						
	Location ID	LEA-01-07	LEA-01-09	LEA-01-09			
	Sample ID	1379237	1379235	1379240			
	Sample Date	04/16/2018	04/16/2018	04/16/2018			
	Sample Time	13:26	09:31	09:31			
	Sample Depth	7.00' - 17.00	7.00' - 17.00	7.00' - 17.00			
	Laboratory	TUNX	TUNX	TUNX			
	Lab. Number	18041607-020	18041607-013	18041607-016			
Constituent	Units						
Depth of Well	Ft	16.76	16.51	16.51			
Depth to Water	Ft	7.93	8.77	8.77			
Date Metals Analyzed	-		04/20/2018	04/20/2018			
Date Organics Analyzed	-	04/30/2018					
Antimony (unfiltered)	mg/L		0.0062	0.0108			
Lead (unfiltered)	mg/L			0.0158			
Benzene	ug/L	2.2					

Table 8

## ATTACHMENT A

Soil Boring Logs

GEOLOG	GIC BORIN	NG LOG		I	Page 1 of 1	
Project:	City of Merio	den-69 East Ma	n St - Ph III	Start Date	Boring ID	
		ber 58ML701		04/11/2018		-
Client	City of Merio	den - GSca		End Date	LEA-01-0	5
Location	City of Merio			04/11/2018		
Drilling C			eering Associates, Inc.	Logged by	John Pawlowski	
Drilling M		Geoprobe	5	Drilling Foreman	JP/JC	
Sampling		Macro		Drill Rig	Geoprobe 6610 DT	-
	ater Observa			Surface Elevation		
Depth	at	Hours		Latitude		
Depth	at	Hours		Longitude		
	Sample	Information	S	Soil Description		PID/FID
Depth	Sample No.	Recovery Blows	6'' Color, Primary Grain Size, Secondar Sedimentary Str	ry Grain Sizes, Moisture, So ructure, Density, Cohesivenes		ppm
0-		100	Brown, SAND, little medium San	d, trace Gravel, fill, loose,	moist	0.0
2-		100	As Above			0.0
I.						
1						
4-		88	As Above			0.0
I						
6-	1379216	88	6'-7': Brown, fine SAND, little me	edium Sand, trace Gravel	fill, loose, moist	0.0
Ī						
1			7'-8': Black staining, fine SAND,	little medium Sand, trace	Gravel fill, loose, moist	
8-	1379232,	+	8'-9.5': Dark black staining, fine S	SAND, little medium Sand	trace trap rock fill	0.2
	1379217		_		,	
			9.5'-10': FILL trace Gravel, concre			
10-		58	10'-10.5': Brown, fine SAND, littl	e medium Sand, trace fill	, loose, moist	0.2
10.5			Refusal at 10.5 feet - possible tigh	nt fill		
			r c			
			Bottom of boring at 10.5 feet.			



Project:	City of Meric	len-69 Fast	Main	St - Ph III	Start Date	Boring ID			
	mission Num				04/11/2018				
	City of Meric		/01.002		End Date	LEA-01-0	6		
	City of Meric				04/11/2018				
Drilling C			nainaa	ring Associates, Inc.	Logged by	John Pawlowski			
0			ngmeer	ing Associates, inc.		JP/JC			
Drilling M		Geoprobe Macro			Drilling Foreman		-		
Sampling					Drill Rig Surface Elevation	Geoprobe 6610 DT			
	ater Observa								
Depth 10			urs		Latitude				
Depth	at		ours	Longitude					
Depth		Informatio	n	Color Deiner Coolor Sine Serve	Soil Description		PID/FI		
Deptii	Sample No.	Recovery BI	lows /6"	Color, Primary Grain Size, Secon Sedimentary	dary Grain Sizes, Moisture, So Structure, Density, Cohesivene		ppm		
0-		96		Brown, fine SAND, little media	-		0.0		
2-		96		As Above			0.0		
1-		75		Brown, fine SAND, little media	im Sand trace fill brick and	asphalt loose moist	0.1		
T		15		blown, file 571(b, fille filear	and Sana, trace in oriek and	asphart, 10050, morst	0.1		
	1270220	75		Duran fina CAND little made		1. fl 1	0.1		
5-	1379220	75		Brown, fine SAND, little media	im Sand, trace Gravel fill roc	ek flour, loose, moist	0.1		
3-	1379221	90		Brown, fine SAND, little media	um Sand, trace Gravel fill, lo	ose, wet at 10 feet	0.1		
10- V		90		Brown, fine SAND, little media	um Sand, loose, wet		0.1		
12-		110		Brown, fine SAND, little media	um Sand, trace Silt, loose, we	et	0.0		
4-		110		As above			0.0		
				Bottom of boring at 16 feet					
6									
	1	1 1					1		



Project:	GIC BORIN			St Dh III	Start Date	Page 1 of 1	
•	mission Num					Boring ID	
				<del>)</del>	04/11/2018	LEA-01-0'	7
Client	City of Meric		а		End Date		
	City of Merio		<b>F</b>	···· A · · · · · · · · · · · · · · · ·	04/11/2018	L.L., D. 11.	
-				ring Associates, Inc.	Logged by	John Pawlowski	
Drilling M		Geoprob	e		Drilling Foreman		,
Sampling		Macro			Drill Rig	Geoprobe 6610 DT	
	ater Observa		•		Surface Elevation	1	
Depth 7.			lours		Latitude		
Depth	at		Hours		Longitude		
Depth		Informa			Soil Description		PID/FID
Deptii	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Seconda Sedimentary St	ury Grain Sizes, Moisture, So cructure, Density, Cohesivene		ppm
0-		92		Brown, fine SAND, little medium			0.0
l							
2-		92		As Above			0.0
-				1.510010			
4-		88		As Above			0.0
+-		00		As Above			0.0
6-		88		As Above			0.1
V							
8-	1379218	83		8'-9': Brown, fine SAND, little m	edium Sand, trace fill Gra	vel and concrete, loose,	0.1
				moist			
				9'-10': Dark brown and black, sta	ining. fine SAND, trace tr	ap rock, fill, loose, wet at 10	1
				feet	-	-	
10-	1379219	83		10'-11': Dark brown and black sta	aining, fine SAND, trace S	Silt, loose, wet	0.1
 				11'-12': Brown, fine SAND, trace	e Silt, loose, wet		
12-		8		Brown, fine SAND, little Silt, tra	ce medium Sand, loose, w	et	0.0
14-		96		As Above			0.0
				Bottom of boring at 16 feet.			
16							



Printed on 04/17/2018

LEA-01-07

Project: Com	City of Meric				Start Date	Boring ID	
LEA Com							
				)	04/11/2018	LEA-01-0	8
	City of Meric		a		End Date		-
	City of Meric		<b>.</b> .		04/11/2018		
Drilling Co				ring Associates, Inc.	Logged by	John Pawlowski	
Drilling M		Geoprob	e		Drilling Foreman		_
Sampling N		Macro			Drill Rig	Geoprobe 6610 DT	
	ter Observa		_		Surface Elevation	l	
Depth 7.8			Hours		Latitude		
Depth	at		Hours	~	Longitude		
Darreth	Sample	Informa			oil Description		PID/FI
Depth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Sedimentary Stru	y Grain Sizes, Moisture, So Icture, Density, Cohesivene		ppm
0-		96		Brown, fine SAND, little medium			0.1
Î				,,, _,	,	,,,	
2-		96		As Above			0.1
		90		As Above			0.1
i							
1		02			<u> </u>	1 1. 1	0.2
4-		83		Brown, fine SAND, little medium	Sand, trace trap rock asp	halt, loose, moist	0.2
¦							
İ							
6-		83		Brown, fine SAND, little medium	Sand, trace trap rock, loo	ose, moist	0.2
-							
i v							
8-	1379224	67		Brown, fine SAND, little medium	Sand, loose, wet at 10 fe	et	0.2
10-	1379225	84		Reddish brown, medium SAND, lo	oose, wet		0.2
1							
12-		71		Brown, fine SAND, little medium	Sand, trace Silt, loose, w	et	0.1
1							
14-		71		As Above			0.1
1							
				Bottom of boring at 16 feet			
 16							
10							
1		1					1



	GIC BORIN			Ct Dh III		Page 1 of 1	
	City of Merio				Start Date	Boring ID	
	mission Num			)	04/11/2018	LEA-01-0	9
	City of Meric		a		End Date		
	City of Merio		<u>.</u>		04/11/2018		
Drilling C				ring Associates, Inc.	Logged by	John Pawlowski	
Drilling M		Geoprob	e		Drilling Foreman		_
Sampling		Macro			Drill Rig	Geoprobe 6610 DT	
	ater Observa		-		Surface Elevation	n	
Depth 8.			Iours		Latitude		
Depth	at		Hours		Longitude		1
Donth	Sample	Informa			oil Description		PID/FI
Depth	Sample No.	Recovery (%)	Blows /6''	Color, Primary Grain Size, Secondary Sedimentary Stru	Grain Sizes, Moisture, So cture, Density, Cohesiven		ppm
0-		83		Brown, fine SAND, little medium S			0.2
Ì					,,,,	, ,	
2-		83		Brown, fine SAND, little medium S	Sand trace Gravel fill 1	oose moist	0.1
2-		0.5		Brown, fine SAND, fittle medium 3	Sand, trace Graver III, I	oose, moist	0.1
						• • • • • • •	0.0
4-		75		Brown, fine SAND, little medium S	Sand, trace Gravel and t	brick, loose, moist	0.2
1							
6-	1379222	75		Brown, fine SAND, little medium S	Sand, trace Silt, loose, n	noist	0.2
8-	1379223	83		Brown, fine SAND, little medium S	Sand, trace Gravel, loos	e, wet at 10 feet	0.3
10-		83		Brown, fine SAND, little Silt, trace	medium Sand, loose, v	vet	0.3
12-		88		As Above			0.0
1							
14-		88		As Above			0.0
1							
I				Bottom of boring at 16 feet			
 16							
10							



## ATTACHMENT B

Laboratory Reports