

31 July 2015

Mr. Ron Matten  
Director of Facilities  
Greenwich Public Schools  
290 Greenwich Avenue  
Greenwich, CT 06830

**Re: Arsenic Delineation Report  
William Street Ball Field  
William Street West and Church Street  
Greenwich, Connecticut  
Langan Project No.: 140109002**

Dear Mr. Matten,

Langan CT, Inc. (Langan) prepared this report to document the results of the horizontal and vertical delineation of arsenic in soils, performed on behalf of AKF Group, LLC (AKF), for the William Street Ball Field (also known as 'Byram Field') located at the intersection of William Street West and Church Street in the Town of Greenwich, Connecticut (hereafter referred to as the "Site"). The Site encompasses approximately 55,000 square feet (SF) and is part of three tax lots designated as Parcel ID's 04-4500/S, 04-4502/S, and 04-4506/S by the Greenwich Tax Assessor. The Site is improved with a public ball field. This letter report describes the sampling methodology, field observations, and analytical results of the shallow subsurface investigation, which included the completion of 84 shallow soil borings (collected at depths ranging from 0 to 4 feet below grade) to investigate the horizontal and vertical extent of soils impacted with arsenic at the Site.

## **PREVIOUS ENVIRONMENTAL INVESTIGATIONS**

Langan conducted a Limited Phase II Environmental Site Investigation (ESI) at the Site in August 2014 (see Attachment A), which included the completion of three environmental soil borings and the collection/analysis of three shallow soil samples. Soil analytical testing results obtained during the Limited Phase II ESI were compared to the Connecticut Department of Energy and Environmental Protection's (CTDEEP) Remediation Standard Regulations (RSRs) Residential Direct Exposure Criteria (RDEC) and the Industrial/Commercial Direct Exposure Criteria (I/C DEC), which in both cases is 10 milligrams per kilogram (mg/kg). The DEC is established to protect human health from risks associated with direct exposure to pollutants in contaminated soil within 15 feet of the ground surface. Laboratory analytical results of the subsurface material identified concentrations of arsenic exceeding the DEC in two of the three borings at depths ranging from 1 to 2 feet below grade surface (bgs). Arsenic was detected at a

concentration of 144 and 89.2 mg/kg in SB-7 and SB-8, respectively; above the DEC of 10 mg/kg.

Based on a review of historical aerial photographs, the ball field was constructed sometime before 1934 and the source of material used to grade and construct the field, if any, is unknown.

Langan conducted a supplemental investigation in March 2015 to investigate the extent of shallow arsenic-impacted soils at the Site (see Attachment A), which included the completion of 20 shallow hand auger soil borings (0 to 1 feet bgs) and collection of 20 grab soil samples (plus one QA/QC duplicate sample). The sampling locations were based on a grid system to cover the entire footprint of the ball field (including the infield and dugout areas) at a frequency of approximately 1 sample per 2,700 square feet. Arsenic was detected at concentrations exceeding the DEC in five soil samples (plus the duplicate QA/QC duplicate sample). These exceedance locations included HA-5 (94.3 mg/kg), HA-6 (214 mg/kg), HA-8 (16.7 mg/kg), HA-10 (18 mg/kg), HA-13 (132 mg/kg), and DUP-1 (152 mg/kg). Arsenic was detected at the remaining locations at concentrations above laboratory reporting limits but below the DEC.

## **FIELD INVESTIGATION**

### Geophysical Survey

Prior to initiation of soil borings, a geophysics survey was completed by Nova Geophysical Services (Nova) of Douglaston, New York, using electromagnetic surveying equipment and ground penetrating radar (GPR). The purpose of the geophysical survey was to locate the gas main that runs beneath the Site. The geophysical report and associated images and map are provided as Attachment B.

The GPR survey identified scattered anomalies located the Site, which were determined to be inconsistent with underground storage tanks. The survey also identified a subsurface natural gas pipeline that bisects the field. The pipeline enters the northeastern portion of the Site along William Street West, runs south-southwest across the infield and outfield portions of the ball field, and exits the Site at the central southern boundary along the paved access road.

### Horizontal and Vertical Delineation of Arsenic in Soil

As stated above, arsenic was detected above the DEC in soil samples collected from 0 to 1 feet bgs at five locations and from 1 to 2 feet bgs at two locations at the Site. The supplemental delineation sampling activities described below were conducted over two



mobilizations and included a total of 84 soil borings to horizontally and vertically delineate arsenic in soil.

During our first mobilization (delineation activities conducted from 30 April 2015 to 1 May 2015), Langan advanced 51 delineation soil borings. In general, approximately nine new borings were advanced at each of the previous exceedance locations: one in the same location as the original boring (to delineate the vertical extent of impacts); four borings around the original location (offset approximately 10 feet to the north, east, south, and west); and four additional step-out borings, completed approximately 10 feet beyond the first set of borings (to delineate the horizontal extent of the impacts). QA/QC measures included the collection of three duplicate soil samples and one equipment blank sample.

Based on a review of the analytical results from the April/May 2015 mobilization, Langan initiated a second mobilization to further delineate arsenic levels in soil. The second mobilization included the completion of 33 additional soil borings, which were located with the intent of delineating reported arsenic concentrations of above 20 mg/kg. At each of the previous exceedance locations, approximately four new borings were advanced: two borings around the original location (offset approximately 10 feet) and two additional step-out borings (offset approximately 10 feet beyond the first set of borings). Grab samples were collected at each boring at intervals of 0 to 1 foot, 1 to 2 feet, 2 to 3 feet, and 3 to 4 feet bgs. QA/QC measures included the collection of one duplicate soil sample and one equipment blank sample.

Samples collected from the delineation soil borings were only analyzed if exceedances were identified in the shallower/inner borings. All samples were collected in laboratory provided glassware, placed in coolers packed with ice, and submitted to York Analytical Laboratories, Inc. (York), a Connecticut-certified laboratory, for analysis of total arsenic under standard chain-of-custody (COC) procedures.

## **OBSERVATIONS AND RESULTS**

### Soil Sample Analytical Results

A total of 126 samples were submitted for laboratory analysis, including four duplicate samples. Analytical results were compared to the RDEC and I/C DEC for arsenic. The soil analytical results are presented in Table 1 and Figure 2.

### **Arsenic**

Samples with concentrations exceeding the R and I/C DEC originated from the following soil borings, organized by depth interval:

#### 0 to 1 feet bgs

HA-5-E1	HA-5-E2	HA-5-E3	HA-5-E6	HA-5-N1	HA-5-N2
HA-5-N3	HA-5-N4	HA-5-N5	HA-5-S1	HA-6-N1	HA-10-E1
HA-10-E2	HA-10-N1	HA-10-N2	HA-10-NE1	HA-10-S1	HA-10-S2
HA-10-W1	HA-10-W2	HA-10-W3	HA-13-E1	HA-13-E2	HA-13-N1
HA-13-N2	HA-13-N4	HA-13-N5	HA-13-N6	HA-13-S1	HA-13-S2
HA-13-W1	HA-13-W2	HA-13-W3	HA-13-SW1	HA-21-N1	HA-21-N2
HA-21-NE1	HA-22-N1	HA-22-S1	HA-22-W1		

#### 1 to 2 feet bgs

HA-5-E2	HA-5-N1	HA-5-N2	HA-5-N4	HA-5-S1	HA-10-W2
HA-10-W3	HA-13-W1	HA-13-W2	HA-21-N1	HA-22-N1	HA-22-S1

## **CONCLUSIONS**

Our investigation included a geophysical survey, the completion of 84 environmental soil borings, and the analysis of 126 soil samples for arsenic. Soil analytical testing data was compared to the CTDEEP RSR Direct Exposure Criteria (DEC). Our conclusions are as follows:

- The GPR survey identified anomalies throughout the site that were determined not to be USTs. A subsurface natural gas pipeline was located, which bisects the Site, running south-southwest from the northeastern corner of the Site to the central-southern portion of the Site.
- Laboratory analytical results of the shallow subsurface material (0 to 1 feet bgs) identified concentrations of arsenic ranging from 11.1 to 500 mg/kg, exceeding the DEC of 10 mg/kg, in 40 of the 84 sampling locations throughout the Site (not including the original five exceedance locations: HA-5, HA-6, HA-8, HA-10 and HA-13). Therefore, a total of 45 of 0- to 1-foot samples collected at the Site have been reported to contain DEC exceedances.
- At the 45 locations noted above, laboratory analytical results of samples collected at the next interval (1 to 2 feet bgs) identified concentrations of arsenic ranging from 10.3 to 40.8 mg/kg, exceeding the DEC of 10 mg/kg, in 12 of the 45 sampling locations (not including the original two exceedance locations: SB-7/HA-22 and SB-8/HA-21). Therefore, a total of 14 of the 1- to 2-foot samples collected at the Site have been reported to contain DEC exceedances.
- At the 14 boring locations noted above, laboratory analytical results of samples collected at the next interval (2 to 3 feet bgs) identified concentrations of arsenic ranging from 1.19 to 9.54 mg/kg, below the DEC of 10 mg/kg, in all 14 sampling locations.

- Laboratory analysis of one of the delineation samples collected at the Site, HA-22-S1, (from the 0 to 1 foot interval) detected arsenic at a concentration of 500 mg/kg. According to the CT DEEP, this detection qualifies as a Significant Environmental Hazard (SEH) since the concentration is greater than 30 times the DEC of 10 mg/kg and is within two feet of the surface. No other SEH exceedances were identified at the Site. To address the SEH, Langan will prepare a written notification for submission to CTDEEP that will provide information regarding the location of the SEH, how the pollutant was discovered, and proposed actions to abate the hazard.
- Given the intended use of the Site, Langan recommends that a plan to mitigate arsenic concentrations in shallow soils exceeding the DEC, be incorporated into the future redevelopment activities at the Site.

This letter report does not constitute a full characterization of the site soils. Should future work yield an export of soils, we would recommend a waste characterization sampling program to characterize those soils slated for offsite disposal.

## **LIMITATIONS**

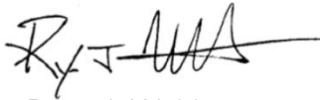
This Arsenic Delineation Report was prepared expressly for the AKF Group, LLC for the William Street Ball Field property located at the intersection of William Street West and Church Street, and for the objectives defined herein. Langan cannot assume responsibility for the use of this report for any property other than the specific site addressed in this report, or by any third party without specific written authorization from Langan.

The conclusions and opinions provided in this report are based on subsurface conditions ascertained from the analysis of a limited number of samples. Actual conditions encountered may differ substantially from those presented herein and should be brought to our attention whereby we may determine how such changes may affect our conclusions.

## CLOSURE

Should you have any questions regarding the findings presented in this report, please feel free to call us at 203-784-3069.

Sincerely,  
**Langan CT, Inc.**



Ryan J. Wohlstrom  
Project Engineer



Jamie P. Barr, L.E.P.  
Senior Associate/Vice President

Enclosures: Table 1 – Arsenic Delineation Sample Results  
Figure 1 – Site Location Map  
Figure 2 – Soil Analytical Results Map  
Attachment A – Previous Reports  
Attachment B – Geophysical Engineering Survey Report  
Attachment C – Laboratory Analytical Reports

# TABLES

Table 1  
Arsenic Delineation Sample Results  
William Street Baseball Field  
Greenwich, Connecticut  
Langan Project No.: 140109002

Sample Location York ID Sample Date and Time Parameters	Residential Direct Exposure Criteria Industrial/ Commercial Direct Exposure Criteria	HA-5 (1-2) 15E0078-12 4/30/2015 18:55	HA-5-E1 (0-1) 15E0078-30 4/30/2015 19:44	HA-5-E1 (1-2) 15E0078-31 4/30/2015 19:45	HA-5-E2 (0-1) 15E0078-26 4/30/2015 19:40	HA-5-E2 (1-2) 15E0078-27 4/30/2015 7:41	HA-5-E2 (2-3) 15E0078-28 4/30/2015 19:42	HA-5-E3 (0-1) 15F0769-67 6/18/15 11:11	HA-5-E3 (1-2) 15F0769-68 6/18/2015 11:12	HA-5-E4 (0-1) 15F0769-59 6/18/15 11:01
Metals (mg/kg)										
Arsenic	10	9.15	37.1	5.21	22.4	11.2	4	11.10	4.90	7.15

**NOTES:**  
NE = Not established  
ND = Not detected  
ND\* = Reporting limit above criteria  
NT = Not tested  
mg/kg = milligrams per kilograms  
\* = For those compounds that do not have certain criteria established within the CTDEEP RSRs effective 30 January 1996 and or 27 June 2013, additional polluting substance crtieria must be requested for approval by the CTDEEP. The data was compared to the criteria listed in the 2008 Proposed Revisions to the Connecticut Remediation Standard Regulations.

**Bold and Shaded indicates an exceedance of the CTDEEP Industrial/ Commercial Direct Exposure Criteria**

Table 1  
Arsenic Delineation Sample Results  
William Street Baseball Field  
Greenwich, Connecticut  
Langan Project No.: 140109002

Sample Location York ID Sample Date and Time Parameters	Residential Direct Exposure Criteria Industrial/ Commercial Direct Exposure Criteria	HA-5-E5 (0-1) 15F0769-71 6/18/2015 11:16	HA-5-E6 (0-1) 15F0769-63 6/18/2015 11:06	HA-5-E6 (1-2) 15F0769-64 6/18/2015 11:07	HA-5-N1 (0-1) 15E0078-22 4/30/2015 19:25	HA-5-N1 (1-2) 15E0078-23 4/30/2015 19:26	HA-5-N1 (2-3) 15E0078-24 4/30/2015 19:27	HA-5-N2 (0-1) 15E0078-18 4/30/2015 19:20	HA-5-N2 (1-2) 15E0078-19 4/30/2015 19:42	HA-5-N2 (2-3) 15E0078-20 4/30/2015 19:22
Metals (mg/kg)										
Arsenic	10	6.60	31.70	4.44	174	13.7	5.13	72.3	17.8	3.07

**NOTES:**  
NE = Not established  
ND = Not detected  
ND\* = Reporting limit above criteria  
NT = Not tested  
mg/kg = milligrams per kilograms  
\* = For those compounds that do not have certain criteria established within the CTDEEP RSRs effective 30 January 1996 and or 27 June 2013, additional polluting substance crtieria must be requested for approval by the CTDEEP. The data was compared to the criteria listed in the 2008 Proposed Revisions to the Connecticut Remediation Standard Regulations.

**Bold and Shaded indicates an exceedance of the CTDEEP Industrial/ Commercial Direct Exposure Criteria**

Table 1  
Arsenic Delineation Sample Results  
William Street Baseball Field  
Greenwich, Connecticut  
Langan Project No.: 140109002

Sample Location York ID Sample Date and Time Parameters	Residential Direct Exposure Criteria Industrial/ Commercial Direct Exposure Criteria	HA-5-N3 (0-1) 15F0769-83 6/18/2015 11:31	HA-5-N3 (1-2) 15F0769-84 6/18/2015 11:32	HA-5-N4 (0-1) 15F0769-75 6/18/2015 11:21	HA-5-N4 (1-2) 15F0769-76 6/18/2015 11:22	HA-5-N4 (2-3) 15F0769-77 6/18/2015 11:23	HA-5-N5 (0-1) 15F0769-87 6/18/2015 11:36	HA-5-N5 (1-2) 15F0769-88 6/18/2015 11:37	HA-5-N6 (0-1) 15F0769-79 6/18/2015 11:26	HA-5-S1 (0-1) 15E0078-34 4/30/2015 20:00
Metals (mg/kg)										
Arsenic	10	55.80	9.77	62.10	14.50	4.88	13.30	9.84	7.41	12.8

**NOTES:**  
NE = Not established  
ND = Not detected  
ND\* = Reporting limit above criteria  
NT = Not tested  
mg/kg = milligrams per kilograms  
\* = For those compounds that do not have certain criteria established within the CTDEEP RSRs effective 30 January 1996 and or 27 June 2013, additional polluting substance crtieria must be requested for approval by the CTDEEP. The data was compared to the criteria listed in the 2008 Proposed Revisions to the Connecticut Remediation Standard Regulations.

**Bold and Shaded indicates an exceedance of the CTDEEP Industrial/ Commercial Direct Exposure Criteria**



Table 1  
Arsenic Delineation Sample Results  
William Street Baseball Field  
Greenwich, Connecticut  
Langan Project No.: 140109002

Sample Location York ID Sample Date and Time Parameters	Residential Direct Exposure Criteria Industrial/ Commercial Direct Exposure Criteria	HA-5-S1 (1-2) 15E0078-35 4/30/2015 20:01	HA-5-S1 (2-3) 15E0078-36 4/30/2015 20:02	HA-5-S2 (0-1) 15E0072-09 4/30/2015 9:24	HA-6 (1-2) 15E0072-91 4/30/2015 17:35	HA-6-N1 (0-1) 15E0072-94 4/30/2015 17:40	HA-6-N1 (1-2) 15E0072-95 4/30/2015 17:41	HA-6-S1 (0-1) 15E0072-98 4/30/2015 18:00	HA-6-W1 (0-1) 15E0072-17 4/30/2015 10:10	HA-8 (1-2) 15E0078-70 5/1/2015 13:25
Metals (mg/kg)										
Arsenic	10	10.3	3.23	9.04	8.83	12.2	7.37	5.88	3.52	9.32

NOTES:  
NE = Not established  
ND = Not detected  
ND\* = Reporting limit above criteria  
NT = Not tested  
mg/kg = milligrams per kilograms  
\* = For those compounds that do not have certain criteria established within the CTDEEP RSRs effective 30 January 1996 and or 27 June 2013, additional polluting substance crtieria must be requested for approval by the CTDEEP. The data was compared to the criteria listed in the 2008 Proposed Revisions to the Connecticut Remediation Standard Regulations.

Bold and Shaded indicates an exceedance of the CTDEEP Industrial/ Commercial Direct Exposure Criteria

Table 1  
Arsenic Delineation Sample Results  
William Street Baseball Field  
Greenwich, Connecticut  
Langan Project No.: 140109002

Sample Location York ID Sample Date and Time Parameters	Residential Direct Exposure Criteria Industrial/ Commercial Direct Exposure Criteria	HA-8-E1 (0-1) 15E0078-54 5/1/2015 13:05	HA-8-N1 (0-1) 15E0078-46 5/1/2015 12:55	HA-8-S1 (0-1) 15E0078-42 5/1/2015 12:50	HA-8-W1 (0-1) 15E0078-62 5/1/2015 13:15	HA-10 (1-2) 15E0072-76 4/30/2015 16:30	Dup-3 [HA-10 (1-2)] 15E0072-02 4/30/2015 15:00	HA-10-E1 (0-1) 15E0072-79 4/30/2015 16:45	HA-10-E1 (1-2) 15E0072-80 4/30/2015 16:46	HA-10-E2 (0-1) 15E0072-36 4/30/2015 12:10
Metals (mg/kg)										
Arsenic	10	7.88	5.37	2.94	9.29	4.35	3.13	23.20	4.85	18.70

**NOTES:**  
NE = Not established  
ND = Not detected  
ND\* = Reporting limit above criteria  
NT = Not tested  
mg/kg = milligrams per kilograms  
\* = For those compounds that do not have certain criteria established within the CTDEEP RSRs effective 30 January 1996 and or 27 June 2013, additional polluting substance crtieria must be requested for approval by the CTDEEP. The data was compared to the criteria listed in the 2008 Proposed Revisions to the Connecticut Remediation Standard Regulations.

**Bold and Shaded indicates an exceedance of the CTDEEP Industrial/ Commercial Direct Exposure Criteria**

Table 1  
Arsenic Delineation Sample Results  
William Street Baseball Field  
Greenwich, Connecticut  
Langan Project No.: 140109002

Sample Location York ID Sample Date and Time Parameters	Residential Direct Exposure Criteria Industrial/ Commercial Direct Exposure Criteria	HA-10-E2 (1-2) 15E0072-37 4/30/2015 12:11	HA-10-N1 (0-1) 15E0072-71 4/30/2015 16:05	HA-10-N1 (1-2) 15E0072-72 4/30/2015 16:06	HA-10-N2 (0-1) 15F0780-04 6/18/2015 11:56	HA-10-N2 (1-2) 15F0780-05 6/18/2015 11:57	HA-10-NE1 (0-1) 15F0769-99 6/18/2015 11:51	DUP [HA-10-NE1 (0-1)] 15F0780-24 6/18/2015 3:00	HA-10-NE1 (1-2) 15F0780-01 6/18/2015 11:52
Metals (mg/kg)									
Arsenic	10	4.94	51.00	3.06	41.10	9.07	41.70	28.60	4.32

**NOTES:**  
NE = Not established  
ND = Not detected  
ND\* = Reporting limit above criteria  
NT = Not tested  
mg/kg = milligrams per kilograms  
\* = For those compounds that do not have certain criteria established within the CTDEEP RSRs effective 30 January 1996 and or 27 June 2013, additional polluting substance crtieria must be requested for approval by the CTDEEP. The data was compared to the criteria listed in the 2008 Proposed Revisions to the Connecticut Remediation Standard Regulations.

**Bold and Shaded indicates an exceedance of the CTDEEP Industrial/ Commercial Direct Exposure Criteria**

Table 1  
Arsenic Delineation Sample Results  
William Street Baseball Field  
Greenwich, Connecticut  
Langan Project No.: 140109002

Sample Location York ID Sample Date and Time Parameters	Residential Direct Exposure Criteria Industrial/ Commercial Direct Exposure Criteria	HA-10-S1 (0-1) 15E0072-83 4/30/2015 17:00	HA-10-S1 (1-2) 15E0072-84 4/30/2015 17:01	HA-10-S2 (0-1) 15E0072-87 4/30/2015 17:05	HA-10-S2 (1-2) 15E0072-88 4/30/2015 17:06	HA-10-W1 (0-1) 15E0072-75 4/30/2015 16:25	HA-10-W1 (1-2) 15F0769-17 6/18/2015 9:21	HA-10-W2 (0-1) 15E0072-22 4/30/2015 10:40	HA-10-W2 (1-2) 15E0072-23 4/30/2015 10:41	HA-10-W2 (2-3) 15F0769-20 6/18/2015 9:26
Metals (mg/kg)										
Arsenic	10	24.60	3.43	33.80	6.02	33.00	4.93	55.90	19.90	9.54

**NOTES:**  
NE = Not established  
ND = Not detected  
ND\* = Reporting limit above criteria  
NT = Not tested  
mg/kg = milligrams per kilograms  
\* = For those compounds that do not have certain criteria established within the CTDEEP RSRs effective 30 January 1996 and or 27 June 2013, additional polluting substance crtieria must be requested for approval by the CTDEEP. The data was compared to the criteria listed in the 2008 Proposed Revisions to the Connecticut Remediation Standard Regulations.

**Bold and Shaded indicates an exceedance of the CTDEEP Industrial/ Commercial Direct Exposure Criteria**

Table 1  
Arsenic Delineation Sample Results  
William Street Baseball Field  
Greenwich, Connecticut  
Langan Project No.: 140109002

Sample Location York ID Sample Date and Time Parameters	Residential Direct Exposure Criteria Industrial/ Commercial Direct Exposure Criteria	HA-10-W3 (0-1) 15F0769-42 6/18/2015 10:01	HA-10-W3 (1-2) 15F0769-43 6/18/2015 10:02	HA-10-W3 (2-3) 15F0769-44 6/18/2015 10:03	HA-10-W4 (0-1) 15F0769-45 6/18/2015 10:06	HA-10-SW1 (0-1) 15F0769-48 6/18/2015 10:11	HA-10-SW2 (0-1) 15F0769-52 6/18/2015 10:16	HA-10-SW3 (0-1) 15F0769-56 6/18/2015 10:21	HA-13 (1-2) 15E0072-46 4/30/2015 13:20
Metals (mg/kg)									
Arsenic	10	15.50	11.40	3.43	7.14	9.09	4.15	6.56	9.33

**NOTES:**  
NE = Not established  
ND = Not detected  
ND\* = Reporting limit above criteria  
NT = Not tested  
mg/kg = milligrams per kilograms  
\* = For those compounds that do not have certain criteria established within the CTDEEP RSRs effective 30 January 1996 and or 27 June 2013, additional polluting substance criteria must be requested for approval by the CTDEEP. The data was compared to the criteria listed in the 2008 Proposed Revisions to the Connecticut Remediation Standard Regulations.

**Bold and Shaded indicates an exceedance of the CTDEEP Industrial/ Commercial Direct Exposure Criteria**

Table 1  
Arsenic Delineation Sample Results  
William Street Baseball Field  
Greenwich, Connecticut  
Langan Project No.: 140109002

Sample Location York ID Sample Date and Time Parameters	Residential Direct Exposure Criteria Industrial/ Commercial Direct Exposure Criteria	Dup-1 [HA-13 (1-2)] 15E0072-02 4/30/2015 15:00	HA-13-E1 (0-1) 15E0072-55 4/30/2015 13:54	HA-13-E1 (1-2) 15E0072-56 4/30/2015 13:55	HA-13-E2 (0-1) 15E0072-30 4/30/2015 12:05	HA-13-E2 (1-2) 15E0072-31 4/30/2015 12:06	HA-13-E3 (0-1) 15F0780-16 6/18/2015 12:11	HA-13-E4 (0-1) 15F0780-12 6/18/2015 12:06	HA-13-N1 (0-1) 15E0072-38 4/30/2015 12:50
Metals (mg/kg)									
Arsenic	10	8.12	133	9.81	15.0	3.9	5.01	6.30	56.3

**NOTES:**  
NE = Not established  
ND = Not detected  
ND\* = Reporting limit above criteria  
NT = Not tested  
mg/kg = milligrams per kilograms  
\* = For those compounds that do not have certain criteria established within the CTDEEP RSRs effective 30 January 1996 and or 27 June 2013, additional polluting substance crtieria must be requested for approval by the CTDEEP. The data was compared to the criteria listed in the 2008 Proposed Revisions to the Connecticut Remediation Standard Regulations.

**Bold and Shaded indicates an exceedance of the CTDEEP Industrial/ Commercial Direct Exposure Criteria**

Table 1  
Arsenic Delineation Sample Results  
William Street Baseball Field  
Greenwich, Connecticut  
Langan Project No.: 140109002

Sample Location York ID Sample Date and Time Parameters	Residential Direct Exposure Criteria Industrial/ Commercial Direct Exposure Criteria	HA-13-N1 (1-2) 15E0072-39 4/30/2015 12:51	HA-13-N2 (0-1) 15E0072-42 4/30/2015 12:54	HA-13-N2 (1-2) 15E0072-43 4/30/2015 12:55	HA-13-N3 (0-1) 15F0769-09 6/18/2015 9:11	HA-13-N4 (0-1) 15F0769-01 6/18/2015 9:01	HA-13-N4 (1-2) 15F0769-02 6/18/2015 9:02	HA-13-N5 (0-1) 15F0769-13 6/18/2015 9:16	HA-13-N5 (1-2) 15F0769-14 6/18/2015 9:17	HA-13-N6 (0-1) 15F0769-05 6/18/2015 9:06
Metals (mg/kg)										
Arsenic	10	6.21	108	6.78	7.16	11.20	5.26	31.80	7.45	17

**NOTES:**  
NE = Not established  
ND = Not detected  
ND\* = Reporting limit above criteria  
NT = Not tested  
mg/kg = milligrams per kilograms  
\* = For those compounds that do not have certain criteria established within the CTDEEP RSRs effective 30 January 1996 and or 27 June 2013, additional polluting substance criteria must be requested for approval by the CTDEEP. The data was compared to the criteria listed in the 2008 Proposed Revisions to the Connecticut Remediation Standard Regulations.

**Bold and Shaded indicates an exceedance of the CTDEEP Industrial/ Commercial Direct Exposure Criteria**

Table 1  
Arsenic Delineation Sample Results  
William Street Baseball Field  
Greenwich, Connecticut  
Langan Project No.: 140109002

Sample Location York ID Sample Date and Time Parameters	Residential Direct Exposure Criteria Industrial/ Commercial Direct Exposure Criteria	HA-13-N6 (1-2) 15F0769-06 6/18/2015 9:07	HA-13-S1 (0-1) 15E0072-51 4/30/2015 13:50	HA-13-S1 (1-2) 15E0072-52 4/30/2015 13:51	HA-13-S2 (0-1) 15E0072-59 4/30/2015 14:20	HA-13-S2 (1-2) 15E0072-60 4/30/2015 14:21	HA-13-W1 (0-1) 15E0072-49 4/30/2015 13:25	Dup-2 [HA-13-W1 (0-1)] 15E0072-03 4/30/2015 15:00	HA-13-W1 (1-2) 15E0072-50 4/30/2015 13:26
Metals (mg/kg)									
Arsenic	10	4.81	46.3	5.78	27.3	4.53	122	169	15.3

**NOTES:**  
NE = Not established  
ND = Not detected  
ND\* = Reporting limit above criteria  
NT = Not tested  
mg/kg = milligrams per kilograms  
\* = For those compounds that do not have certain criteria established within the CTDEEP RSRs effective 30 January 1996 and or 27 June 2013, additional polluting substance crtieria must be requested for approval by the CTDEEP. The data was compared to the criteria listed in the 2008 Proposed Revisions to the Connecticut Remediation Standard Regulations.

**Bold and Shaded indicates an exceedance of the CTDEEP Industrial/ Commercial Direct Exposure Criteria**



Table 1  
Arsenic Delineation Sample Results  
William Street Baseball Field  
Greenwich, Connecticut  
Langan Project No.: 140109002

Sample Location York ID Sample Date and Time Parameters	Residential Direct Exposure Criteria Industrial/ Commercial Direct Exposure Criteria	HA-13-W1 (2-3) 15F0769-24 6/18/2015 9:36	HA-13-W2 (0-1) 15E0072-32 4/30/2015 11:40	HA-13-W2 (1-2) 15E0072-33 4/30/2015 11:41	HA-13-W2 (2-3) 15E0072-33 4/30/2015 11:42	HA-13-W3 (0-1) 15F0769-26 6/18/2015 9:41	HA-13-W3 (1-2) 15F0769-27 6/18/2015 9:42	HA-13-W4 (0-1) 15F0769-30 6/18/2015 9:46	HA-13-SW1 (0-1) 15F0769-34 6/18/2015 9:51	HA-13-SW1 (1-2) 15F0769-35 6/18/2015 9:52
Metals (mg/kg)										
Arsenic	10	3.54	104	16.8	5.51	13.60	6.78	5.83	11.70	4.89

**NOTES:**  
NE = Not established  
ND = Not detected  
ND\* = Reporting limit above criteria  
NT = Not tested  
mg/kg = milligrams per kilograms  
\* = For those compounds that do not have certain criteria established within the CTDEEP RSRs effective 30 January 1996 and or 27 June 2013, additional polluting substance criteria must be requested for approval by the CTDEEP. The data was compared to the criteria listed in the 2008 Proposed Revisions to the Connecticut Remediation Standard Regulations.

**Bold and Shaded indicates an exceedance of the CTDEEP Industrial/ Commercial Direct Exposure Criteria**

Table 1  
Arsenic Delineation Sample Results  
William Street Baseball Field  
Greenwich, Connecticut  
Langan Project No.: 140109002

Sample Location York ID Sample Date and Time Parameters	Residential Direct Exposure Criteria Industrial/ Commercial Direct Exposure Criteria	HA-13-SW2 (0-1) 15F0769-38 6/18/2015 9:56	HA-13-SE1 (0-1) 15F0780-08 6/18/2015 12:01	HA-21 (2-3) 15E0078-02 4/30/2015 18:11	HA-21-N1 (0-1) 15E0078-08 4/30/2015 18:40	HA-21-N1 (1-2) 15E0078-09 4/30/2015 18:41	HA-21-N1 (2-3) 15E0078-10 4/30/2015 18:42	HA-21-N2 (0-1) 15E0078-14 4/30/2015 19:00	HA-21-N2 (1-2) 15E0078-15 4/30/2015 19:01	HA-21-S1 (0-1) 15E0078-04 4/30/2015 18:25
Metals (mg/kg)										
Arsenic	10	5.84	3.44	1.81	84	16.4	3.31	132	3.95	4.45

**NOTES:**  
NE = Not established  
ND = Not detected  
ND\* = Reporting limit above criteria  
NT = Not tested  
mg/kg = milligrams per kilograms  
\* = For those compounds that do not have certain criteria established within the CTDEEP RSRs effective 30 January 1996 and or 27 June 2013, additional polluting substance crtieria must be requested for approval by the CTDEEP. The data was compared to the criteria listed in the 2008 Proposed Revisions to the Connecticut Remediation Standard Regulations.

**Bold and Shaded indicates an exceedance of the CTDEEP Industrial/ Commercial Direct Exposure Criteria**

Table 1  
Arsenic Delineation Sample Results  
William Street Baseball Field  
Greenwich, Connecticut  
Langan Project No.: 140109002

Sample Location York ID Sample Date and Time Parameters	Residential Direct Exposure Criteria Industrial/ Commercial Direct Exposure Criteria	HA-21-NE1 (0-1) 15F0769-91 6/18/2015 11:41	HA-21-NE1 (1-2) 15F0769-92 6/18/2015 11:42	HA-21-NE2 (0-1) 15F0769-95 6/18/2015 11:46	HA-22 (2-3) 15E0072-67 4/30/2015 15:01	HA-22-N1 (0-1) 15E0072-63 4/30/2015 14:40	HA-22-N1 (1-2) 15E0072-64 4/30/2015 14:41	HA-22-N1 (2-3) 15E0072-65 4/30/2015 14:42	HA-22-S1 (0-1) 15E0072-69 4/30/2015 15:05	HA-22-S1 (1-2) 15E0072-70 4/30/2015 15:06
Metals (mg/kg)										
Arsenic	10	25.50	9.86	2.05	2.77	257	15.6	5.79	500	40.8

**NOTES:**  
NE = Not established  
ND = Not detected  
ND\* = Reporting limit above criteria  
NT = Not tested  
mg/kg = milligrams per kilograms  
\* = For those compounds that do not have certain criteria established within the CTDEEP RSRs effective 30 January 1996 and or 27 June 2013, additional polluting substance crtieria must be requested for approval by the CTDEEP. The data was compared to the criteria listed in the 2008 Proposed Revisions to the Connecticut Remediation Standard Regulations.

**Bold and Shaded indicates an exceedance of the CTDEEP Industrial/ Commercial Direct Exposure Criteria**

Table 1  
Arsenic Delineation Sample Results  
William Street Baseball Field  
Greenwich, Connecticut  
Langan Project No.: 140109002

Sample Location York ID Sample Date and Time Parameters	Residential Direct Exposure Criteria Industrial/ Commercial Direct Exposure Criteria	HA-22-S1 (2-3) 15F0769-22 6/18/2015 9:31	HA-22-W1 (0-1) 15E0072-27 4/30/2015 11:25	HA-22-W1 (1-2) 15E0072-28 4/30/2015 11:26	HA-22-W2 (0-1) 15E0072-24 4/30/2015 11:20
Metals (mg/kg)					
Arsenic	10	1.19	94.5	4.88	6.85

**NOTES:**  
NE = Not established  
ND = Not detected  
ND\* = Reporting limit above criteria  
NT = Not tested  
mg/kg = milligrams per kilograms  
\* = For those compounds that do not have certain criteria established within the CTDEEP RSRs effective 30 January 1996 and or 27 June 2013, additional polluting substance crteria must be requested for approval by the CTDEEP. The data was compared to the criteria listed in the 2008 Proposed Revisions to the Connecticut Remediation Standard Regulations.

**Bold and Shaded indicates an exceedance of the CTDEEP Industrial/ Commercial Direct Exposure Criteria**

# FIGURES



**LANGAN**  
ENGINEERING & ENVIRONMENTAL SERVICES

555 Long Wharf Drive  
New Haven, CT 06511-6107  
T: 203.562.5771 F: 203.789.6142  
www.langan.com

NEW JERSEY NEW YORK VIRGINIA CALIFORNIA  
PENNSYLVANIA CONNECTICUT FLORIDA

ABU DHABI ATHENS DOHA  
DUBAI ISTANBUL

Project

**WILLIAM STREET  
BASEBALL FIELD**

GREENWICH

FAIRFIELD COUNTY CONNECTICUT

Drawing Title

**SITE LOCATION  
MAP**

Project No.

140109002

Date

7/10/2015

Scale

1"=1,000'

Drawn By

KTZ

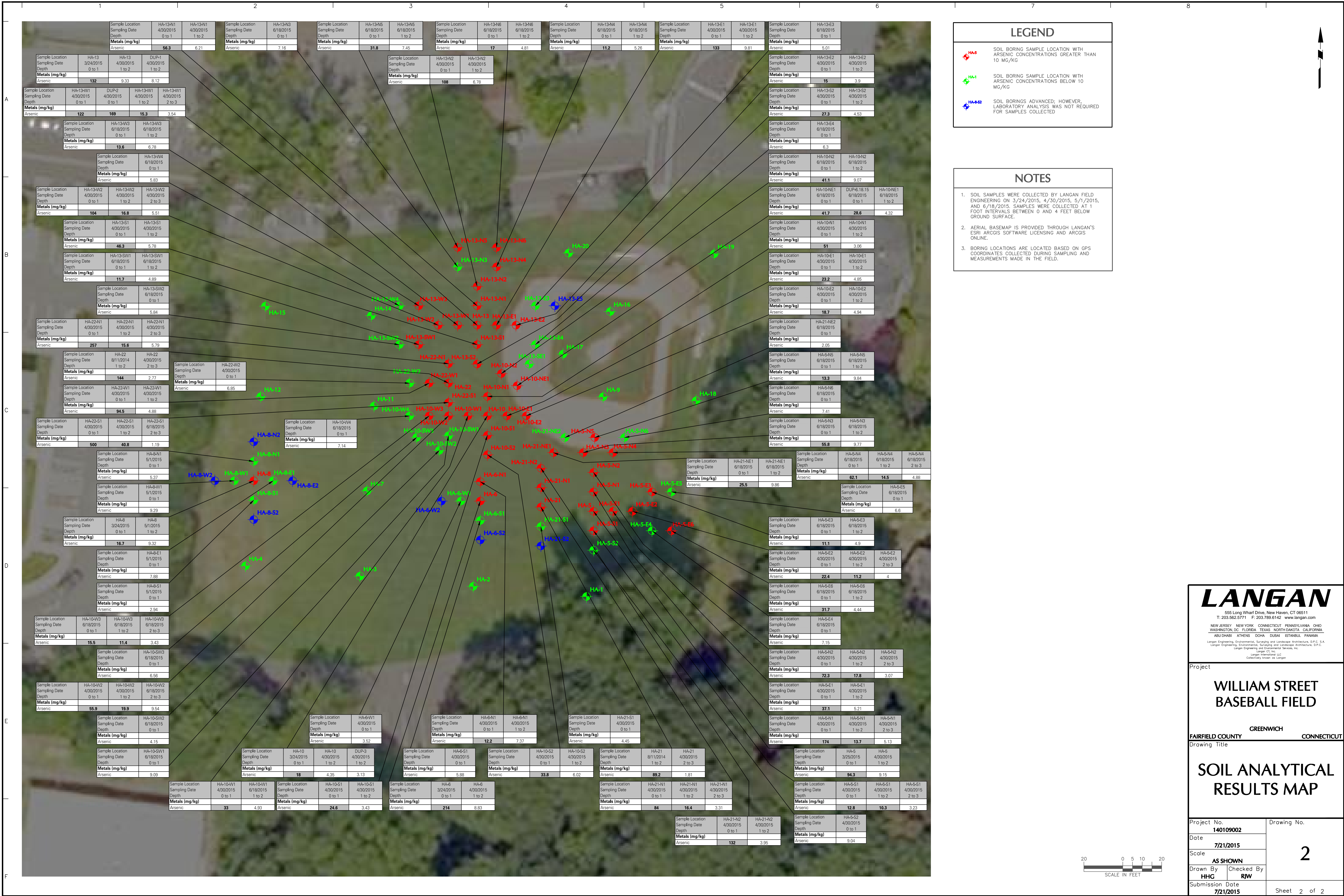
Submission Date

7/10/2015


Figure

1







LEGEND

 HA-S

SOIL BORING SAMPLE LOCATION WITH ARSENIC CONCENTRATIONS GREATER THAN 10 MG/KG

 HA-I

SOIL BORING SAMPLE LOCATION WITH ARSENIC CONCENTRATIONS BELOW 10 MG/KG

 HA-S2

SOIL BORINGS ADVANCED; HOWEVER, LABORATORY ANALYSIS WAS NOT REQUIRED FOR SAMPLES COLLECTED

NOTES

1.

SOIL SAMPLES WERE COLLECTED BY LANGAN FIELD ENGINEERING ON 3/24/2015, 4/30/2015, 5/1/2015, AND 6/18/2015. SAMPLES WERE COLLECTED AT 1 FOOT INTERVALS BETWEEN 0 AND 4 FEET BELOW GROUND SURFACE.

2.

AERIAL BASEMAP IS PROVIDED THROUGH LANGAN'S ESRI ARCGIS SOFTWARE LICENSING AND ARCGIS ONLINE.

3.

BORING LOCATIONS ARE LOCATED BASED ON GPS COORDINATES COLLECTED DURING SAMPLING AND MEASUREMENTS MADE IN THE FIELD.

LANGAN

555 Long Wharf Drive, New Haven, CT 06511  
T: 203.562.5771 F: 203.769.6142 www.langan.com  
NEW JERSEY NEW YORK CONNECTICUT PENNSYLVANIA OHIO  
WASHINGTON, DC FLORIDA TEXAS NORTH DAKOTA CALIFORNIA  
ABU DHABI ATHENS DOHA DUBAI ISTANBUL PANAMA  
Langan Engineering, Environmental, Surveying and Landscape Architecture, P.C. & A  
Langan Engineering and Environmental Services, Inc.  
Langan International LLC  
Collectively known as Langan

Project

WILLIAM STREET  
BASEBALL FIELD

GREENWICH

FAIRFIELD COUNTY CONNECTICUT

Drawing Title

SOIL ANALYTICAL  
RESULTS MAP

Project No.  
140109002

Drawing No.  
2

Date  
7/21/2015

AS SHOWN

Drawn By  
HHG

Checked By  
RW

Submission Date  
7/21/2015

Sheet 2 of 2



## **ATTACHMENT A**

Previous Reports



---

# LIMITED PHASE II ENVIRONMENTAL SITE INVESTIGATION REPORT

for

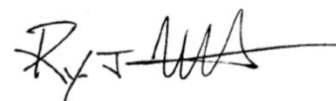
## PUBLIC BASEBALL FIELD Greenwich, Connecticut

*Prepared For:*

**AKF Group, LLC**  
750 East Main Street, Suite 501  
Stamford, Connecticut 06902


*Prepared By:*

**Langan CT, Inc.**  
555 Long Wharf Drive  
New Haven, Connecticut 06511



---

**Ryan J. Wohlstrom**  
Project Engineer



---

**Jamie Barr, L.E.P.**  
Senior Associate/Vice President

**LANGAN**

**March 2015**  
**Langan Project No. 140109002**

---

## TABLE OF CONTENTS

<b>1.0</b>	<b>INTRODUCTION.....</b>	<b>2</b>
1.1	Background and Purpose .....	2
1.2	Site Description and History .....	2
1.3	Scope of Work.....	3
<b>2.0</b>	<b>REGULATORY BACKGROUND .....</b>	<b>3</b>
2.1	Soil Criteria.....	3
<b>3.0</b>	<b>GEOLOGY, HYDROGEOLOGY, AND GROUNDWATER QUALITY .....</b>	<b>4</b>
3.1	Geology .....	4
3.2	Hydrogeology.....	5
<b>4.0</b>	<b>LIMITED PHASE II ESI METHODOLOGY AND INVESTIGATION ACTIVITIES .....</b>	<b>5</b>
4.1	Geophysical Survey .....	5
4.2	Subsurface Soil Investigation .....	6
4.3	Soil Sampling Results.....	6
4.3.1	Quality Assurance/Quality Control .....	7
<b>5.0</b>	<b>CONCEPTUAL SITE MODEL.....</b>	<b>7</b>
5.1	Impact Sources and Mechanisms .....	8
5.2	Migration Pathways .....	8
5.2.1	Infiltration into the Vadose Zone (Soil) .....	8
5.2.2	Migration in the Saturated Zone/Bedrock (Groundwater).....	9
5.3	Exposure Pathways .....	9
5.4	Preliminary Ecological Screening .....	9
<b>6.0</b>	<b>CONCLUSIONS AND RECOMMENDATIONS .....</b>	<b>10</b>
<b>7.0</b>	<b>LIMITATIONS .....</b>	<b>10</b>

## TABLES

Table 1	Summary of Soil Analytical Results
---------	------------------------------------

## FIGURES

Figure 1	Site Location Plan
Figure 2	Site Layout Map
Figure 3	Soil Analytical Results Map

## APPENDICES

Appendix A	Geophysical Survey Report
Appendix B	Soil Boring Logs
Appendix C	Laboratory Reports
Appendix D	Wetland Delineation Report

## **1.0 INTRODUCTION**

Langan CT, Inc. (Langan) was retained by AKF Group, LLC (AKF) to perform a Limited Phase II Environmental Site Investigation (ESI) for the public baseball field located on William Street West and Church Street in the Town of Greenwich, Fairfield County, Connecticut (hereafter referred to as the "Subject Property"). The Subject Property encompasses approximately 1.5 acres and is part of three tax lots designated as Parcel ID's 04-4500/S, 04-4502/S, and 04-4506/S by the Greenwich Tax Assessor. The Subject Property is improved with a recreational baseball field. The location of the Subject Property is depicted on Figure 1 (Site Location Plan) and pertinent current and historic Subject Property features are depicted on Figure 2 (Site Layout Map).

Langan's Limited Phase II ESI scope of work was conducted in accordance with our Limited Phase II Scope of Work provided as an attachment to the AKF Proposal No. P\_S140086 submitted on May 22, 2014. Sampling was conducted by Langan in general accordance with the Connecticut Department of Energy and Environmental Protection's (CTDEEP) 2007 Site Characterization Guidance Document in order to assess Potential Areas of Concern (PAOCs) at the Subject Property.

The Limited Phase II ESI was conducted in support of a planned redevelopment of the adjacent New Lebanon School property. This report summarizes the work completed, the findings of the investigation, an interpretation of analytical data, and our conclusions and recommendations.

### **1.1 Background and Purpose**

The proposed scope was developed to identify potential environmental issues which may impact redevelopment activities and to evaluate potential remediation costs associated with the proposed site redevelopment.

### **1.2 Site Description and History**

The Subject Property encompasses approximately 1.5 acres and consists of a recreational baseball field. The baseball field was constructed between 1954 and 1957, according to aerial images obtained from Environmental Data Resources, Inc. (EDR) of Shelton, Connecticut. The Subject Property is accessible from Church Street and William Street West, where asphalt parking lots are available. The Subject Property is bound to the north and east by residential properties, by the Byram-Schubert Library to the west, and the New Lebanon School and associated woodland areas to the south.

### **1.3 Scope of Work**

The scope of work for this Limited Phase II ESI was completed on August 11, 2014 and included the following tasks:

- Completion of a ground-penetrating radar (GPR) survey within select areas of the Subject Property in an attempt to determine the possible presence of utilities and/or other subsurface anomalies;
- Environmental oversight of the advancement of three environmental borings (SB-6 through SB-8) using a Geoprobe model 7822 direct push drill rig; and,
- Collection and analysis of three soil samples.

## **2.0 REGULATORY BACKGROUND**

The analytical results for soil obtained during this investigation were compared to the numeric criteria listed in the Connecticut Remediation Standard Regulations (RSRs), sections 22a-133k-1 through 22a-133k-3 of the Regulations of Connecticut State Agencies dated January 1996, and to numeric criteria in the "Approved Criteria for Additional Polluting Substances" dated April 30, 1999. The RSRs were developed by the CTDEEP to define the remediation performance standards for soil and groundwater, specific numeric cleanup criteria, and processes for establishing alternative site-specific standards. The RSRs apply specifically to sites at which remedial actions are required by the CTDEEP under Chapters 445 or 446k of the Connecticut General Statutes (CGS) such as under an administrative order, subsequent to a transfer of an establishment under CGS Section 22a-134a, and to sites that are enrolled in a Voluntary Remediation Program under CGS Sections 22a-133x or 22a-133y.

The Subject Property is not currently regulated under any of these State statutes. However, Langan used the numeric criteria in the RSRs as guidelines to assess the Subject Property and to make conclusions regarding concentrations of regulated compounds detected in soil. The following sections provide a brief summary of the criteria evaluated during this Limited Phase II ESI.

### **2.1 Soil Criteria**

The RSRs provide two criteria for soil, including the Direct Exposure Criteria (DEC) and Pollutant Mobility Criteria (PMC), which are summarized below.

### Direct Exposure Criteria

The DEC are established to protect human health from risks associated with direct exposure to pollutants in contaminated soil within 15 feet of the ground surface. Different DEC apply to a property depending on land use, either "residential" or "industrial/commercial", as defined by the CTDEEP. Polluted soil must be remediated to a concentration that is consistent with the Residential Direct Exposure Criteria (RDEC), unless the site is used exclusively for industrial or commercial purposes. However, Langan compared the soil analytical results to both the Residential and Industrial/Commercial Direct Exposure Criteria (I/CDEC), which are summarized in Table 1.

### Pollutant Mobility Criteria

The PMC are established to protect groundwater quality by reducing or eliminating the migration of pollutants to the groundwater from contaminated soil. Different PMC apply to a property depending on the quality of groundwater at the site, as designated by the CTDEEP. In a "GB" groundwater classification area the GB PMC apply to soil located above the seasonal high water table. Langan compared the soil analytical results to the GB PMC, which are summarized in Table 1.

## **3.0 GEOLOGY, HYDROGEOLOGY, AND GROUNDWATER QUALITY**

### **3.1 Geology**

According to the Surficial Materials Glacial and Postglacial Deposits for Greenwich, Connecticut (United States Geological Survey/Connecticut Department of Environmental Protection, 2009), soils beneath the Subject Property consist of till of varied thickness, generally non-stratified mixtures of grain-sizes ranging from clay to large boulders that can be sparse or abundant.

Based on information observed during Langan's environmental boring advancement activities, the surficial materials primarily consist of native and non-native brown to grayish-brown, fine to coarse sand, followed by red to gray clay above bedrock.

According to the Bedrock Geologic Map of Connecticut (United States Geological Survey, 1985), bedrock underlying the Subject Property is classified as Harrison Gneiss, which consists of interlayered dark and light-gray, medium grained, foliated gneiss.

Numerous bedrock outcrops were identified on the Subject Property during our site reconnaissance. Bedrock was encountered at depths ranging from 6 to 7 feet below ground surface (bgs) during this Limited Phase II ESI.

### **3.2 Hydrogeology**

According to the Water Quality Classifications Greenwich, CT map (CTDEEP, February 2011) the groundwater underlying the Subject Property is GB. Based on the Connecticut Water Quality Standards and Criteria, Class GB is designated for industrial process water and cooling waters and baseflow for hydraulically-connected water bodies and is presumed not suitable for human consumption without treatment.

According to information on the United States Geological Service (USGS) topographic quadrangle map for Greenwich CT, groundwater flow beneath the Subject Property is inferred to be to the south.

According to the Water Quality Classifications Greenwich, CT map (CTDEEP, February 2011), Byram River, located approximately 1,300 feet to the west of the Subject Property is identified as a Class SB water body. Based on the Connecticut Water Quality Standards and Criteria, Class SB surface water is designated for habitat for marine fish and aquatic life and wildlife; commercial shellfish harvesting; recreation; industrial supply; and navigation.

Groundwater was not encountered above bedrock during this Limited Phase II ESI.

## **4.0 LIMITED PHASE II ESI METHODOLOGY AND INVESTIGATION ACTIVITIES**

### **4.1 Geophysical Survey**

A geophysical survey was completed by Nova Geophysical Services (Nova) of Douglaston, New York, using electromagnetic surveying equipment and ground penetrating radar (GPR). The purpose of the geophysical survey was to complete utility markouts at the proposed test boring locations and/or other subsurface anomalies. The geophysical report and associated images and map are provided as Appendix A.

The GPR survey identified minor anomalies located through the Subject Property area; based on their reflection rates and their proximity (approximately 2 to 5 feet bgs) they were consistent with subsurface utility lines.

## **4.2 Subsurface Soil Investigation**

Three soil borings were installed on August 11, 2014 by American Environmental Assessment Corp. (American) of Hartford, Connecticut with oversight provided by Langan. Soil boring locations (SB-6 through SB-8) are shown on Figure 2.

Soil borings SB-6 through SB-8 were advanced to bedrock refusal, encountered at depths ranging from approximately 6 to 7 feet bgs using the direct push method (i.e., Geoprobe®). Soil cores were collected continuously in dedicated, acetate liners from ground surface to the boring completion depths.

Soil cores were classified for soil type, grain size, moisture content, and texture and evaluated for visual and olfactory indications of environmental impacts. Soil cores were screened for total organic vapors using a photoionization detector (PID) equipped with a 10.6 electron volt (eV) lamp. Soil boring logs are included in Appendix B.

Soil samples were collected from areas exhibiting visual or olfactory indications of impacts or with the highest PID readings. In the absence of soil impacts, samples were collected from shallow soils (0 to 5 feet bgs). Upon collection, soil samples were placed in laboratory-supplied containers and submitted to York Analytical Laboratories (York) of Stratford, Connecticut. Soil samples were submitted for analysis of volatile organic compounds (VOCs) by EPA Method 8260, semi-volatile organic compounds (SVOCs), extractable total petroleum hydrocarbon (ETPH), polychlorinated biphenyls (PCBs), pesticides, herbicides, and Connecticut-listed Metals.

## **4.3 Soil Sampling Results**

Soil analytical results are discussed below and summarized in Table 1, and laboratory analytical reports are included in Appendix C.

### *Volatile Organic Compounds (VOCs)*

Acetone was detected at a concentration of 0.05 mg/kg in Sb-7 (1 to 2 feet bgs), below all applicable CTDEEP RSR criteria. Acetone (a common laboratory contaminant) was also detected in the trip blank and associated batch blank. VOCs were not detected above laboratory reporting limits in the remaining soil samples.

### *Semi-Volatile Organic Compounds (SVOCs)*

SVOCs were not detected above laboratory reporting limits in the remaining soil samples.

### Pesticides

4,4'-DDE was detected at a concentration of 0.00285 mg/kg in SB-8 (1 to 2 feet bgs), below all applicable CTDEEP RSR criteria.

4,4'-DDT was detected at a concentration of 0.00277 mg/kg in SB-8 (1 to 2 feet bgs), below all applicable CTDEEP RSR criteria.

Pesticides were not detected above laboratory reporting limits in the remaining soil samples.

### Extractable Total Petroleum Hydrocarbons (ETPH)

ETPH was detected in all soil samples at concentrations ranging from 22.6 to 28 mg/kg. All detected ETPH concentrations were below applicable CTDEEP criteria.

### Herbicides and PCBs

Herbicides and PCBs were not detected above laboratory reporting limits in any of the soil samples submitted for analysis.

### Metals

Arsenic was detected above CT RSR criteria in two of the three soil samples submitted for analysis. Arsenic was detected at a concentration of 144 and 89.2 mg/kg in SB-7 and SB-8, respectively, (both at 1 to 2 feet bgs) above the RDEC and I/CDEC of 10 mg/kg. Metals including antimony, arsenic, barium, beryllium, chromium, copper, lead, nickel, selenium, vanadium, zinc, and/or mercury were detected above laboratory reporting limits but below CTDEEP RSR criteria in all of the soil samples.

#### **4.3.1 Quality Assurance/Quality Control**

As a Quality Assurance/Quality Control (QA/QC) measure, a trip blank was submitted to the laboratory with the samples for VOC analysis. Acetone was detected in the trip blank at a concentration of 4 µg/L. The analyte was found in the associated batch blank. For volatiles, acetone is a common lab contaminant and any data less than 10 times the blank value should be considered an artifact.

## **5.0 CONCEPTUAL SITE MODEL**

The development of a conceptual site model (CSM) is a planning tool used for evaluating assessment and remedial actions at a site, using an assessment framework that integrates



new site information as it becomes available. The CSM incorporates site-specific and hydrological information to identify constituents of concern (COCs), the nature of impacts, migration and potential exposure pathways, and points of exposure. The development of a site-specific conceptual model is a critical component in risk-informed cleanup. A well-defined conceptual model of a site contains sufficient information to: (1) identify sources of the impacts, (2) determine the nature and extent of the impacts, (3) identify the dominant fate and transport characteristics of the site, (4) specify potential exposure pathways, and, (5) identify potential receptors that may be impacted.

### **5.1 Impact Sources and Mechanisms**

The Subject Property was investigated to identify potential environmental issues which may impact redevelopment activities and to evaluate remediation costs associated with the proposed site redevelopment. Soil samples were collected across the Subject Property area to identify potential sources of contamination associated with historic fill and/or historic site use.

The potential constituents of concern (COCs) are VOCs, SVOCs, ETPH, and CT-Listed metals.

### **5.2 Migration Pathways**

The primary migration pathway at the Subject Property consists of contamination due to the presence of historic fill. COCs typically associated with historic fill include SVOCs, metals, and ETPH.

Arsenic was detected at concentrations exceeding the RDEC and I/CDEC in two soil samples (SB-7 and SB-8).

Additional potential migration pathways may include volatilization into the air from the soil, and/or leaching from the soil; VOCs were not identified at elevated concentrations in soil.

#### **5.2.1 Infiltration into the Vadose Zone (Soil)**

The primary contaminant of concern identified at the Subject Property is arsenic. Because of the presence of poorly-graded sandy soils and clay on top of bedrock with no evidence of overburden groundwater, COCs associated with a release at the Subject Property would likely not migrate from the vadose zone. An additional migration pathway may include volatilization into the air from the soil. Vertical migration of contaminants is

not anticipated as soil impacts were consistent with urban fill characteristics and VOCs were not identified at elevated concentrations in soil.

### **5.2.2 Migration in the Saturated Zone/Bedrock (Groundwater)**

Due to the presence of shallow bedrock throughout the Subject Property, overburden groundwater was not encountered in any of the soil borings. In addition, groundwater is not suitable for human consumption in this area, therefore eliminating a potential exposure pathway associated with groundwater impacts.

### **5.3 Exposure Pathways**

Potential exposure pathways at the Subject Property include direct exposure to metal-impacted soils (arsenic) identified in the upper 2 feet of soil in two of the three borings advanced within the Subject Property. Disturbance of impacted subsurface soils exceeding the DEC during construction could result in a complete exposure pathway; therefore, appropriate dust suppression and implementation of a Health and Safety Plan should be implemented during invasive activities.

Groundwater was not encountered above bedrock in any of the soil borings and groundwater is not suitable for human consumption in this area, therefore eliminating a potential exposure pathway associated with groundwater impacts.

### **5.4 Preliminary Ecological Screening**

Impacts at the Subject Property include the presence of urban fill material. Ecologically sensitive areas are the wetlands located down-gradient of the Subject Property on the adjacent New Lebanon School property. A wetland delineation report, dated August 8, 2014, is provided as Appendix D. Ecological receptors include terrestrial (plants and soil invertebrates), wildlife, and aquatic receptors.

#### Exposure Pathways Considered

The following exposure pathways were considered in this assessment:

- Direct contact of aquatic receptors to surface water;
- Direct contact of benthic macroinvertebrates with sediment;
- Direct contact of terrestrial plants and soil invertebrates with soil; and,
- Ingestion of surface water and soil by wildlife receptors.

### Summary of Ecological Assessment

Based on the impacts identified at the Subject Property, no complete ecological exposure pathways were identified. As stated above, no overburden groundwater was identified on-site, suggesting that impacts are not migrating to the off-site wetlands.

## **6.0 CONCLUSIONS AND RECOMMENDATIONS**

This Limited Phase II ESI included the completion of a geophysical survey, the oversight of three environmental soil borings, and the collection/analysis of three soil samples. Soil analytical testing data obtained during the Limited Phase II ESI was compared to the RDEC, the I/CDEC, and the GB PMC. Our conclusions and recommendations are as follows:

- The Subject Property is underlain by native and non-native brown to grayish-brown, fine to coarse sand, followed by red to gray clay above bedrock. Bedrock was encountered at depths ranging from 6 to 7 feet bgs. Groundwater was not encountered above bedrock during this Limited Phase II ESI.
- Laboratory analytical results of the subsurface material identified impacts from arsenic at concentrations exceeding the RDEC and I/CDEC at depths ranging from 1 to 2 feet bgs. Given the confirmed presence of contaminated soil at the Subject Property (arsenic), we recommend implementation of soil handling and management procedures during site redevelopment to address proper excavation, re-use, handling, and possible off-site disposal of this material.
- Although contaminated soils have been identified at two locations on the Subject Property (see Figure 3), this does not constitute a full characterization of the site soils. If the redevelopment of the Subject Property is going to yield a net export of soils, we would recommend a waste characterization sampling program to characterize those soils slated for export, and better understand potential soil export premiums during construction.

## **7.0 LIMITATIONS**

This Limited Phase II ESI report was completed expressly for AKF Group, LLC for the Subject Property as defined in Section 1.2, for the objectives defined herein for due diligence to assess the potential development of the Subject Property. Langan cannot assume responsibility for the use of this report for any property other than the specific Subject Property addressed in this report or for use by any third party without specific

written authorization from Langan. The conclusions, opinions and recommendations given in this report are based on subsurface conditions ascertained from the analysis of a limited number of samples and from environmental reports prepared by other professionals. Recommendations given are contingent upon one another and no recommendation should be followed independent of the others. Actual conditions encountered may differ substantially from those presented herein and should be brought to our attention so that we may determine how such changes may affect our conclusions, opinions and recommendations.

\\langan.com\data\NH\data0\140109002\Office Data\Reports\Environmental\Phase II ESI\_Baseball Field\Text\Phase II ESA\_Baseball Field.docx

# TABLES

**Table 1**  
**Summary of Soil Analytical Results**  
**Public Baseball Field**  
**Greenwich, Connecticut**  
**140109002**

Sample ID Parameters Sampling Date Depth (ft)	Residential Direct Exposure Criteria	Industrial/Commercial Direct Exposure Criteria	GB Pollution Mobility Criteria	SB-6 8/11/2014 2 to 3	SB-7 8/11/2014 1 to 2	SB-8 8/11/2014 1 to 2
<b>VOCs (mg/kg)</b>						
Acetone	500	1,000	140	ND<0.011	0.05	ND<0.012
<b>SVOCs (mg/kg)</b>	~	~	~	NE	NE	NE
<b>Herbicides (mg/kg)</b>	~	~	~	NE	NE	NE
<b>Pesticides (mg/kg)</b>						
4,4'-DDE	1.2**	16.8**	0.01**	ND<0.00237	ND<0.00178	0.00285 D
4,4'-DDT	1.2**	16.8**	0.01**	ND<0.00237	ND<0.00178	0.00277 D
<b>PCBs (mg/kg)</b>						
Total PCBs	1	10	0.005	ND*<0.0358	ND*<0.027	ND*<0.0271
<b>ETPH (mg/kg)</b>	500	2,500	2,500	22.6	23.7	28
<b>Metals (mg/kg)</b>						
Antimony	27	8,200	~	0.779	ND<0.539	ND<0.541
Arsenic	10	10	~	3.75	<b>144</b>	<b>89.2</b>
Barium	4,700	140,000	~	240	91.2	139
Beryllium	2	2	~	0.463	ND<0.108	ND<0.108
Chromium	4,000	51,100	~	52.8	33.6	50.3
Copper	2,500	76,000	~	13	16.8	22.7
Lead	500	1,000	~	16.6	35.7	41.6
Nickel	1,400	7,500	~	31.6	21.5	29.6
Selenium	340	10,000	~	2.01	ND<1.08	1.59
Vanadium	470	14,000	~	29.3	35.6	41.2
Zinc	20,000	610,000	~	52.2	57.2	69
Mercury	20	610	~	0.0814	0.0741	0.0681

**NOTES:**

NE = No exceedance of criteria

ND = Not detected

ND\* = Reporting limit above criteria

D = result is from an analysis that required a dilution

~ = this indicates that no regulatory limit has been established for this analyte

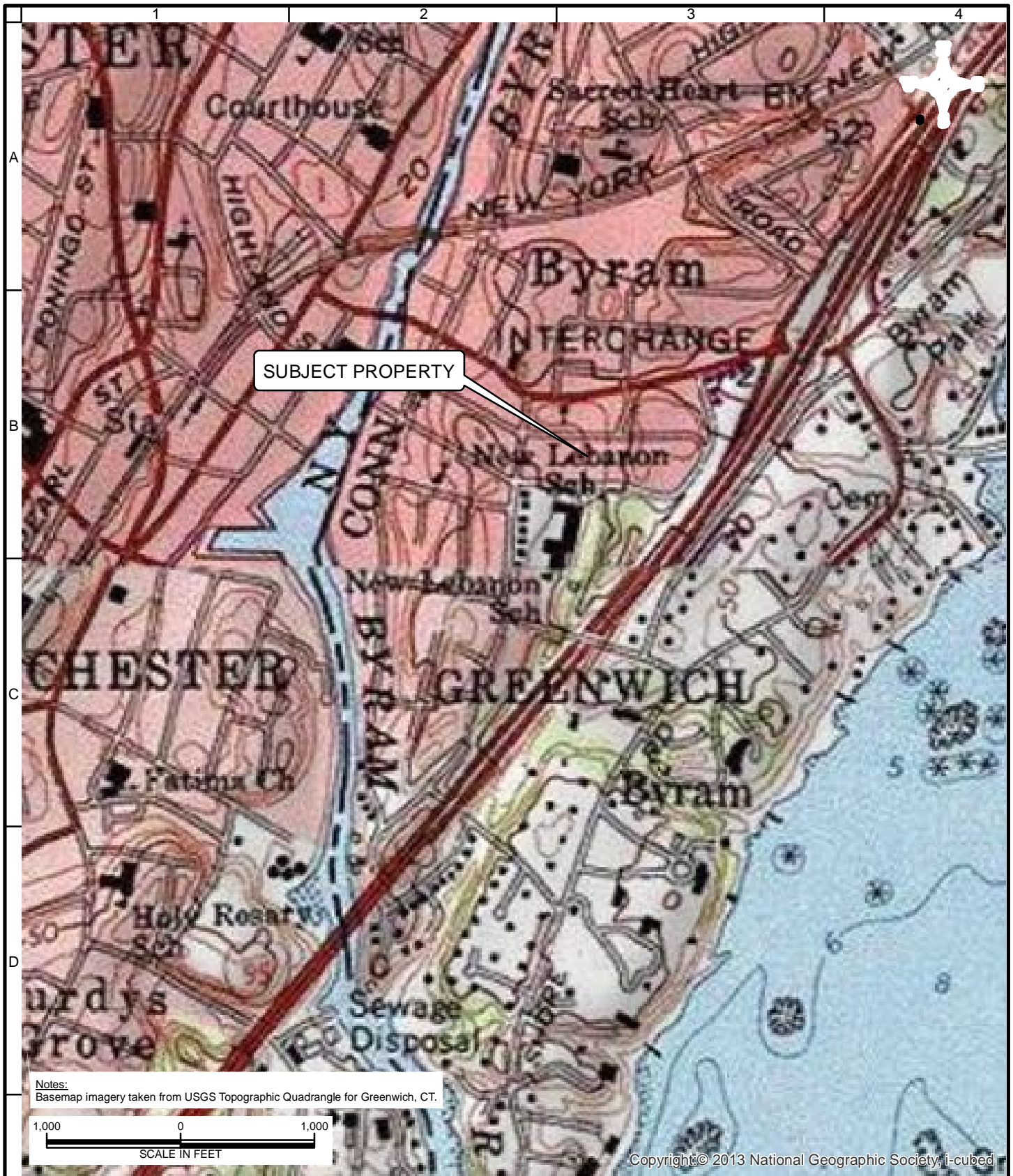
\*\* = For those compounds that do not have certain criteria established within the CTDEEP RSRs effective January 30, 1996, additional polluting substance criteria must be requested for approval by the CTDEEP. The data was compared to the criteria listed in the 2008 Proposed Revisions to the Connecticut Remediation Standard Regulations and the July 2012 Technical Support Document titled "Extractable Petroleum Hydrocarbon Fractions Using the ETPH Analytical Method and Criteria Development".

1) Acetone was detected in the Trip Blank at a concentration of 4 µg/L with a tag of B, meaning the analyte was found in the associated batch blank. For volatiles, methylene chloride and acetone are common lab contaminants. Data users should consider anything <10x the blank value as artifact.

**Bold indicates an exceedance of the RDEC**

**Bold and shading indicates an exceedance of the I/CDEC**

# FIGURES

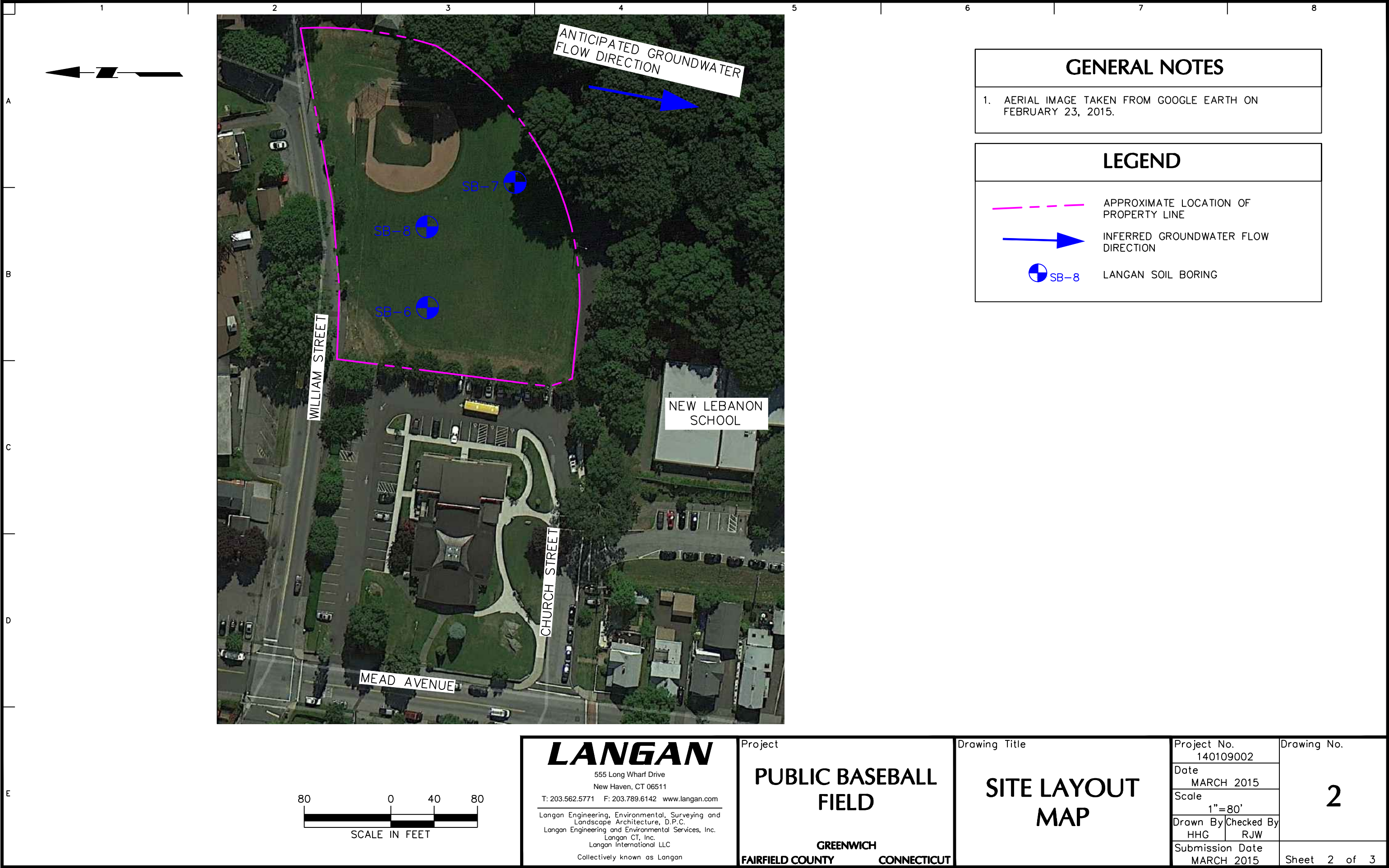


<b>LANGAN</b> ENGINEERING & ENVIRONMENTAL SERVICES 555 Long Wharf Drive New Haven, CT 06511-6107 T: 203.562.5771 F: 203.789.6142 www.langan.com NEW JERSEY NEW YORK VIRGINIA CALIFORNIA PENNSYLVANIA CONNECTICUT FLORIDA ABU DHABI ATHENS DOHA DUBAI ISTANBUL	Project <b>PUBLIC BASEBALL FIELD</b>  GREENWICH FAIRFIELD COUNTY CONNECTICUT	Drawing Title <b>SITE LOCATION PLAN</b>	Project No. 140109002 Date 9/4/2014 Scale 1"=1,000' Drawn By HHG Submission Date 9/4/2014	Figure  1
--	--	--	--	-----------------

Path: \\langan.com\data\NH\data\0140109001\ArcGIS\Map\_Documents\Figure 1\_Baseball Field.mxd

© 2013 Langan





GENERAL NOTES

1. AERIAL IMAGE TAKEN FROM GOOGLE EARTH ON FEBRUARY 23, 2015.

LEGEND

- APPROXIMATE LOCATION OF PROPERTY LINE
- INFERRED GROUNDWATER FLOW DIRECTION
- LANGAN SOIL BORING

LANGAN

555 Long Wharf Drive  
New Haven, CT 06511  
T: 203.562.5771 F: 203.789.6142 www.langan.com  
Langan Engineering, Environmental, Surveying and  
Landscape Architecture, D.P.C.  
Langan Engineering and Environmental Services, Inc.  
Langan CT, Inc.  
Langan International LLC  
Collectively known as Langan

Project  
PUBLIC BASEBALL  
FIELD

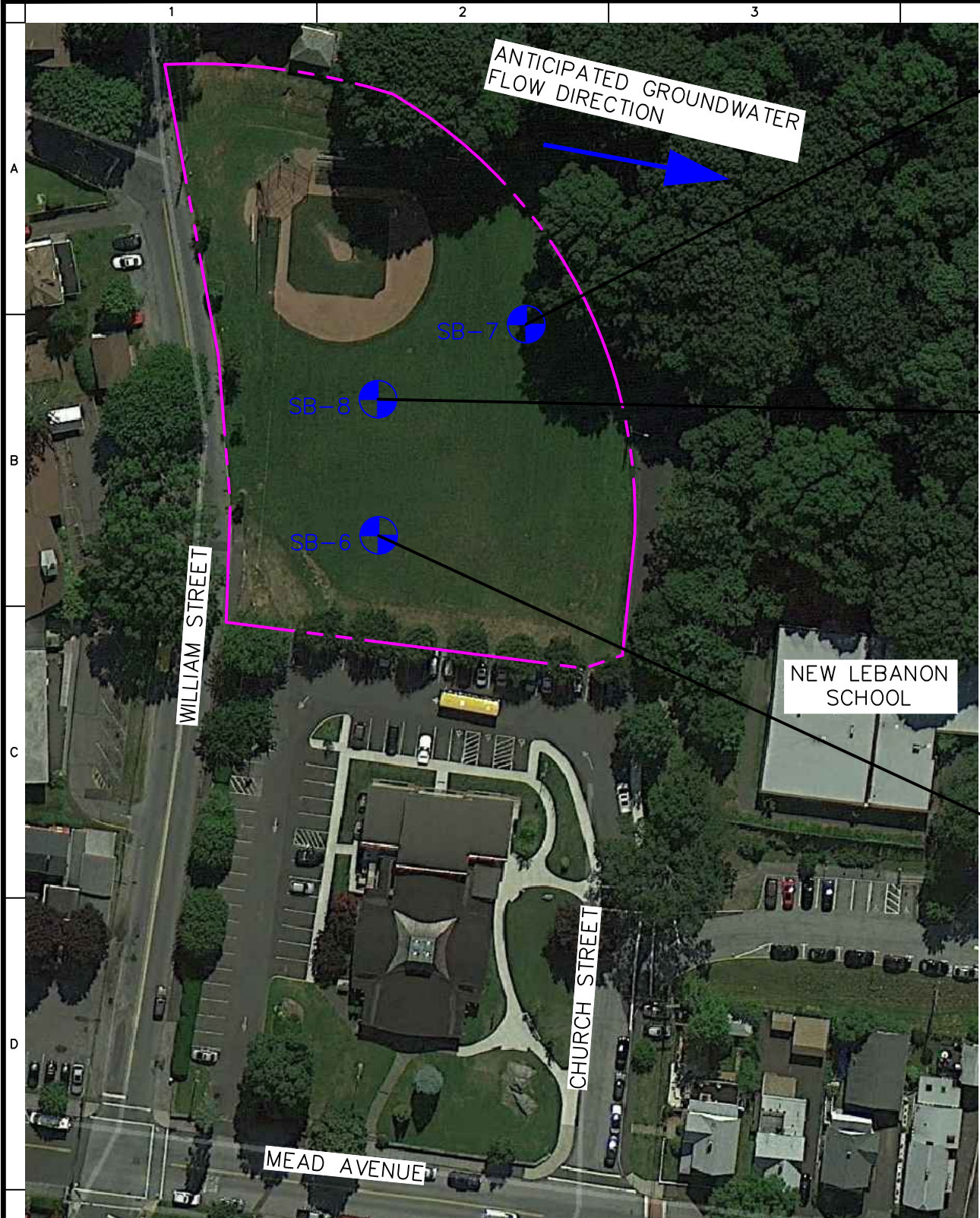
GREENWICH  
FAIRFIELD COUNTY CONNECTICUT

Drawing Title  
SITE LAYOUT  
MAP

Project No.  
140109002  
Date  
MARCH 2015  
Scale  
1"=80'  
Drawn By  
HHG  
Checked By  
RJW  
Submission Date  
MARCH 2015

Drawing No.  
2  
Sheet 2 of 3





Sample ID	SB-7
Sampling Date	8/11/2014
Depth (ft)	1 to 2
<b>VOCs (mg/kg)</b>	
Acetone	0.05
<b>ETPH (mg/kg)</b>	23.7
<b>Metals (mg/kg)</b>	
Arsenic	<b>144</b>
Barium	91.2
Chromium	33.6
Copper	16.8
Lead	35.7
Nickel	21.5
Vanadium	35.6
Zinc	57.2
Mercury	0.0741

Sample ID	SB-8
Sampling Date	8/11/2014
Depth (ft)	1 to 2
<b>Pesticides (mg/kg)</b>	
4,4'-DDE	0.00285 D
4,4'-DDT	0.00277 D
<b>ETPH (mg/kg)</b>	28
<b>Metals (mg/kg)</b>	
Arsenic	<b>89.20</b>
Barium	139
Chromium	50.3
Copper	22.7
Lead	41.6
Nickel	29.6
Selenium	1.59
Vanadium	41.2
Zinc	69
Mercury	0.0681

Sample ID	SB-6
Sampling Date	8/11/2014
Depth (ft)	2 to 3
<b>ETPH (mg/kg)</b>	22.6
<b>Metals (mg/kg)</b>	
Antimony	0.779
Arsenic	3.75
Barium	240
Beryllium	0.463
Chromium	52.8
Copper	13
Lead	16.6
Nickel	31.6
Selenium	2.01
Vanadium	29.3
Zinc	52.2
Mercury	0.0814

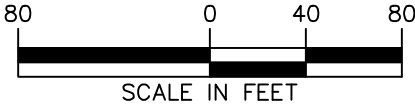
LEGEND

- APPROXIMATE LOCATION OF PROPERTY LINE
- SB-4 LANGAN SOIL BORING

GENERAL NOTES

1. AERIAL IMAGE TAKEN FROM GOOGLE EARTH ON FEBRUARY 23, 2015.
2. BOLD INDICATES AN EXCEEDANCE OF THE RDEC
3. BOLD AND SHADING INDICATES AN EXCEEDANCE OF THE I/CDEC
4. D = RESULT IS FROM AN ANALYSIS THAT REQUIRED DILUTION

Analyte	Residential Direct Exposure Criteria	Ind./Comm. Direct Exposure Criteria	GB Pollution Mobility Criteria
<b>VOCs (mg/kg)</b>			
Acetone	500	1,000	140
<b>Pesticides (mg/kg)</b>			
4,4'-DDE	1.2**	16.8**	0.01**
4,4'-DDT	1.2**	16.8**	0.01**
<b>ETPH (mg/kg)</b>	500	2,500	2,500
<b>Metals (mg/kg)</b>			
Antimony	27	8,200	~
Arsenic	10	10	~
Barium	4,700	140,000	~
Beryllium	2	2	~
Chromium	4,000	51,100	~
Copper	2,500	76,000	~
Lead	500	1,000	~
Nickel	1,400	7,500	~
Selenium	340	10,000	~
Vanadium	470	14,000	~
Zinc	20,000	610,000	~
Mercury	20	610	~



**LANGAN**

555 Long Wharf Drive  
New Haven, CT 06511

T: 203.562.5771 F: 203.789.6142 www.langan.com

Langan Engineering, Environmental, Surveying and  
Landscape Architecture, D.P.C.  
Langan Engineering and Environmental Services, Inc.  
Langan CT, Inc.  
Langan International LLC  
Collectively known as Langan

Project

**PUBLIC BASEBALL  
FIELD**

**GREENWICH**

**FAIRFIELD COUNTY**

**CONNECTICUT**

Drawing Title

**SOIL  
ANALYTICAL  
RESULTS MAP**

Project No.  
140109002

Date  
MARCH 2015

Scale  
1"=80'

Drawn By  
HHG

Checked By  
RJW

Submission Date  
MARCH 2015

Drawing No.

**3**

Sheet 3 of 3

## **APPENDIX A**

# **GEOPHYSICAL SURVEY REPORT**

# **GEOPHYSICAL ENGINEERING SURVEY REPORT**

**NEW LEBABNON SCHOOL**

**25 MEAD AVENUE**

**GREENWICH, CONNECTICUT 06830**

**NOVA PROJECT NUMBER**

**14-0338**

**DATED**

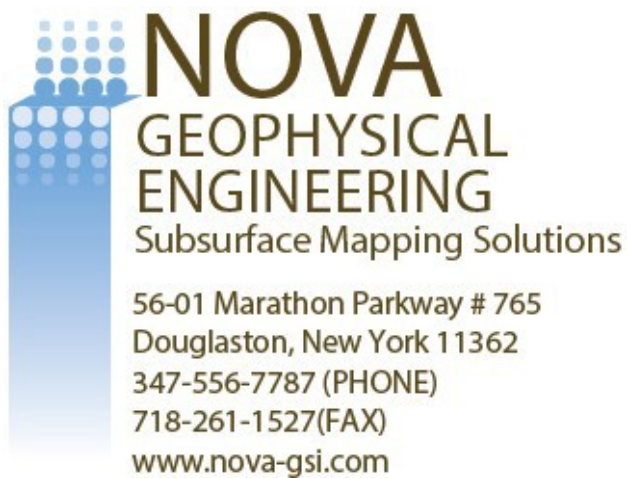
**AUGUST 22, 2014**

**PREPARED FOR:**

***LANGAN***

**Long Warf Maritime Center –  
555 Long Warf Drive  
New Haven, CT 06511**

**PREPARED BY:**



# NOVA GEOPHYSICAL SERVICES

## SUBSURFACEMAPPINGSOLUTIONS

56-01 Marathon Parkway, # 765, Douglaston, New York 11362  
Ph. 347-556-7787 Fax. 718-261-1527  
www.nova-gsi.com

---

August 22, 2014

Ryan J Wohlstrom, P.E. LEED AP  
Project Engineer  
**LANGAN**

Long Warf Maritime Center –  
555 Long Warf Drive  
New Haven, CT 06511  
Direct: 203.784.3069  
Mobile: 203.464.2731

Re: Geophysical Engineering Survey (GES) Report  
New Lebanon School  
25 Mead Avenue  
Greenwich, Connecticut 06830

Dear Mr. Wohlstrom:

Nova Geophysical Services (NOVA) is pleased to provide findings of the geophysical engineering survey (GES) at the above referenced project site: 25 Mead Avenue, Greenwich, New York (the "Site"). Please see attached Site Location and Geophysical Survey maps for more details.

## INTRODUCTION TO GEOPHYSICAL ENGINEERING SURVEY (GES)

---

NOVA performed a Geophysical engineering surveys (GES) consisting of Ground Penetrating Radar (GPR) and Electromagnetic (EM) surveys at the project Site. The purpose of this survey is to locate and identify USTs, anomalies, utilities and other substructures and to clear and mark proposed environmental boring areas on August 11<sup>th</sup>, 2014.

The equipment selected for this investigation was an Electromagnetic Utility Detector (EUD-3) and Noggin's 250 MHz ground penetrating radar (GPR) shielded antenna.

A GPR system consists of a radar control unit, control cable and a transducer (antenna). The control unit transmits a trigger pulse at a normal repetition rate of 250 MHz. The trigger pulse is sent to the transmitter electronics in the transducer via the control cable. The transmitter electronics amplify the trigger pulses into bipolar pulses that are radiated to the surface. The transformed pulses vary in shape and frequency according to the transducer used. In the subsurface, variations of the signal occur at boundaries where there is a dielectric contrast (void, steel, soil type, etc.). Signal reflections travel back to the control unit and are represented as color graphic images for interpolation.

GPR, Magnetics, Electromagnetics, Seismic, Resistivity, Utility Location, Borehole Logging & Camera





## GEOPHYSICAL METHODS

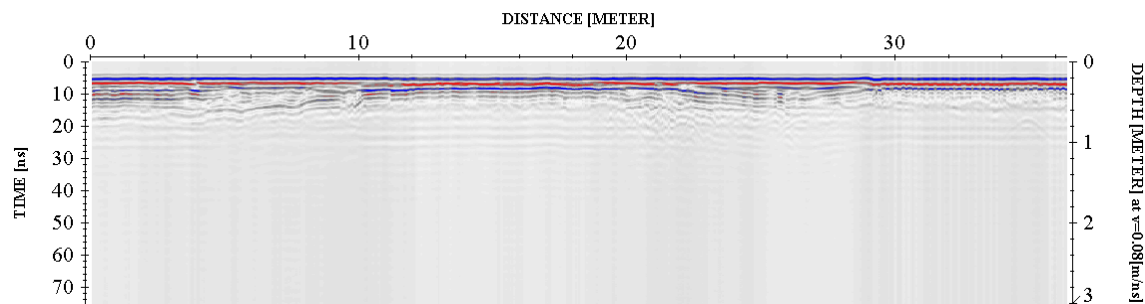
The project site was first screened using the Geonics(tm) electromagnetic detector by carrying the instrument over the project area at the site in 4' x 4' traverses. Finally, GPR profiles were collected over each anomaly and inspected for reflections, which could be indicative of major anomalies and substructures. Nova performed full scale multi-frequency GPR surveys for the targeted depths of approximately 3 to 15 feet below ground surface (bgs) pending quality of the data and sediments settings.

GPR data profiles were collected for the areas of the Site specified by the client. The surveyed areas consisted of paved and none paved areas.

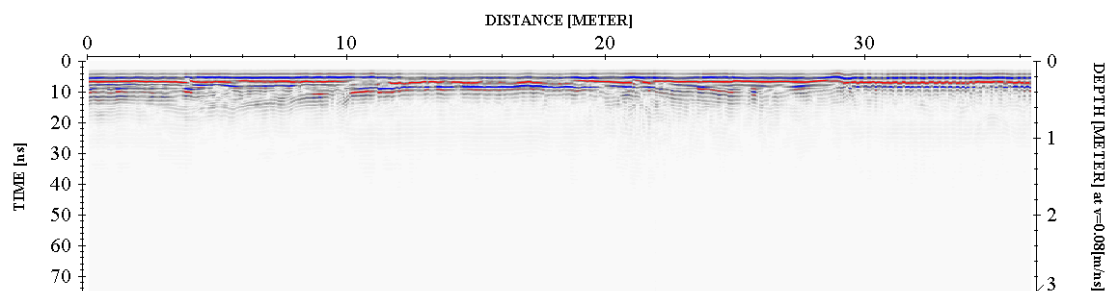
## DATA PROCESSING

In order to improve the quality of the results and to better identify subsurface anomalies NOVA processed the collected data. The processes flow is briefly described at this section.

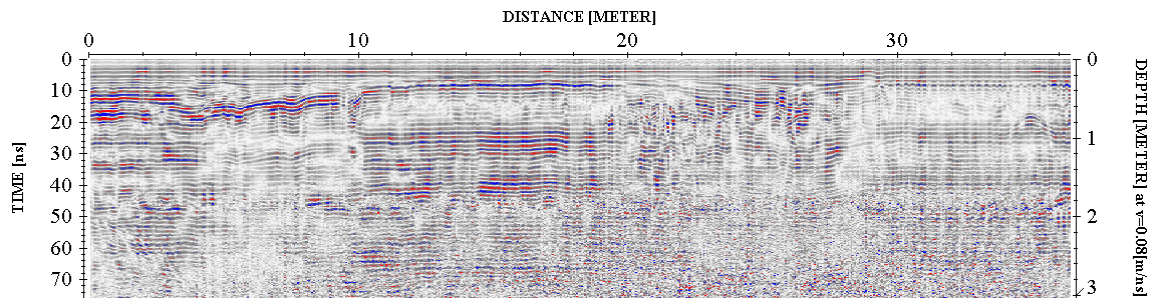
### Step 1. Import raw RAMAC data to standard processing format



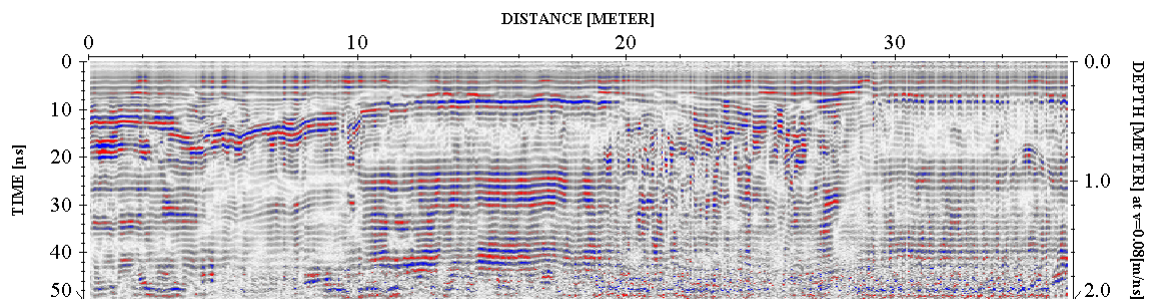
### Step 2. Remove instrument noise (dewow)



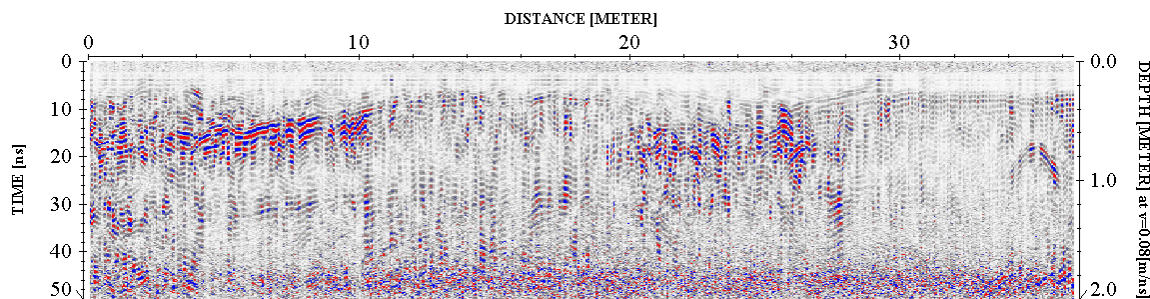
**Step 3. Correct for attenuation losses (*energy decay function*)**



**Step 4. Remove static from bottom of profile (*time cut*)**



**Step 5. Mute horizontal ringing/noise (*subtracting average*)**



The above example shows the significance of data processing. The last image (step 5) has higher resolution than the starting image (raw data – step 1) and describes the subsurface anomalies more accurately.

**PHYSICAL SETTINGS**

---

Nova observed following physical conditions at the time of the survey:

**The weather:** Mostly Cloudy and Rain.

**Temp:** 74 Degrees (F).

**Surface:** Paved (concrete-asphalt) & none paved.

GPR, Magnetics, Electromagnetics, Seismic, Resistivity, Utility Location, Borehole Logging & Camera

**Geophysical Noise Level (GNL):** Geophysical Noise Level (GNL) was low to medium at the time of the survey due to on-site on-going businesses which, created geophysical noise activities. Therefore no quality EM data was collected or analyzed and GPR data was limited.

## **RESULTS**

---

The results of the geophysical engineering survey (GES) identified following at the project Site:

- GES identified a major anomaly located along the eastern portion of the project site building. Based on its reflection rate and proximity, this anomaly was approximately 20 feet long by 8 feet in diameter and consistent with an UST. Nova also observed a fill port and a vent pipe which were associated with this anomaly.
- GES identified disturbed soil area along the western portion of the project site. However, no EM data was available and disturbances identified with the GPR was not consistent with any major anomaly.
- GES identified scattered anomalies consistent with fill materials. All of the identified scattered anomalies were clearly marked during the field survey.
- GES identified minor anomalies located throughout of the project area. Based on their reflection rates and their proximity (approximately 2 to 5 feet bgs) they were consistent with subsurface utility lines.
- Nova cleared and marked all of the proposed boring locations at the time of the survey.
- Geophysical Survey Plan portrays the areas investigated during the geophysical survey.

If you have any questions please do not hesitate to contact the undersigned.

Sincerely,

### **NOVA Geophysical Services**

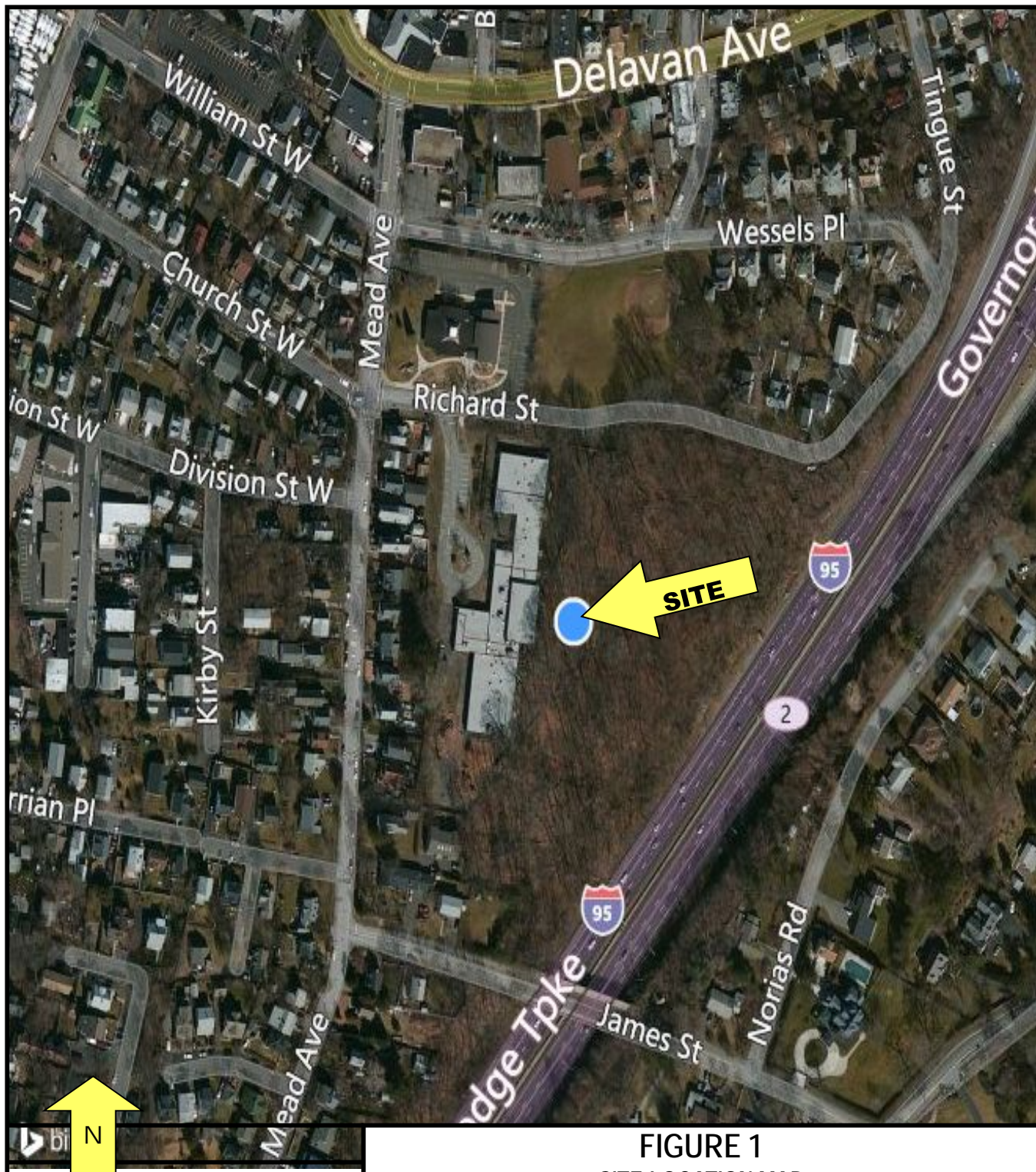


Levent Eskicakit, P.G., E.P.  
Project Engineer

### **Attachments:**

Figure 1 Site Location Map  
Geophysical Survey Plan  
Geophysical Images





**FIGURE 1**  
SITE LOCATION MAP

**NOVA**  
Geophysical Services

Subsurface Mapping Solutions

56-01 Marathon Pkwy, # 765, Douglaston, NY11362

(347) 556-7787 Fax (718) 261-1528

[www.nova-gsi.com](http://www.nova-gsi.com)

**SITE:**

**New Lebanon School**

25 Mead Avenue

Greenwich, Connecticut 06830

**SCALE:**

See Map





Note: All anomalies were marked in the field

● Proposed Boring Areas

## NOVA Geophysical Services

Subsurface Mapping Solutions

56-01 Marathon Parkway, # 765

Douglaston, New York 11362

Phone (347) 556-7787 \* Email [info@nova-gsi.com](mailto:info@nova-gsi.com)

[www.nova-gsi.com](http://www.nova-gsi.com)

### GEOPHYSICAL SURVEY

SITE : New Lebanon School

25 Mead Avenue, Greenwich, CT

CLIENT: Langan Engineering & Environmental Services

DATE: August 11<sup>th</sup> 2014

Scale See Map

### INFORMATION



Project Area



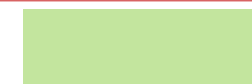
Major Anomaly  
(UST)



Scattered Anomalies



Underground  
Utilities/Pipes



Evidence of  
Disturbed Soil



Geophysical Noise  
Areas (NO DATA)

## GEOPHYSICAL IMAGES

### Lebanon School

25 Mead Avenue, Greenwich, Connecticut

August 11<sup>th</sup>, 2014



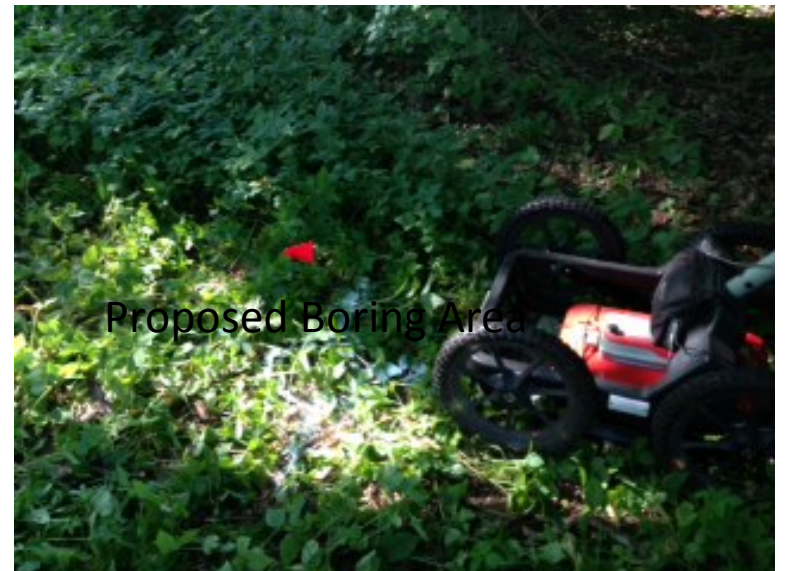


## GEOPHYSICAL IMAGES

Lebanon School

25 Mead Avenue, Greenwich, Connecticut

August 11<sup>th</sup>, 2014



## GEOPHYSICAL IMAGES

### Lebanon School

25 Mead Avenue, Greenwich, Connecticut

August 11<sup>th</sup>, 2014



**APPENDIX B**

**SOIL BORING LOGS**



PROJECT <u>New Lebanon School</u>			PROJECT NO. <u>140109001</u>		
LOCATION <u>25 Mead Avenue, Greenwich, CT</u>			ELEVATION AND DATUM		
DRILLING AGENCY <u>American Environmental</u>			DATE STARTED <u>8.11.14</u>		DATE FINISHED <u>8.11.14</u>
DRILLING EQUIPMENT <u>Geoprobe 7822 DT</u>			COMPLETION DEPTH <u>7'</u>		ROCK DEPTH <u>7'</u>
SIZE AND TYPE OF BIT			NO. SAMPLES	DIST. <u>1</u>	UNDIST.
CASING			WATER LEVEL	FIRST <u>—</u>	COMPL.
CASING HAMMER	WEIGHT	DROP	FOREMAN <u>Floyd</u>		
SAMPLER <u>2" OD Macro core</u>			INSPECTOR <u>H. Griesbach</u>		
SAMPLER HAMMER	WEIGHT	DROP			

PID (ppm)	SAMPLE DESCRIPTION	DEPTH SCALE	SAMPLES				REMARKS (DRILLING FLUID, DEPTH OF CASING, CASING BLOWS, FLUID LOSS, ETC.)
			NO. LOC.	TYPE	REC'D. FT.	PENETR. RESIST. BLG IN.	
0.0	1' Topsoil						no staining, no odor
	Brown to orange, M-F SAND, sm-clay, sm-silt, tr-f- gravel	1					
		2					
		3					
		4					
		5					
0.0	Brown to orange CLAY, sm-f-sand, sm-silt, tr-f- gravel	6					no staining, no odor
		7					Refusal @ 7'
		8					
		9					
		10					
		11					
		12					
		13					
		14					

PROJECT <u>New Lebanon School</u>			PROJECT NO. <u>140109001</u>		
LOCATION <u>25 Mead Avenue, Greenwich, CT</u>			ELEVATION AND DATUM		
DRILLING AGENCY <u>American Environmental</u>			DATE STARTED <u>8.11.14</u>		DATE FINISHED <u>8.11.14</u>
DRILLING EQUIPMENT <u>Geoprobe 7822 DT</u>			COMPLETION DEPTH <u>6'</u>		ROCK DEPTH <u>6'</u>
SIZE AND TYPE OF BIT			NO. SAMPLES	DIST. <u>1</u>	UNDIST.
CASING			WATER LEVEL	FIRST <u>—</u>	COMPL.
CASING HAMMER	WEIGHT	DROP	FOREMAN <u>Floyd</u>		
SAMPLER <u>2" OD Macro core</u>			INSPECTOR <u>H. Griesbach</u>		
SAMPLER HAMMER	WEIGHT	DROP			

PID (ppm)	SAMPLE DESCRIPTION	DEPTH SCALE	SAMPLES				REMARKS (DRILLING FLUID, DEPTH OF CASING, CASING BLOWS, FLUID LOSS, ETC.)
			NO. LOC.	TYPE	REC'D. FT.	PENETR. RESIST. BLU IN.	
0.0	1' Topsoil Brown to orange, M-F sand, sm-clay, sm-silt, tr-f- gravel	1	S-1	MC	44/60		no staining, no odor 1220 sample 1-2'
		2					
		3					
		4					
0.0	Brown to orange CLAY, sm-f-sand, tr-silt, tr-f-gravel	5	S-2	MC	18/60		no staining, no odor Refusal @ 6'
		6					
		7					
		8					
		9					
		10					
		11					
		12					
		13					
		14					

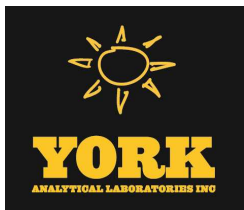


PROJECT <u>New Lebanon School</u>			PROJECT NO. <u>140109001</u>		
LOCATION <u>25 Mead Avenue, Greenwich, CT</u>			ELEVATION AND DATUM		
DRILLING AGENCY <u>American Environmental</u>			DATE STARTED <u>8.11.14</u>		DATE FINISHED <u>8.11.14</u>
DRILLING EQUIPMENT <u>Geoprobe 7822 DT</u>			COMPLETION DEPTH <u>6'</u>		ROCK DEPTH <u>6'</u>
SIZE AND TYPE OF BIT			NO. SAMPLES	DIST. <u>1</u>	UNDIST.
CASING			WATER LEVEL	FIRST <u>—</u>	COMPL.
CASING HAMMER	WEIGHT	DROP	FOREMAN <u>Floyd</u>		
SAMPLER <u>2" OD Macro core</u>			INSPECTOR <u>H. Griesbach</u>		
SAMPLER HAMMER	WEIGHT	DROP			

PID (ppm)	SAMPLE DESCRIPTION	DEPTH SCALE	SAMPLES				REMARKS (DRILLING FLUID, DEPTH OF CASING, CASING BLOWS, FLUID LOSS, ETC.)
			NO. LOC.	TYPE	REC'D. FT.	PENETR. RESIST. BLU. IN.	
0.0	1' Topsoil Brown to orange, M-F SAND sm-clay, sm-silt, tr-f-gravel	1	S-1	MC	34/60		no staining, no odor 1245 sample 1-2'
		2					
		3					
		4					
0.0	Brown CLAY, sm-f-sand, tr-silt, tr-f-gravel	5	S-2	MC	24/60		no staining, no odor Refusal @ 6'
		6					
		7					
		8					
		9					
		10					
		11					
		12					
		13					

## **APPENDIX C**

### **LABORATORY REPORTS**



# Technical Report

prepared for:

**Langan Engineering & Environmental Services (CT)**

Long Wharf Maritime Center, 555 Long Wharf Drive

New Haven CT, 06511

**Attention: Hannah Griesbach**

Report Date: 03/03/2015

**Client Project ID: Public Baseball Field**

York Project (SDG) No.: 14H0523

Revision No. 4.0

CT Cert. No. PH-0723

New Jersey Cert. No. CT-005



New York Cert. No. 10854

PA Cert. No. 68-04440

Report Date: 03/03/2015  
Client Project ID: Public Baseball Field  
York Project (SDG) No.: 14H0523

**Langan Engineering & Environmental Services (CT)**  
Long Wharf Maritime Center, 555 Long Wharf Drive  
New Haven CT, 06511  
Attention: Hannah Griesbach

---

## Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on August 11, 2014 and listed below. The project was identified as your project: **Public Baseball Field**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Notes section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the attachment to this report, and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
14H0523-06	SB-6 2-3'	Soil	08/11/2014	08/11/2014
14H0523-07	SB-7 1-2'	Soil	08/11/2014	08/11/2014
14H0523-08	SB-8 1-2'	Soil	08/11/2014	08/11/2014
14H0523-11	TB-1	Water	08/11/2014	08/11/2014

## **General Notes for York Project (SDG) No.: 14H0523**

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All samples were received in proper condition for analysis with proper documentation, unless otherwise noted.
6. All analyses conducted met method or Laboratory SOP requirements. See the Qualifiers and/or Narrative sections for further information.
7. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
8. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.

**Approved By:**



**Benjamin Gulizia**  
Laboratory Director

**Date:** 03/03/2015





## Sample Information

**Client Sample ID:** SB-6 2-3'

**York Sample ID:** 14H0523-06

**York Project (SDG) No.**

14H0523

**Client Project ID**

Public Baseball Field

**Matrix**

Soil

**Collection Date/Time**

August 11, 2014 12:00 pm

**Date Received**

08/11/2014

### Volatile Organics, CT RCP List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
75-34-3	1,1-Dichloroethane	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
75-35-4	1,1-Dichloroethylene	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
563-58-6	1,1-Dichloropropylene	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
107-06-2	1,2-Dichloroethane	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
142-28-9	1,3-Dichloropropane	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
594-20-7	2,2-Dichloropropane	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
78-93-3	2-Butanone	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
95-49-8	2-Chlorotoluene	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
591-78-6	2-Hexanone	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
106-43-4	4-Chlorotoluene	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
67-64-1	Acetone	ND		ug/kg dry	2.8	11	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
107-13-1	Acrylonitrile	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
71-43-2	Benzene	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
108-86-1	Bromobenzene	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
74-97-5	Bromochloromethane	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
75-27-4	Bromodichloromethane	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
75-25-2	Bromoform	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS



## Sample Information

**Client Sample ID:** SB-6 2-3'

**York Sample ID:** 14H0523-06

York Project (SDG) No.  
14H0523

Client Project ID  
Public Baseball Field

Matrix  
Soil

Collection Date/Time  
August 11, 2014 12:00 pm

Date Received  
08/11/2014

### Volatile Organics, CT RCP List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
74-83-9	Bromomethane	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
75-15-0	Carbon disulfide	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
56-23-5	Carbon tetrachloride	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
108-90-7	Chlorobenzene	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
75-00-3	Chloroethane	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
67-66-3	Chloroform	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
74-87-3	Chloromethane	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
124-48-1	Dibromochloromethane	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
74-95-3	Dibromomethane	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
75-71-8	Dichlorodifluoromethane	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
100-41-4	Ethyl Benzene	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
98-82-8	Isopropylbenzene	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
80-62-6	Methyl Methacrylate	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
75-09-2	Methylene chloride	ND		ug/kg dry	2.8	11	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
91-20-3	Naphthalene	ND		ug/kg dry	2.8	11	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
104-51-8	n-Butylbenzene	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
103-65-1	n-Propylbenzene	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
95-47-6	o-Xylene	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
179601-23-1	p- & m- Xylenes	ND		ug/kg dry	5.5	11	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
99-87-6	p-Isopropyltoluene	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
135-98-8	sec-Butylbenzene	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
100-42-5	Styrene	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
98-06-6	tert-Butylbenzene	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
127-18-4	Tetrachloroethylene	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
109-99-9	Tetrahydrofuran	ND		ug/kg dry	5.5	11	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
108-88-3	Toluene	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
110-57-6	trans-1,4-dichloro-2-butene	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
79-01-6	Trichloroethylene	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
75-69-4	Trichlorofluoromethane	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS
75-01-4	Vinyl Chloride	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	08/15/2014 08:23	08/15/2014 19:37	SS



## Sample Information

**Client Sample ID:** SB-6 2-3'

**York Sample ID:** 14H0523-06

**York Project (SDG) No.**  
14H0523

**Client Project ID**  
Public Baseball Field

**Matrix**  
Soil

**Collection Date/Time**  
August 11, 2014 12:00 pm

**Date Received**  
08/11/2014

### Volatile Organics, CT RCP List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
Surrogate Recoveries		Result		Acceptance Range							
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	109 %				67-130					
460-00-4	Surrogate: p-Bromofluorobenzene	95.4 %				75-127					
2037-26-5	Surrogate: Toluene-d8	104 %				90-112					

### Semi-Volatiles, CT RCP BNA List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3545A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
83-32-9	Acenaphthene	ND		ug/kg dry	93.2	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
208-96-8	Acenaphthylene	ND		ug/kg dry	93.2	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
62-53-3	Aniline	ND		ug/kg dry	93.2	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
120-12-7	Anthracene	ND		ug/kg dry	93.2	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
56-55-3	Benzo(a)anthracene	ND		ug/kg dry	93.2	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
50-32-8	Benzo(a)pyrene	ND		ug/kg dry	93.2	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
205-99-2	Benzo(b)fluoranthene	ND		ug/kg dry	93.2	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
191-24-2	Benzo(g,h,i)perylene	ND		ug/kg dry	179	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
207-08-9	Benzo(k)fluoranthene	ND		ug/kg dry	93.2	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
85-68-7	Benzyl butyl phthalate	ND		ug/kg dry	93.2	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
101-55-3	4-Bromophenyl phenyl ether	ND		ug/kg dry	93.2	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
59-50-7	4-Chloro-3-methylphenol	ND		ug/kg dry	179	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
106-47-8	4-Chloroaniline	ND		ug/kg dry	179	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
111-91-1	Bis(2-chloroethoxy)methane	ND		ug/kg dry	93.2	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
111-44-4	Bis(2-chloroethyl)ether	ND		ug/kg dry	93.2	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
108-60-1	Bis(2-chloroisopropyl)ether	ND		ug/kg dry	93.2	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
91-58-7	2-Chloronaphthalene	ND		ug/kg dry	93.2	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
95-57-8	2-Chlorophenol	ND		ug/kg dry	93.2	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
7005-72-3	4-Chlorophenyl phenyl ether	ND		ug/kg dry	93.2	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
218-01-9	Chrysene	ND		ug/kg dry	93.2	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
53-70-3	Dibenzo(a,h)anthracene	ND		ug/kg dry	93.2	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
132-64-9	Dibenzofuran	ND		ug/kg dry	93.2	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
84-74-2	Di-n-butyl phthalate	ND		ug/kg dry	93.2	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
91-94-1	3,3'-Dichlorobenzidine	ND		ug/kg dry	93.2	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
120-83-2	2,4-Dichlorophenol	ND		ug/kg dry	179	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
86-74-8	Carbazole	ND		ug/kg dry	93.2	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
84-66-2	Diethyl phthalate	ND		ug/kg dry	93.2	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR





## Sample Information

**Client Sample ID:** SB-6 2-3'

**York Sample ID:** 14H0523-06

**York Project (SDG) No.**  
14H0523

**Client Project ID**  
Public Baseball Field

**Matrix**  
Soil

**Collection Date/Time**  
August 11, 2014 12:00 pm

**Date Received**  
08/11/2014

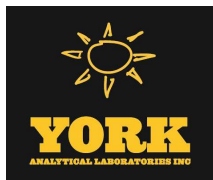
### Semi-Volatiles, CT RCP BNA List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3545A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
105-67-9	2,4-Dimethylphenol	ND		ug/kg dry	93.2	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
131-11-3	Dimethyl phthalate	ND		ug/kg dry	93.2	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
534-52-1	4,6-Dinitro-2-methylphenol	ND		ug/kg dry	179	717	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
51-28-5	2,4-Dinitrophenol	ND		ug/kg dry	358	717	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
606-20-2	2,6-Dinitrotoluene	ND		ug/kg dry	93.2	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
121-14-2	2,4-Dinitrotoluene	ND		ug/kg dry	179	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
117-84-0	Di-n-octyl phthalate	ND		ug/kg dry	93.2	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
117-81-7	Bis(2-ethylhexyl)phthalate	ND		ug/kg dry	93.2	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
206-44-0	Fluoranthene	ND		ug/kg dry	93.2	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
86-73-7	Fluorene	ND		ug/kg dry	93.2	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
118-74-1	Hexachlorobenzene	ND		ug/kg dry	93.2	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	93.2	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
77-47-4	Hexachlorocyclopentadiene	ND		ug/kg dry	179	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
67-72-1	Hexachloroethane	ND		ug/kg dry	93.2	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/kg dry	93.2	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
78-59-1	Isophorone	ND		ug/kg dry	93.2	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
90-12-0	1-Methylnaphthalene	ND		ug/kg dry	93.2	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
91-57-6	2-Methylnaphthalene	ND		ug/kg dry	93.2	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
95-48-7	2-Methylphenol	ND		ug/kg dry	179	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
65794-96-9	3- & 4-Methylphenols	ND		ug/kg dry	179	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
91-20-3	Naphthalene	ND		ug/kg dry	93.2	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
99-09-2	3-Nitroaniline	ND		ug/kg dry	179	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
100-01-6	4-Nitroaniline	ND		ug/kg dry	179	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
88-74-4	2-Nitroaniline	ND		ug/kg dry	93.2	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
98-95-3	Nitrobenzene	ND		ug/kg dry	93.2	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
88-75-5	2-Nitrophenol	ND		ug/kg dry	93.2	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
100-02-7	4-Nitrophenol	ND		ug/kg dry	179	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
621-64-7	N-nitroso-di-n-propylamine	ND		ug/kg dry	93.2	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
86-30-6	N-Nitrosodiphenylamine	ND		ug/kg dry	93.2	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
82-68-8	Pentachloronitrobenzene	ND		ug/kg dry	179	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
87-86-5	Pentachlorophenol	ND		ug/kg dry	179	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
85-01-8	Phenanthrene	ND		ug/kg dry	93.2	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
108-95-2	Phenol	ND		ug/kg dry	93.2	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
129-00-0	Pyrene	ND		ug/kg dry	93.2	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
110-86-1	Pyridine	ND		ug/kg dry	93.2	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		ug/kg dry	179	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR



## Sample Information

**Client Sample ID:** SB-6 2-3'

**York Sample ID:** 14H0523-06

**York Project (SDG) No.**  
14H0523

**Client Project ID**  
Public Baseball Field

**Matrix**  
Soil

**Collection Date/Time**  
August 11, 2014 12:00 pm

**Date Received**  
08/11/2014

### Semi-Volatiles, CT RCP BNA List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3545A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	93.2	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
88-06-2	2,4,6-Trichlorophenol	ND		ug/kg dry	93.2	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
95-95-4	2,4,5-Trichlorophenol	ND		ug/kg dry	93.2	358	1	EPA 8270D	08/13/2014 14:35	08/14/2014 20:42	SR
<b>Surrogate Recoveries</b>		<b>Result</b>		<b>Acceptance Range</b>							
367-12-4	Surrogate: 2-Fluorophenol	34.2 %		10-105							
4165-62-2	Surrogate: Phenol-d5	31.7 %		10-118							
4165-60-0	Surrogate: Nitrobenzene-d5	29.5 %		10-140							
321-60-8	Surrogate: 2-Fluorobiphenyl	27.8 %		10-126							
118-79-6	Surrogate: 2,4,6-Tribromophenol	25.0 %		10-150							
1718-51-0	Surrogate: Terphenyl-d14	63.9 %		10-137							

### Pesticides, CT RCP Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3545\_A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
72-54-8	4,4'-DDD	ND		ug/kg dry	2.37	2.37	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:04	JW
72-55-9	4,4'-DDE	ND		ug/kg dry	2.37	2.37	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:04	JW
50-29-3	4,4'-DDT	ND		ug/kg dry	2.37	2.37	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:04	JW
15972-60-8	Alachlor	ND		ug/kg dry	2.37	2.37	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:04	JW
309-00-2	Aldrin	ND		ug/kg dry	2.37	2.37	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:04	JW
319-84-6	alpha-BHC	ND		ug/kg dry	2.37	2.37	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:04	JW
319-85-7	beta-BHC	ND		ug/kg dry	2.37	2.37	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:04	JW
57-74-9	Chlordane, total	ND		ug/kg dry	9.46	9.46	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:04	JW
319-86-8	delta-BHC	ND		ug/kg dry	2.37	2.37	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:04	JW
60-57-1	Dieldrin	ND		ug/kg dry	2.37	2.37	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:04	JW
959-98-8	Endosulfan I	ND		ug/kg dry	2.37	2.37	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:04	JW
33213-65-9	Endosulfan II	ND		ug/kg dry	2.37	2.37	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:04	JW
1031-07-8	Endosulfan sulfate	ND		ug/kg dry	2.37	2.37	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:04	JW
72-20-8	Endrin	ND		ug/kg dry	2.37	2.37	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:04	JW
7421-93-4	Endrin aldehyde	ND		ug/kg dry	2.37	2.37	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:04	JW
53494-70-5	Endrin ketone	ND		ug/kg dry	2.37	2.37	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:04	JW
58-89-9	gamma-BHC (Lindane)	ND		ug/kg dry	2.37	2.37	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:04	JW
76-44-8	Heptachlor	ND		ug/kg dry	2.37	2.37	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:04	JW
1024-57-3	Heptachlor epoxide	ND		ug/kg dry	2.37	2.37	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:04	JW
72-43-5	Methoxychlor	ND		ug/kg dry	11.8	11.8	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:04	JW
8001-35-2	Toxaphene	ND		ug/kg dry	120	120	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:04	JW
<b>Surrogate Recoveries</b>		<b>Result</b>		<b>Acceptance Range</b>							



## Sample Information

**Client Sample ID:** SB-6 2-3'

**York Sample ID:** 14H0523-06

York Project (SDG) No.  
14H0523

Client Project ID  
Public Baseball Field

Matrix  
Soil

Collection Date/Time  
August 11, 2014 12:00 pm

Date Received  
08/11/2014

### Pesticides, CT RCP Target List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3545\_A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
2051-24-3	Surrogate: Decachlorobiphenyl	55.4 %			30-140						
877-09-8	Surrogate: Tetrachloro-m-xylene	51.5 %			30-140						

### Polychlorinated Biphenyls(PCB RCP)

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3545\_A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND		mg/kg dry	0.0358	0.0358	1	EPA 8082A	08/13/2014 17:00	08/14/2014 13:02	AMC
11104-28-2	Aroclor 1221	ND		mg/kg dry	0.0358	0.0358	1	EPA 8082A	08/13/2014 17:00	08/14/2014 13:02	AMC
11141-16-5	Aroclor 1232	ND		mg/kg dry	0.0358	0.0358	1	EPA 8082A	08/13/2014 17:00	08/14/2014 13:02	AMC
53469-21-9	Aroclor 1242	ND		mg/kg dry	0.0358	0.0358	1	EPA 8082A	08/13/2014 17:00	08/14/2014 13:02	AMC
12672-29-6	Aroclor 1248	ND		mg/kg dry	0.0358	0.0358	1	EPA 8082A	08/13/2014 17:00	08/14/2014 13:02	AMC
11097-69-1	Aroclor 1254	ND		mg/kg dry	0.0358	0.0358	1	EPA 8082A	08/13/2014 17:00	08/14/2014 13:02	AMC
11096-82-5	Aroclor 1260	ND		mg/kg dry	0.0358	0.0358	1	EPA 8082A	08/13/2014 17:00	08/14/2014 13:02	AMC
37324-23-5	Aroclor 1262	ND		mg/kg dry	0.0358	0.0358	1	EPA 8082A	08/13/2014 17:00	08/14/2014 13:02	AMC
11100-14-4	Aroclor 1268	ND		mg/kg dry	0.0358	0.0358	1	EPA 8082A	08/13/2014 17:00	08/14/2014 13:02	AMC
1336-36-3	Total PCBs	ND		mg/kg dry	0.0358	0.0358	1	EPA 8082A	08/13/2014 17:00	08/14/2014 13:02	AMC
Surrogate Recoveries		Result		Acceptance Range							
877-09-8	Surrogate: Tetrachloro-m-xylene	49.0 %			30-140						
2051-24-3	Surrogate: Decachlorobiphenyl	28.0 %	GC-Sur r		30-140						

### Herbicides, CT RCP

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3550B/8151A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
1918-00-9	Dicamba	ND		ug/kg dry	28.7	28.7	1	EPA 8151A m	08/13/2014 05:58	08/14/2014 17:00	JW
94-75-7	2,4-D	ND		ug/kg dry	28.7	28.7	1	EPA 8151A m	08/13/2014 05:58	08/14/2014 17:00	JW
93-72-1	2,4,5-TP (Silvex)	ND		ug/kg dry	28.7	28.7	1	EPA 8151A m	08/13/2014 05:58	08/14/2014 17:00	JW
93-76-5	2,4,5-T	ND		ug/kg dry	28.7	28.7	1	EPA 8151A m	08/13/2014 05:58	08/14/2014 17:00	JW
75-99-0	Dalapon	ND		ug/kg dry	28.7	28.7	1	EPA 8151A m	08/13/2014 05:58	08/15/2014 00:44	JW
Surrogate Recoveries		Result		Acceptance Range							
19719-28-9	Surrogate: 2,4-Dichlorophenylacetic acid (E	60.6 %			30-150						



## Sample Information

**Client Sample ID:** SB-6 2-3'

**York Sample ID:** 14H0523-06

**York Project (SDG) No.**  
14H0523

**Client Project ID**  
Public Baseball Field

**Matrix**  
Soil

**Collection Date/Time**  
August 11, 2014 12:00 pm

**Date Received**  
08/11/2014

### Extractable Total Petroleum Hydrocarbons (ETPH)

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3545A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
CT ETPH	ETPH (Extractable Total Petroleum Hydrocarbons)	22.6		mg/kg dry	3.05	14.3	1	CT DEP ETPH	08/18/2014 08:30	08/19/2014 09:40	JW
	Surrogate Recoveries	Result				Acceptance Range					
3386-33-2	Surrogate: 1-Chlorooctadecane	76.7 %				50-150					

### Metals, CTDEP RCP

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-36-0	Antimony	0.779		mg/kg dry	0.717	0.717	1	EPA 6010C	08/15/2014 08:06	08/15/2014 12:14	MW
7440-38-2	Arsenic	3.75		mg/kg dry	1.43	1.43	1	EPA 6010C	08/15/2014 08:06	08/15/2014 12:14	MW
7440-39-3	Barium	240		mg/kg dry	1.43	1.43	1	EPA 6010C	08/15/2014 08:06	08/15/2014 12:14	MW
7440-41-7	Beryllium	0.463		mg/kg dry	0.143	0.143	1	EPA 6010C	08/15/2014 08:06	08/15/2014 12:14	MW
7440-43-9	Cadmium	ND		mg/kg dry	0.430	0.430	1	EPA 6010C	08/15/2014 08:06	08/15/2014 12:14	MW
7440-47-3	Chromium	52.8		mg/kg dry	0.717	0.717	1	EPA 6010C	08/15/2014 08:06	08/15/2014 12:14	MW
7440-50-8	Copper	13.0		mg/kg dry	0.717	0.717	1	EPA 6010C	08/15/2014 08:06	08/15/2014 12:14	MW
7439-92-1	Lead	16.6		mg/kg dry	0.430	0.430	1	EPA 6010C	08/15/2014 08:06	08/15/2014 12:14	MW
7440-02-0	Nickel	31.6		mg/kg dry	0.717	0.717	1	EPA 6010C	08/15/2014 08:06	08/15/2014 12:14	MW
7782-49-2	Selenium	2.01		mg/kg dry	1.43	1.43	1	EPA 6010C	08/15/2014 08:06	08/15/2014 12:14	MW
7440-22-4	Silver	ND		mg/kg dry	0.717	0.717	1	EPA 6010C	08/15/2014 08:06	08/15/2014 12:14	MW
7440-28-0	Thallium	ND		mg/kg dry	1.43	1.43	1	EPA 6010C	08/15/2014 08:06	08/15/2014 12:14	MW
7440-62-2	Vanadium	29.3		mg/kg dry	1.43	1.43	1	EPA 6010C	08/15/2014 08:06	08/15/2014 12:14	MW
7440-66-6	Zinc	52.2		mg/kg dry	1.43	1.43	1	EPA 6010C	08/15/2014 08:06	08/15/2014 12:14	MW

### Mercury by 7473

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 7473 soil

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	0.0814		mg/kg dry	0.0430	0.0430	1	EPA 7473	08/14/2014 12:30	08/14/2014 15:39	ALD

### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	69.8		%	0.100	0.100	1	SM 2540G	08/15/2014 09:34	08/15/2014 14:37	KK



## Sample Information

**Client Sample ID:** SB-7 1-2'

**York Sample ID:** 14H0523-07

**York Project (SDG) No.**  
14H0523

**Client Project ID**  
Public Baseball Field

**Matrix**  
Soil

**Collection Date/Time**  
August 11, 2014 12:20 pm

**Date Received**  
08/11/2014

### Volatile Organics, CT RCP List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
75-34-3	1,1-Dichloroethane	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
75-35-4	1,1-Dichloroethylene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
563-58-6	1,1-Dichloropropylene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
107-06-2	1,2-Dichloroethane	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
142-28-9	1,3-Dichloropropane	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
594-20-7	2,2-Dichloropropane	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
78-93-3	2-Butanone	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
95-49-8	2-Chlorotoluene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
591-78-6	2-Hexanone	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
106-43-4	4-Chlorotoluene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
67-64-1	<b>Acetone</b>	<b>50</b>		ug/kg dry	2.4	9.6	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
107-13-1	Acrylonitrile	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
71-43-2	Benzene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
108-86-1	Bromobenzene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
74-97-5	Bromochloromethane	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
75-27-4	Bromodichloromethane	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
75-25-2	Bromoform	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS



## Sample Information

**Client Sample ID:** SB-7 1-2'

**York Sample ID:** 14H0523-07

York Project (SDG) No.  
14H0523

Client Project ID  
Public Baseball Field

Matrix  
Soil

Collection Date/Time  
August 11, 2014 12:20 pm

Date Received  
08/11/2014

### Volatile Organics, CT RCP List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
74-83-9	Bromomethane	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
75-15-0	Carbon disulfide	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
56-23-5	Carbon tetrachloride	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
108-90-7	Chlorobenzene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
75-00-3	Chloroethane	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
67-66-3	Chloroform	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
74-87-3	Chloromethane	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
124-48-1	Dibromochloromethane	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
74-95-3	Dibromomethane	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
75-71-8	Dichlorodifluoromethane	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
100-41-4	Ethyl Benzene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
98-82-8	Isopropylbenzene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
80-62-6	Methyl Methacrylate	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
75-09-2	Methylene chloride	ND		ug/kg dry	2.4	9.6	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
91-20-3	Naphthalene	ND		ug/kg dry	2.4	9.6	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
104-51-8	n-Butylbenzene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
103-65-1	n-Propylbenzene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
95-47-6	o-Xylene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
179601-23-1	p- & m- Xylenes	ND		ug/kg dry	4.8	9.6	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
99-87-6	p-Isopropyltoluene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
135-98-8	sec-Butylbenzene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
100-42-5	Styrene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
98-06-6	tert-Butylbenzene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
127-18-4	Tetrachloroethylene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
109-99-9	Tetrahydrofuran	ND		ug/kg dry	4.8	9.6	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
108-88-3	Toluene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
110-57-6	trans-1,4-dichloro-2-butene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
79-01-6	Trichloroethylene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
75-69-4	Trichlorofluoromethane	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS
75-01-4	Vinyl Chloride	ND		ug/kg dry	2.4	4.8	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:06	SS



## Sample Information

**Client Sample ID:** SB-7 1-2'

**York Sample ID:** 14H0523-07

York Project (SDG) No.  
14H0523

Client Project ID  
Public Baseball Field

Matrix  
Soil

Collection Date/Time  
August 11, 2014 12:20 pm

Date Received  
08/11/2014

### Volatile Organics, CT RCP List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
Surrogate Recoveries		Result		Acceptance Range							
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	110 %				67-130					
460-00-4	Surrogate: p-Bromofluorobenzene	102 %				75-127					
2037-26-5	Surrogate: Toluene-d8	108 %				90-112					

### Semi-Volatiles, CT RCP BNA List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3545A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
83-32-9	Acenaphthene	ND		ug/kg dry	70.1	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
208-96-8	Acenaphthylene	ND		ug/kg dry	70.1	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
62-53-3	Aniline	ND		ug/kg dry	70.1	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
120-12-7	Anthracene	ND		ug/kg dry	70.1	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
56-55-3	Benzo(a)anthracene	ND		ug/kg dry	70.1	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
50-32-8	Benzo(a)pyrene	ND		ug/kg dry	70.1	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
205-99-2	Benzo(b)fluoranthene	ND		ug/kg dry	70.1	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
191-24-2	Benzo(g,h,i)perylene	ND		ug/kg dry	135	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
207-08-9	Benzo(k)fluoranthene	ND		ug/kg dry	70.1	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
85-68-7	Benzyl butyl phthalate	ND		ug/kg dry	70.1	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
101-55-3	4-Bromophenyl phenyl ether	ND		ug/kg dry	70.1	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
59-50-7	4-Chloro-3-methylphenol	ND		ug/kg dry	135	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
106-47-8	4-Chloroaniline	ND		ug/kg dry	135	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
111-91-1	Bis(2-chloroethoxy)methane	ND		ug/kg dry	70.1	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
111-44-4	Bis(2-chloroethyl)ether	ND		ug/kg dry	70.1	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
108-60-1	Bis(2-chloroisopropyl)ether	ND		ug/kg dry	70.1	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
91-58-7	2-Chloronaphthalene	ND		ug/kg dry	70.1	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
95-57-8	2-Chlorophenol	ND		ug/kg dry	70.1	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
7005-72-3	4-Chlorophenyl phenyl ether	ND		ug/kg dry	70.1	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
218-01-9	Chrysene	ND		ug/kg dry	70.1	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
53-70-3	Dibenzo(a,h)anthracene	ND		ug/kg dry	70.1	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
132-64-9	Dibenzofuran	ND		ug/kg dry	70.1	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
84-74-2	Di-n-butyl phthalate	ND		ug/kg dry	70.1	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
91-94-1	3,3'-Dichlorobenzidine	ND		ug/kg dry	70.1	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
120-83-2	2,4-Dichlorophenol	ND		ug/kg dry	135	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
86-74-8	Carbazole	ND		ug/kg dry	70.1	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
84-66-2	Diethyl phthalate	ND		ug/kg dry	70.1	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR





## Sample Information

**Client Sample ID:** SB-7 1-2'

**York Sample ID:** 14H0523-07

York Project (SDG) No.  
14H0523

Client Project ID  
Public Baseball Field

Matrix  
Soil

Collection Date/Time  
August 11, 2014 12:20 pm

Date Received  
08/11/2014

### Semi-Volatiles, CT RCP BNA List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3545A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
105-67-9	2,4-Dimethylphenol	ND		ug/kg dry	70.1	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
131-11-3	Dimethyl phthalate	ND		ug/kg dry	70.1	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
534-52-1	4,6-Dinitro-2-methylphenol	ND		ug/kg dry	135	539	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
51-28-5	2,4-Dinitrophenol	ND		ug/kg dry	270	539	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
606-20-2	2,6-Dinitrotoluene	ND		ug/kg dry	70.1	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
121-14-2	2,4-Dinitrotoluene	ND		ug/kg dry	135	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
117-84-0	Di-n-octyl phthalate	ND		ug/kg dry	70.1	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
117-81-7	Bis(2-ethylhexyl)phthalate	ND		ug/kg dry	70.1	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
206-44-0	Fluoranthene	ND		ug/kg dry	70.1	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
86-73-7	Fluorene	ND		ug/kg dry	70.1	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
118-74-1	Hexachlorobenzene	ND		ug/kg dry	70.1	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	70.1	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
77-47-4	Hexachlorocyclopentadiene	ND		ug/kg dry	135	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
67-72-1	Hexachloroethane	ND		ug/kg dry	70.1	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/kg dry	70.1	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
78-59-1	Isophorone	ND		ug/kg dry	70.1	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
90-12-0	1-Methylnaphthalene	ND		ug/kg dry	70.1	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
91-57-6	2-Methylnaphthalene	ND		ug/kg dry	70.1	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
95-48-7	2-Methylphenol	ND		ug/kg dry	135	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
65794-96-9	3- & 4-Methylphenols	ND		ug/kg dry	135	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
91-20-3	Naphthalene	ND		ug/kg dry	70.1	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
99-09-2	3-Nitroaniline	ND		ug/kg dry	135	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
100-01-6	4-Nitroaniline	ND		ug/kg dry	135	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
88-74-4	2-Nitroaniline	ND		ug/kg dry	70.1	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
98-95-3	Nitrobenzene	ND		ug/kg dry	70.1	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
88-75-5	2-Nitrophenol	ND		ug/kg dry	70.1	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
100-02-7	4-Nitrophenol	ND		ug/kg dry	135	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
621-64-7	N-nitroso-di-n-propylamine	ND		ug/kg dry	70.1	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
86-30-6	N-Nitrosodiphenylamine	ND		ug/kg dry	70.1	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
82-68-8	Pentachloronitrobenzene	ND		ug/kg dry	135	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
87-86-5	Pentachlorophenol	ND		ug/kg dry	135	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
85-01-8	Phenanthrene	ND		ug/kg dry	70.1	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
108-95-2	Phenol	ND		ug/kg dry	70.1	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
129-00-0	Pyrene	ND		ug/kg dry	70.1	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
110-86-1	Pyridine	ND		ug/kg dry	70.1	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		ug/kg dry	135	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR





## Sample Information

**Client Sample ID:** SB-7 1-2'

**York Sample ID:** 14H0523-07

**York Project (SDG) No.**  
14H0523

**Client Project ID**  
Public Baseball Field

**Matrix**  
Soil

**Collection Date/Time**  
August 11, 2014 12:20 pm

**Date Received**  
08/11/2014

### Semi-Volatiles, CT RCP BNA List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3545A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	70.1	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
88-06-2	2,4,6-Trichlorophenol	ND		ug/kg dry	70.1	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
95-95-4	2,4,5-Trichlorophenol	ND		ug/kg dry	70.1	270	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:15	SR
<b>Surrogate Recoveries</b>		<b>Result</b>		<b>Acceptance Range</b>							
367-12-4	Surrogate: 2-Fluorophenol	50.5 %		10-105							
4165-62-2	Surrogate: Phenol-d5	42.4 %		10-118							
4165-60-0	Surrogate: Nitrobenzene-d5	52.3 %		10-140							
321-60-8	Surrogate: 2-Fluorobiphenyl	61.8 %		10-126							
118-79-6	Surrogate: 2,4,6-Tribromophenol	59.7 %		10-150							
1718-51-0	Surrogate: Terphenyl-d14	80.0 %		10-137							

### Pesticides, CT RCP Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3545\_A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
72-54-8	4,4'-DDD	ND		ug/kg dry	1.78	1.78	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:19	JW
72-55-9	4,4'-DDE	ND		ug/kg dry	1.78	1.78	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:19	JW
50-29-3	4,4'-DDT	ND		ug/kg dry	1.78	1.78	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:19	JW
15972-60-8	Alachlor	ND		ug/kg dry	1.78	1.78	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:19	JW
309-00-2	Aldrin	ND		ug/kg dry	1.78	1.78	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:19	JW
319-84-6	alpha-BHC	ND		ug/kg dry	1.78	1.78	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:19	JW
319-85-7	beta-BHC	ND		ug/kg dry	1.78	1.78	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:19	JW
57-74-9	Chlordane, total	ND		ug/kg dry	7.12	7.12	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:19	JW
319-86-8	delta-BHC	ND		ug/kg dry	1.78	1.78	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:19	JW
60-57-1	Dieldrin	ND		ug/kg dry	1.78	1.78	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:19	JW
959-98-8	Endosulfan I	ND		ug/kg dry	1.78	1.78	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:19	JW
33213-65-9	Endosulfan II	ND		ug/kg dry	1.78	1.78	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:19	JW
1031-07-8	Endosulfan sulfate	ND		ug/kg dry	1.78	1.78	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:19	JW
72-20-8	Endrin	ND		ug/kg dry	1.78	1.78	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:19	JW
7421-93-4	Endrin aldehyde	ND		ug/kg dry	1.78	1.78	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:19	JW
53494-70-5	Endrin ketone	ND		ug/kg dry	1.78	1.78	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:19	JW
58-89-9	gamma-BHC (Lindane)	ND		ug/kg dry	1.78	1.78	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:19	JW
76-44-8	Heptachlor	ND		ug/kg dry	1.78	1.78	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:19	JW
1024-57-3	Heptachlor epoxide	ND		ug/kg dry	1.78	1.78	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:19	JW
72-43-5	Methoxychlor	ND		ug/kg dry	8.89	8.89	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:19	JW
8001-35-2	Toxaphene	ND		ug/kg dry	90.0	90.0	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:19	JW
<b>Surrogate Recoveries</b>		<b>Result</b>		<b>Acceptance Range</b>							



## Sample Information

**Client Sample ID:** SB-7 1-2'

**York Sample ID:** 14H0523-07

York Project (SDG) No.  
14H0523

Client Project ID  
Public Baseball Field

Matrix  
Soil

Collection Date/Time  
August 11, 2014 12:20 pm

Date Received  
08/11/2014

### Pesticides, CT RCP Target List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3545\_A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
2051-24-3	Surrogate: Decachlorobiphenyl	92.4 %			30-140						
877-09-8	Surrogate: Tetrachloro-m-xylene	79.6 %			30-140						

### Polychlorinated Biphenyls(PCB RCP)

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3545\_A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND		mg/kg dry	0.0270	0.0270	1	EPA 8082A	08/13/2014 17:00	08/14/2014 13:31	AMC
11104-28-2	Aroclor 1221	ND		mg/kg dry	0.0270	0.0270	1	EPA 8082A	08/13/2014 17:00	08/14/2014 13:31	AMC
11141-16-5	Aroclor 1232	ND		mg/kg dry	0.0270	0.0270	1	EPA 8082A	08/13/2014 17:00	08/14/2014 13:31	AMC
53469-21-9	Aroclor 1242	ND		mg/kg dry	0.0270	0.0270	1	EPA 8082A	08/13/2014 17:00	08/14/2014 13:31	AMC
12672-29-6	Aroclor 1248	ND		mg/kg dry	0.0270	0.0270	1	EPA 8082A	08/13/2014 17:00	08/14/2014 13:31	AMC
11097-69-1	Aroclor 1254	ND		mg/kg dry	0.0270	0.0270	1	EPA 8082A	08/13/2014 17:00	08/14/2014 13:31	AMC
11096-82-5	Aroclor 1260	ND		mg/kg dry	0.0270	0.0270	1	EPA 8082A	08/13/2014 17:00	08/14/2014 13:31	AMC
37324-23-5	Aroclor 1262	ND		mg/kg dry	0.0270	0.0270	1	EPA 8082A	08/13/2014 17:00	08/14/2014 13:31	AMC
11100-14-4	Aroclor 1268	ND		mg/kg dry	0.0270	0.0270	1	EPA 8082A	08/13/2014 17:00	08/14/2014 13:31	AMC
1336-36-3	Total PCBs	ND		mg/kg dry	0.0270	0.0270	1	EPA 8082A	08/13/2014 17:00	08/14/2014 13:31	AMC
<b>Surrogate Recoveries</b>		<b>Result</b>		<b>Acceptance Range</b>							
877-09-8	Surrogate: Tetrachloro-m-xylene	76.0 %			30-140						
2051-24-3	Surrogate: Decachlorobiphenyl	48.5 %			30-140						

### Herbicides, CT RCP

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3550B/8151A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
1918-00-9	Dicamba	ND		ug/kg dry	21.6	21.6	1	EPA 8151A m	08/13/2014 05:58	08/14/2014 17:15	JW
94-75-7	2,4-D	ND		ug/kg dry	21.6	21.6	1	EPA 8151A m	08/13/2014 05:58	08/14/2014 17:15	JW
93-72-1	2,4,5-TP (Silvex)	ND		ug/kg dry	21.6	21.6	1	EPA 8151A m	08/13/2014 05:58	08/14/2014 17:15	JW
93-76-5	2,4,5-T	ND		ug/kg dry	21.6	21.6	1	EPA 8151A m	08/13/2014 05:58	08/14/2014 17:15	JW
75-99-0	Dalapon	ND		ug/kg dry	21.6	21.6	1	EPA 8151A m	08/13/2014 05:58	08/15/2014 01:14	JW
<b>Surrogate Recoveries</b>		<b>Result</b>		<b>Acceptance Range</b>							
19719-28-9	Surrogate: 2,4-Dichlorophenylacetic acid (D	86.0 %			30-150						



## Sample Information

**Client Sample ID:** SB-7 1-2'

**York Sample ID:** 14H0523-07

**York Project (SDG) No.**  
14H0523

**Client Project ID**  
Public Baseball Field

**Matrix**  
Soil

**Collection Date/Time**  
August 11, 2014 12:20 pm

**Date Received**  
08/11/2014

### Extractable Total Petroleum Hydrocarbons (ETPH)

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3545A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
CT ETPH	ETPH (Extractable Total Petroleum Hydrocarbons)	23.7		mg/kg dry	2.30	10.8	1	CT DEP ETPH	08/18/2014 08:30	08/19/2014 09:40	JW
	Surrogate Recoveries	Result				Acceptance Range					
3386-33-2	Surrogate: 1-Chlorooctadecane	70.3 %				50-150					

### Metals, CTDEP RCP

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-36-0	Antimony	ND		mg/kg dry	0.539	0.539	1	EPA 6010C	08/15/2014 08:06	08/15/2014 12:19	MW
7440-38-2	Arsenic	144		mg/kg dry	1.08	1.08	1	EPA 6010C	08/15/2014 08:06	08/15/2014 12:19	MW
7440-39-3	Barium	91.2		mg/kg dry	1.08	1.08	1	EPA 6010C	08/15/2014 08:06	08/15/2014 12:19	MW
7440-41-7	Beryllium	ND		mg/kg dry	0.108	0.108	1	EPA 6010C	08/15/2014 08:06	08/15/2014 12:19	MW
7440-43-9	Cadmium	ND		mg/kg dry	0.323	0.323	1	EPA 6010C	08/15/2014 08:06	08/15/2014 12:19	MW
7440-47-3	Chromium	33.6		mg/kg dry	0.539	0.539	1	EPA 6010C	08/15/2014 08:06	08/15/2014 12:19	MW
7440-50-8	Copper	16.8		mg/kg dry	0.539	0.539	1	EPA 6010C	08/15/2014 08:06	08/15/2014 12:19	MW
7439-92-1	Lead	35.7		mg/kg dry	0.323	0.323	1	EPA 6010C	08/15/2014 08:06	08/15/2014 12:19	MW
7440-02-0	Nickel	21.5		mg/kg dry	0.539	0.539	1	EPA 6010C	08/15/2014 08:06	08/15/2014 12:19	MW
7782-49-2	Selenium	ND		mg/kg dry	1.08	1.08	1	EPA 6010C	08/15/2014 08:06	08/15/2014 12:19	MW
7440-22-4	Silver	ND		mg/kg dry	0.539	0.539	1	EPA 6010C	08/15/2014 08:06	08/15/2014 12:19	MW
7440-28-0	Thallium	ND		mg/kg dry	1.08	1.08	1	EPA 6010C	08/15/2014 08:06	08/15/2014 12:19	MW
7440-62-2	Vanadium	35.6		mg/kg dry	1.08	1.08	1	EPA 6010C	08/15/2014 08:06	08/15/2014 12:19	MW
7440-66-6	Zinc	57.2		mg/kg dry	1.08	1.08	1	EPA 6010C	08/15/2014 08:06	08/15/2014 12:19	MW

### Mercury by 7473

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 7473 soil

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	0.0741		mg/kg dry	0.0323	0.0323	1	EPA 7473	08/14/2014 12:30	08/14/2014 15:50	ALD

### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	92.8		%	0.100	0.100	1	SM 2540G	08/15/2014 09:34	08/15/2014 14:37	KK



## Sample Information

**Client Sample ID:** SB-8 1-2'

**York Sample ID:** 14H0523-08

York Project (SDG) No.  
14H0523

Client Project ID  
Public Baseball Field

Matrix  
Soil

Collection Date/Time  
August 11, 2014 12:45 pm

Date Received  
08/11/2014

### Volatile Organics, CT RCP List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
75-34-3	1,1-Dichloroethane	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
75-35-4	1,1-Dichloroethylene	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
563-58-6	1,1-Dichloropropylene	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
107-06-2	1,2-Dichloroethane	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
142-28-9	1,3-Dichloropropane	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
594-20-7	2,2-Dichloropropane	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
78-93-3	2-Butanone	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
95-49-8	2-Chlorotoluene	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
591-78-6	2-Hexanone	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
106-43-4	4-Chlorotoluene	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
67-64-1	Acetone	ND		ug/kg dry	3.1	12	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
107-13-1	Acrylonitrile	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
71-43-2	Benzene	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
108-86-1	Bromobenzene	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
74-97-5	Bromochloromethane	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
75-27-4	Bromodichloromethane	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
75-25-2	Bromoform	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS



## Sample Information

**Client Sample ID:** SB-8 1-2'

**York Sample ID:** 14H0523-08

York Project (SDG) No.  
14H0523

Client Project ID  
Public Baseball Field

Matrix  
Soil

Collection Date/Time  
August 11, 2014 12:45 pm

Date Received  
08/11/2014

### Volatile Organics, CT RCP List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
74-83-9	Bromomethane	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
75-15-0	Carbon disulfide	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
56-23-5	Carbon tetrachloride	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
108-90-7	Chlorobenzene	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
75-00-3	Chloroethane	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
67-66-3	Chloroform	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
74-87-3	Chloromethane	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
124-48-1	Dibromochloromethane	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
74-95-3	Dibromomethane	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
75-71-8	Dichlorodifluoromethane	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
100-41-4	Ethyl Benzene	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
98-82-8	Isopropylbenzene	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
80-62-6	Methyl Methacrylate	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
75-09-2	Methylene chloride	ND		ug/kg dry	3.1	12	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
91-20-3	Naphthalene	ND		ug/kg dry	3.1	12	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
104-51-8	n-Butylbenzene	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
103-65-1	n-Propylbenzene	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
95-47-6	o-Xylene	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
179601-23-1	p- & m- Xylenes	ND		ug/kg dry	6.2	12	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
99-87-6	p-Isopropyltoluene	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
135-98-8	sec-Butylbenzene	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
100-42-5	Styrene	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
98-06-6	tert-Butylbenzene	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
127-18-4	Tetrachloroethylene	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
109-99-9	Tetrahydrofuran	ND		ug/kg dry	6.2	12	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
108-88-3	Toluene	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
110-57-6	trans-1,4-dichloro-2-butene	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
79-01-6	Trichloroethylene	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
75-69-4	Trichlorofluoromethane	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS
75-01-4	Vinyl Chloride	ND		ug/kg dry	3.1	6.2	1	EPA 8260C	08/15/2014 08:23	08/15/2014 20:35	SS



## Sample Information

**Client Sample ID:** SB-8 1-2'

**York Sample ID:** 14H0523-08

**York Project (SDG) No.**  
14H0523

**Client Project ID**  
Public Baseball Field

**Matrix**  
Soil

**Collection Date/Time**  
August 11, 2014 12:45 pm

**Date Received**  
08/11/2014

### Volatile Organics, CT RCP List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
Surrogate Recoveries		Result		Acceptance Range							
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	108 %				67-130					
460-00-4	Surrogate: p-Bromofluorobenzene	123 %				75-127					
2037-26-5	Surrogate: Toluene-d8	110 %				90-112					

### Semi-Volatiles, CT RCP BNA List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3545A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
83-32-9	Acenaphthene	ND		ug/kg dry	70.4	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
208-96-8	Acenaphthylene	ND		ug/kg dry	70.4	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
62-53-3	Aniline	ND		ug/kg dry	70.4	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
120-12-7	Anthracene	ND		ug/kg dry	70.4	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
56-55-3	Benzo(a)anthracene	ND		ug/kg dry	70.4	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
50-32-8	Benzo(a)pyrene	ND		ug/kg dry	70.4	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
205-99-2	Benzo(b)fluoranthene	ND		ug/kg dry	70.4	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
191-24-2	Benzo(g,h,i)perylene	ND		ug/kg dry	135	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
207-08-9	Benzo(k)fluoranthene	ND		ug/kg dry	70.4	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
85-68-7	Benzyl butyl phthalate	ND		ug/kg dry	70.4	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
101-55-3	4-Bromophenyl phenyl ether	ND		ug/kg dry	70.4	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
59-50-7	4-Chloro-3-methylphenol	ND		ug/kg dry	135	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
106-47-8	4-Chloroaniline	ND		ug/kg dry	135	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
111-91-1	Bis(2-chloroethoxy)methane	ND		ug/kg dry	70.4	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
111-44-4	Bis(2-chloroethyl)ether	ND		ug/kg dry	70.4	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
108-60-1	Bis(2-chloroisopropyl)ether	ND		ug/kg dry	70.4	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
91-58-7	2-Chloronaphthalene	ND		ug/kg dry	70.4	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
95-57-8	2-Chlorophenol	ND		ug/kg dry	70.4	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
7005-72-3	4-Chlorophenyl phenyl ether	ND		ug/kg dry	70.4	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
218-01-9	Chrysene	ND		ug/kg dry	70.4	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
53-70-3	Dibenzo(a,h)anthracene	ND		ug/kg dry	70.4	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
132-64-9	Dibenzofuran	ND		ug/kg dry	70.4	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
84-74-2	Di-n-butyl phthalate	ND		ug/kg dry	70.4	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
91-94-1	3,3'-Dichlorobenzidine	ND		ug/kg dry	70.4	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
120-83-2	2,4-Dichlorophenol	ND		ug/kg dry	135	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
86-74-8	Carbazole	ND		ug/kg dry	70.4	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
84-66-2	Diethyl phthalate	ND		ug/kg dry	70.4	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR



## Sample Information

**Client Sample ID:** SB-8 1-2'

**York Sample ID:** 14H0523-08

**York Project (SDG) No.**  
14H0523

**Client Project ID**  
Public Baseball Field

**Matrix**  
Soil

**Collection Date/Time**  
August 11, 2014 12:45 pm

**Date Received**  
08/11/2014

### Semi-Volatiles, CT RCP BNA List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3545A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
105-67-9	2,4-Dimethylphenol	ND		ug/kg dry	70.4	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
131-11-3	Dimethyl phthalate	ND		ug/kg dry	70.4	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
534-52-1	4,6-Dinitro-2-methylphenol	ND		ug/kg dry	135	541	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
51-28-5	2,4-Dinitrophenol	ND		ug/kg dry	271	541	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
606-20-2	2,6-Dinitrotoluene	ND		ug/kg dry	70.4	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
121-14-2	2,4-Dinitrotoluene	ND		ug/kg dry	135	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
117-84-0	Di-n-octyl phthalate	ND		ug/kg dry	70.4	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
117-81-7	Bis(2-ethylhexyl)phthalate	ND		ug/kg dry	70.4	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
206-44-0	Fluoranthene	ND		ug/kg dry	70.4	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
86-73-7	Fluorene	ND		ug/kg dry	70.4	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
118-74-1	Hexachlorobenzene	ND		ug/kg dry	70.4	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	70.4	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
77-47-4	Hexachlorocyclopentadiene	ND		ug/kg dry	135	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
67-72-1	Hexachloroethane	ND		ug/kg dry	70.4	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/kg dry	70.4	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
78-59-1	Isophorone	ND		ug/kg dry	70.4	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
90-12-0	1-Methylnaphthalene	ND		ug/kg dry	70.4	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
91-57-6	2-Methylnaphthalene	ND		ug/kg dry	70.4	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
95-48-7	2-Methylphenol	ND		ug/kg dry	135	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
65794-96-9	3- & 4-Methylphenols	ND		ug/kg dry	135	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
91-20-3	Naphthalene	ND		ug/kg dry	70.4	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
99-09-2	3-Nitroaniline	ND		ug/kg dry	135	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
100-01-6	4-Nitroaniline	ND		ug/kg dry	135	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
88-74-4	2-Nitroaniline	ND		ug/kg dry	70.4	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
98-95-3	Nitrobenzene	ND		ug/kg dry	70.4	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
88-75-5	2-Nitrophenol	ND		ug/kg dry	70.4	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
100-02-7	4-Nitrophenol	ND		ug/kg dry	135	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
621-64-7	N-nitroso-di-n-propylamine	ND		ug/kg dry	70.4	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
86-30-6	N-Nitrosodiphenylamine	ND		ug/kg dry	70.4	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
82-68-8	Pentachloronitrobenzene	ND		ug/kg dry	135	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
87-86-5	Pentachlorophenol	ND		ug/kg dry	135	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
85-01-8	Phenanthrene	ND		ug/kg dry	70.4	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
108-95-2	Phenol	ND		ug/kg dry	70.4	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
129-00-0	Pyrene	ND		ug/kg dry	70.4	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
110-86-1	Pyridine	ND		ug/kg dry	70.4	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		ug/kg dry	135	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR





## Sample Information

**Client Sample ID:** SB-8 1-2'

**York Sample ID:** 14H0523-08

**York Project (SDG) No.**  
14H0523

**Client Project ID**  
Public Baseball Field

**Matrix**  
Soil

**Collection Date/Time**  
August 11, 2014 12:45 pm

**Date Received**  
08/11/2014

### Semi-Volatiles, CT RCP BNA List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3545A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	70.4	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
88-06-2	2,4,6-Trichlorophenol	ND		ug/kg dry	70.4	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
95-95-4	2,4,5-Trichlorophenol	ND		ug/kg dry	70.4	271	1	EPA 8270D	08/13/2014 14:35	08/14/2014 21:48	SR
<b>Surrogate Recoveries</b>		<b>Result</b>		<b>Acceptance Range</b>							
367-12-4	Surrogate: 2-Fluorophenol	39.8 %		10-105							
4165-62-2	Surrogate: Phenol-d5	27.6 %		10-118							
4165-60-0	Surrogate: Nitrobenzene-d5	42.4 %		10-140							
321-60-8	Surrogate: 2-Fluorobiphenyl	24.4 %		10-126							
118-79-6	Surrogate: 2,4,6-Tribromophenol	23.3 %		10-150							
1718-51-0	Surrogate: Terphenyl-d14	61.2 %		10-137							

### Pesticides, CT RCP Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3545\_A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
72-54-8	4,4'-DDD	ND		ug/kg dry	1.79	1.79	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:34	JW
72-55-9	4,4'-DDE	2.85		ug/kg dry	1.79	1.79	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:34	JW
50-29-3	4,4'-DDT	2.77		ug/kg dry	1.79	1.79	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:34	JW
15972-60-8	Alachlor	ND		ug/kg dry	1.79	1.79	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:34	JW
309-00-2	Aldrin	ND		ug/kg dry	1.79	1.79	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:34	JW
319-84-6	alpha-BHC	ND		ug/kg dry	1.79	1.79	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:34	JW
319-85-7	beta-BHC	ND		ug/kg dry	1.79	1.79	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:34	JW
57-74-9	Chlordane, total	ND		ug/kg dry	7.15	7.15	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:34	JW
319-86-8	delta-BHC	ND		ug/kg dry	1.79	1.79	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:34	JW
60-57-1	Dieldrin	ND		ug/kg dry	1.79	1.79	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:34	JW
959-98-8	Endosulfan I	ND		ug/kg dry	1.79	1.79	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:34	JW
33213-65-9	Endosulfan II	ND		ug/kg dry	1.79	1.79	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:34	JW
1031-07-8	Endosulfan sulfate	ND		ug/kg dry	1.79	1.79	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:34	JW
72-20-8	Endrin	ND		ug/kg dry	1.79	1.79	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:34	JW
7421-93-4	Endrin aldehyde	ND		ug/kg dry	1.79	1.79	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:34	JW
53494-70-5	Endrin ketone	ND		ug/kg dry	1.79	1.79	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:34	JW
58-89-9	gamma-BHC (Lindane)	ND		ug/kg dry	1.79	1.79	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:34	JW
76-44-8	Heptachlor	ND		ug/kg dry	1.79	1.79	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:34	JW
1024-57-3	Heptachlor epoxide	ND		ug/kg dry	1.79	1.79	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:34	JW
72-43-5	Methoxychlor	ND		ug/kg dry	8.93	8.93	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:34	JW
8001-35-2	Toxaphene	ND		ug/kg dry	90.4	90.4	5	EPA 8081B	08/13/2014 17:00	08/14/2014 12:34	JW
<b>Surrogate Recoveries</b>		<b>Result</b>		<b>Acceptance Range</b>							





## Sample Information

**Client Sample ID:** SB-8 1-2'

**York Sample ID:** 14H0523-08

**York Project (SDG) No.**  
14H0523

**Client Project ID**  
Public Baseball Field

**Matrix**  
Soil

**Collection Date/Time**  
August 11, 2014 12:45 pm

**Date Received**  
08/11/2014

### Pesticides, CT RCP Target List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3545\_A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
2051-24-3	Surrogate: Decachlorobiphenyl	106 %			30-140						
877-09-8	Surrogate: Tetrachloro-m-xylene	89.0 %			30-140						

### Polychlorinated Biphenyls(PCB RCP)

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3545\_A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND		mg/kg dry	0.0271	0.0271	1	EPA 8082A	08/13/2014 17:00	08/14/2014 14:00	AMC
11104-28-2	Aroclor 1221	ND		mg/kg dry	0.0271	0.0271	1	EPA 8082A	08/13/2014 17:00	08/14/2014 14:00	AMC
11141-16-5	Aroclor 1232	ND		mg/kg dry	0.0271	0.0271	1	EPA 8082A	08/13/2014 17:00	08/14/2014 14:00	AMC
53469-21-9	Aroclor 1242	ND		mg/kg dry	0.0271	0.0271	1	EPA 8082A	08/13/2014 17:00	08/14/2014 14:00	AMC
12672-29-6	Aroclor 1248	ND		mg/kg dry	0.0271	0.0271	1	EPA 8082A	08/13/2014 17:00	08/14/2014 14:00	AMC
11097-69-1	Aroclor 1254	ND		mg/kg dry	0.0271	0.0271	1	EPA 8082A	08/13/2014 17:00	08/14/2014 14:00	AMC
11096-82-5	Aroclor 1260	ND		mg/kg dry	0.0271	0.0271	1	EPA 8082A	08/13/2014 17:00	08/14/2014 14:00	AMC
37324-23-5	Aroclor 1262	ND		mg/kg dry	0.0271	0.0271	1	EPA 8082A	08/13/2014 17:00	08/14/2014 14:00	AMC
11100-14-4	Aroclor 1268	ND		mg/kg dry	0.0271	0.0271	1	EPA 8082A	08/13/2014 17:00	08/14/2014 14:00	AMC
1336-36-3	Total PCBs	ND		mg/kg dry	0.0271	0.0271	1	EPA 8082A	08/13/2014 17:00	08/14/2014 14:00	AMC
<b>Surrogate Recoveries</b>		<b>Result</b>		<b>Acceptance Range</b>							
877-09-8	Surrogate: Tetrachloro-m-xylene	83.0 %			30-140						
2051-24-3	Surrogate: Decachlorobiphenyl	54.5 %			30-140						

### Herbicides, CT RCP

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3550B/8151A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
1918-00-9	Dicamba	ND		ug/kg dry	21.7	21.7	1	EPA 8151A m	08/13/2014 05:58	08/14/2014 17:30	JW
94-75-7	2,4-D	ND		ug/kg dry	21.7	21.7	1	EPA 8151A m	08/13/2014 05:58	08/14/2014 17:30	JW
93-72-1	2,4,5-TP (Silvex)	ND		ug/kg dry	21.7	21.7	1	EPA 8151A m	08/13/2014 05:58	08/14/2014 17:30	JW
93-76-5	2,4,5-T	ND		ug/kg dry	21.7	21.7	1	EPA 8151A m	08/13/2014 05:58	08/14/2014 17:30	JW
75-99-0	Dalapon	ND		ug/kg dry	21.7	21.7	1	EPA 8151A m	08/13/2014 05:58	08/15/2014 01:44	JW
<b>Surrogate Recoveries</b>		<b>Result</b>		<b>Acceptance Range</b>							
19719-28-9	Surrogate: 2,4-Dichlorophenylacetic acid (D	89.6 %			30-150						



## Sample Information

**Client Sample ID:** SB-8 1-2'

**York Sample ID:** 14H0523-08

**York Project (SDG) No.**  
14H0523

**Client Project ID**  
Public Baseball Field

**Matrix**  
Soil

**Collection Date/Time**  
August 11, 2014 12:45 pm

**Date Received**  
08/11/2014

### Extractable Total Petroleum Hydrocarbons (ETPH)

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3545A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
CT ETPH	ETPH (Extractable Total Petroleum Hydrocarbons)	28.0		mg/kg dry	2.31	10.8	1	CT DEP ETPH	08/18/2014 08:30	08/19/2014 09:40	JW
	Surrogate Recoveries	Result				Acceptance Range					
3386-33-2	Surrogate: 1-Chlorooctadecane	80.2 %				50-150					

### Metals, CTDEP RCP

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-36-0	Antimony	ND		mg/kg dry	0.541	0.541	1	EPA 6010C	08/15/2014 08:06	08/15/2014 12:23	MW
7440-38-2	Arsenic	89.2		mg/kg dry	1.08	1.08	1	EPA 6010C	08/15/2014 08:06	08/15/2014 12:23	MW
7440-39-3	Barium	139		mg/kg dry	1.08	1.08	1	EPA 6010C	08/15/2014 08:06	08/15/2014 12:23	MW
7440-41-7	Beryllium	ND		mg/kg dry	0.108	0.108	1	EPA 6010C	08/15/2014 08:06	08/15/2014 12:23	MW
7440-43-9	Cadmium	ND		mg/kg dry	0.325	0.325	1	EPA 6010C	08/15/2014 08:06	08/15/2014 12:23	MW
7440-47-3	Chromium	50.3		mg/kg dry	0.541	0.541	1	EPA 6010C	08/15/2014 08:06	08/15/2014 12:23	MW
7440-50-8	Copper	22.7		mg/kg dry	0.541	0.541	1	EPA 6010C	08/15/2014 08:06	08/15/2014 12:23	MW
7439-92-1	Lead	41.6		mg/kg dry	0.325	0.325	1	EPA 6010C	08/15/2014 08:06	08/15/2014 12:23	MW
7440-02-0	Nickel	29.6		mg/kg dry	0.541	0.541	1	EPA 6010C	08/15/2014 08:06	08/15/2014 12:23	MW
7782-49-2	Selenium	1.59		mg/kg dry	1.08	1.08	1	EPA 6010C	08/15/2014 08:06	08/15/2014 12:23	MW
7440-22-4	Silver	ND		mg/kg dry	0.541	0.541	1	EPA 6010C	08/15/2014 08:06	08/15/2014 12:23	MW
7440-28-0	Thallium	ND		mg/kg dry	1.08	1.08	1	EPA 6010C	08/15/2014 08:06	08/15/2014 12:23	MW
7440-62-2	Vanadium	41.2		mg/kg dry	1.08	1.08	1	EPA 6010C	08/15/2014 08:06	08/15/2014 12:23	MW
7440-66-6	Zinc	69.0		mg/kg dry	1.08	1.08	1	EPA 6010C	08/15/2014 08:06	08/15/2014 12:23	MW

### Mercury by 7473

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 7473 soil

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	0.0681		mg/kg dry	0.0325	0.0325	1	EPA 7473	08/14/2014 12:30	08/14/2014 16:00	ALD

### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	92.3		%	0.100	0.100	1	SM 2540G	08/15/2014 09:34	08/15/2014 14:37	KK



## Sample Information

**Client Sample ID:** TB-1

**York Sample ID:** 14H0523-11

**York Project (SDG) No.**  
14H0523

**Client Project ID**  
Public Baseball Field

**Matrix**  
Water

**Collection Date/Time**  
August 11, 2014 12:00 am

**Date Received**  
08/11/2014

### Volatile Organics, CT RCP List

**Log-in Notes:** VOA-Air

**Sample Notes:**

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
67-64-1	Acetone	4.0	B	ug/L	1.0	2.0	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
107-13-1	Acrylonitrile	ND		ug/L	0.20	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
108-86-1	Bromobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
78-93-3	2-Butanone	ND		ug/L	0.50	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
95-49-8	2-Chlorotoluene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
106-43-4	4-Chlorotoluene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
110-57-6	trans-1,4-dichloro-2-butene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS



## Sample Information

**Client Sample ID:** TB-1

**York Sample ID:** 14H0523-11

York Project (SDG) No.  
14H0523

Client Project ID  
Public Baseball Field

Matrix  
Water

Collection Date/Time  
August 11, 2014 12:00 am

Date Received  
08/11/2014

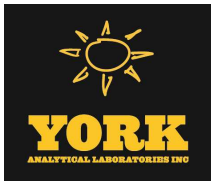
### Volatile Organics, CT RCP List

Log-in Notes: VOA-Air

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
75-09-2	Methylene chloride	ND		ug/L	10	10	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
80-62-6	Methyl Methacrylate	ND		ug/L	0.50	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
91-20-3	Naphthalene	ND		ug/L	1.0	2.0	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
127-18-4	Tetrachloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
109-99-9	Tetrahydrofuran	ND		ug/L	1.0	2.0	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.20	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.50	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C	08/15/2014 09:36	08/15/2014 22:02	SS



## Sample Information

**Client Sample ID:** TB-1

**York Sample ID:** 14H0523-11

York Project (SDG) No.

14H0523

Client Project ID

Public Baseball Field

Matrix

Water

Collection Date/Time

August 11, 2014 12:00 am

Date Received

08/11/2014

### Volatile Organics, CT RCP List

Log-in Notes: VOA-Air

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
Surrogate Recoveries		Result			Acceptance Range						
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	104 %			81-123						
2037-26-5	Surrogate: Toluene-d8	100 %			88-114						
460-00-4	Surrogate: p-Bromofluorobenzene	97.2 %			70-128						



## Analytical Batch Summary

**Batch ID:** BH40720      **Preparation Method:** EPA 3545A      **Prepared By:** SA

YORK Sample ID	Client Sample ID	Preparation Date
14H0523-06	SB-6 2-3'	08/13/14
14H0523-07	SB-7 1-2'	08/13/14
14H0523-08	SB-8 1-2'	08/13/14
BH40720-BLK1	Blank	08/13/14
BH40720-BS1	LCS	08/13/14
BH40720-BSD1	LCS Dup	08/13/14

**Batch ID:** BH40723      **Preparation Method:** EPA 3545\_A      **Prepared By:** SA

YORK Sample ID	Client Sample ID	Preparation Date
14H0523-06	SB-6 2-3'	08/13/14
14H0523-06	SB-6 2-3'	08/13/14
14H0523-07	SB-7 1-2'	08/13/14
14H0523-07	SB-7 1-2'	08/13/14
14H0523-08	SB-8 1-2'	08/13/14
14H0523-08	SB-8 1-2'	08/13/14
BH40723-BLK1	Blank	08/13/14
BH40723-BLK1	Blank	08/13/14
BH40723-BS1	LCS	08/13/14
BH40723-BS2	LCS	08/13/14
BH40723-BSD1	LCS Dup	08/13/14

**Batch ID:** BH40763      **Preparation Method:** EPA 3550B/8151A      **Prepared By:** TFD

YORK Sample ID	Client Sample ID	Preparation Date
14H0523-06	SB-6 2-3'	08/13/14
14H0523-07	SB-7 1-2'	08/13/14
14H0523-08	SB-8 1-2'	08/13/14
BH40763-BLK1	Blank	08/13/14
BH40763-BS1	LCS	08/13/14
BH40763-BSD1	LCS Dup	08/13/14

**Batch ID:** BH40795      **Preparation Method:** EPA 7473 soil      **Prepared By:** ALD

YORK Sample ID	Client Sample ID	Preparation Date
14H0523-06	SB-6 2-3'	08/14/14
14H0523-07	SB-7 1-2'	08/14/14
14H0523-08	SB-8 1-2'	08/14/14
BH40795-BLK1	Blank	08/14/14
BH40795-SRM1	Reference	08/14/14

**Batch ID:** BH40842      **Preparation Method:** EPA 3050B      **Prepared By:** MW



YORK Sample ID	Client Sample ID	Preparation Date
14H0523-06	SB-6 2-3'	08/15/14
14H0523-07	SB-7 1-2'	08/15/14
14H0523-08	SB-8 1-2'	08/15/14
BH40842-BLK1	Blank	08/15/14
BH40842-SRM1	Reference	08/15/14

**Batch ID:** BH40853      **Preparation Method:** % Solids Prep      **Prepared By:** KK

YORK Sample ID	Client Sample ID	Preparation Date
14H0523-06	SB-6 2-3'	08/15/14
14H0523-07	SB-7 1-2'	08/15/14
14H0523-08	SB-8 1-2'	08/15/14

**Batch ID:** BH40876      **Preparation Method:** EPA 5035A      **Prepared By:** BK

YORK Sample ID	Client Sample ID	Preparation Date
14H0523-06	SB-6 2-3'	08/15/14
14H0523-07	SB-7 1-2'	08/15/14
14H0523-08	SB-8 1-2'	08/15/14
BH40876-BLK1	Blank	08/15/14
BH40876-BS1	LCS	08/15/14
BH40876-BSD1	LCS Dup	08/15/14

**Batch ID:** BH40890      **Preparation Method:** EPA 5030B      **Prepared By:** OW

YORK Sample ID	Client Sample ID	Preparation Date
14H0523-11	TB-1	08/15/14
BH40890-BLK1	Blank	08/15/14
BH40890-BS1	LCS	08/15/14
BH40890-BSD1	LCS Dup	08/15/14

**Batch ID:** BH40908      **Preparation Method:** EPA 3545A      **Prepared By:** KAT

YORK Sample ID	Client Sample ID	Preparation Date
14H0523-06	SB-6 2-3'	08/18/14
14H0523-07	SB-7 1-2'	08/18/14
14H0523-08	SB-8 1-2'	08/18/14
BH40908-BLK1	Blank	08/18/14
BH40908-BS1	LCS	08/18/14
BH40908-BSD1	LCS Dup	08/18/14



## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
---------	--------	--------------------	-------	----------------	-------------------	------	----------------	------	-----	--------------	------

#### Batch BH40876 - EPA 5035A

##### Blank (BH40876-BLK1)

Prepared & Analyzed: 08/15/2014

1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg wet
1,1,1-Trichloroethane	ND	5.0	"
1,1,2,2-Tetrachloroethane	ND	5.0	"
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	5.0	"
1,1,2-Trichloroethane	ND	5.0	"
1,1-Dichloroethane	ND	5.0	"
1,1-Dichloroethylene	ND	5.0	"
1,1-Dichloropropylene	ND	5.0	"
1,2,3-Trichlorobenzene	ND	5.0	"
1,2,3-Trichloropropane	ND	5.0	"
1,2,4-Trichlorobenzene	ND	5.0	"
1,2,4-Trimethylbenzene	ND	5.0	"
1,2-Dibromo-3-chloropropane	ND	5.0	"
1,2-Dibromoethane	ND	5.0	"
1,2-Dichlorobenzene	ND	5.0	"
1,2-Dichloroethane	ND	5.0	"
1,2-Dichloropropane	ND	5.0	"
1,3,5-Trimethylbenzene	ND	5.0	"
1,3-Dichlorobenzene	ND	5.0	"
1,3-Dichloropropane	ND	5.0	"
1,4-Dichlorobenzene	ND	5.0	"
2,2-Dichloropropane	ND	5.0	"
2-Butanone	ND	5.0	"
2-Chlorotoluene	ND	5.0	"
2-Hexanone	ND	5.0	"
4-Chlorotoluene	ND	5.0	"
4-Methyl-2-pentanone	ND	5.0	"
Acetone	ND	10	"
Acrylonitrile	ND	5.0	"
Benzene	ND	5.0	"
Bromobenzene	ND	5.0	"
Bromochloromethane	ND	5.0	"
Bromodichloromethane	ND	5.0	"
Bromoform	ND	5.0	"
Bromomethane	ND	5.0	"
Carbon disulfide	ND	5.0	"
Carbon tetrachloride	ND	5.0	"
Chlorobenzene	ND	5.0	"
Chloroethane	ND	5.0	"
Chloroform	ND	5.0	"
Chloromethane	ND	5.0	"
cis-1,2-Dichloroethylene	ND	5.0	"
cis-1,3-Dichloropropylene	ND	5.0	"
Dibromochloromethane	ND	5.0	"
Dibromomethane	ND	5.0	"
Dichlorodifluoromethane	ND	5.0	"
Ethyl Benzene	ND	5.0	"
Hexachlorobutadiene	ND	5.0	"
Isopropylbenzene	ND	5.0	"
Methyl Methacrylate	ND	5.0	"
Methyl tert-butyl ether (MTBE)	ND	5.0	"





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
---------	--------	--------------------	-------	----------------	-------------------	------	----------------	------	-----	--------------	------

#### Batch BH40876 - EPA 5035A

##### Blank (BH40876-BLK1)

Prepared & Analyzed: 08/15/2014

Methylene chloride	ND	10	ug/kg wet
Naphthalene	ND	10	"
n-Butylbenzene	ND	5.0	"
n-Propylbenzene	ND	5.0	"
o-Xylene	ND	5.0	"
p- & m- Xylenes	ND	10	"
p-Isopropyltoluene	ND	5.0	"
sec-Butylbenzene	ND	5.0	"
Styrene	ND	5.0	"
tert-Butylbenzene	ND	5.0	"
Tetrachloroethylene	ND	5.0	"
Tetrahydrofuran	ND	10	"
Toluene	ND	5.0	"
trans-1,2-Dichloroethylene	ND	5.0	"
trans-1,3-Dichloropropylene	ND	5.0	"
trans-1,4-dichloro-2-butene	ND	5.0	"
Trichloroethylene	ND	5.0	"
Trichlorofluoromethane	ND	5.0	"
Vinyl Chloride	ND	5.0	"

Surrogate: 1,2-Dichloroethane-d4	51.2	ug/L	50.0	102	67-130
Surrogate: p-Bromofluorobenzene	50.2	"	50.0	100	75-127
Surrogate: Toluene-d8	50.3	"	50.0	101	90-112

##### LCS (BH40876-BS1)

Prepared & Analyzed: 08/15/2014

1,1,1,2-Tetrachloroethane	50.4	ug/L	50.0	101	72-126
1,1,1-Trichloroethane	50.3	"	50.0	101	74-126
1,1,2,2-Tetrachloroethane	54.5	"	50.0	109	72-133
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	73.0	"	50.0	146	47-160
1,1,2-Trichloroethane	51.2	"	50.0	102	81-124
1,1-Dichloroethane	49.7	"	50.0	99.3	80-125
1,1-Dichloroethylene	48.2	"	50.0	96.4	62-136
1,1-Dichloropropylene	48.2	"	50.0	96.5	81-121
1,2,3-Trichlorobenzene	49.1	"	50.0	98.2	63-154
1,2,3-Trichloropropane	50.7	"	50.0	101	70-126
1,2,4-Trichlorobenzene	49.9	"	50.0	99.8	61-158
1,2,4-Trimethylbenzene	53.1	"	50.0	106	83-123
1,2-Dibromo-3-chloropropane	51.0	"	50.0	102	48-152
1,2-Dibromoethane	52.8	"	50.0	106	81-123
1,2-Dichlorobenzene	47.7	"	50.0	95.4	81-117
1,2-Dichloroethane	50.0	"	50.0	99.9	67-129
1,2-Dichloropropane	52.0	"	50.0	104	74-127
1,3,5-Trimethylbenzene	52.7	"	50.0	105	81-120
1,3-Dichlorobenzene	49.0	"	50.0	98.0	84-117
1,3-Dichloropropane	52.3	"	50.0	105	77-125
1,4-Dichlorobenzene	47.3	"	50.0	94.6	85-118
2,2-Dichloropropane	50.4	"	50.0	101	69-129
2-Butanone	50.8	"	50.0	102	58-159
2-Chlorotoluene	51.4	"	50.0	103	75-123
2-Hexanone	54.8	"	50.0	110	50-154
4-Chlorotoluene	52.1	"	50.0	104	76-121
4-Methyl-2-pentanone	53.4	"	50.0	107	53-149
Acetone	47.8	"	50.0	95.6	32-173



## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
---------	--------	--------------------	-------	----------------	-------------------	------	----------------	------	-----	--------------	------

#### Batch BH40876 - EPA 5035A

#### LCS (BH40876-BS1)

Prepared & Analyzed: 08/15/2014

Acrylonitrile	49.7		ug/L	50.0		99.5	50-158				
Benzene	49.3		"	50.0		98.5	83-126				
Bromobenzene	53.4		"	50.0		107	70-130				
Bromochloromethane	52.2		"	50.0		104	73-128				
Bromodichloromethane	54.4		"	50.0		109	74-126				
Bromoform	53.5		"	50.0		107	63-137				
Bromomethane	53.8		"	50.0		108	24-144				
Carbon disulfide	48.5		"	50.0		96.9	29-64	High Bias			
Carbon tetrachloride	48.0		"	50.0		96.1	68-132				
Chlorobenzene	48.3		"	50.0		96.5	87-115				
Chloroethane	43.5		"	50.0		86.9	39-146				
Chloroform	49.6		"	50.0		99.3	84-120				
Chloromethane	46.9		"	50.0		93.8	35-153				
cis-1,2-Dichloroethylene	48.7		"	50.0		97.4	86-121				
cis-1,3-Dichloropropylene	53.6		"	50.0		107	78-122				
Dibromochloromethane	52.7		"	50.0		105	41-149				
Dibromomethane	50.0		"	50.0		100	82-118				
Dichlorodifluoromethane	43.7		"	50.0		87.4	52-143				
Ethyl Benzene	49.7		"	50.0		99.5	81-118				
Hexachlorobutadiene	49.6		"	50.0		99.2	70-133				
Isopropylbenzene	51.8		"	50.0		104	78-122				
Methyl Methacrylate	53.8		"	50.0		108	73-131				
Methyl tert-butyl ether (MTBE)	50.1		"	50.0		100	62-140				
Methylene chloride	48.8		"	50.0		97.5	48-143				
Naphthalene	51.4		"	50.0		103	55-160				
n-Butylbenzene	51.4		"	50.0		103	71-142				
n-Propylbenzene	52.4		"	50.0		105	80-123				
o-Xylene	53.8		"	50.0		108	81-118				
p- & m- Xylenes	102		"	100		102	80-120				
p-Isopropyltoluene	49.5		"	50.0		99.0	83-126				
sec-Butylbenzene	51.8		"	50.0		104	84-123				
Styrene	51.3		"	50.0		103	85-115				
tert-Butylbenzene	54.7		"	50.0		109	78-122				
Tetrachloroethylene	49.7		"	50.0		99.5	76-129				
Tetrahydrofuran	48.7		"	50.0		97.5	67-127				
Toluene	51.0		"	50.0		102	85-116				
trans-1,2-Dichloroethylene	48.1		"	50.0		96.2	66-136				
trans-1,3-Dichloropropylene	55.0		"	50.0		110	71-128				
trans-1,4-dichloro-2-butene	56.2		"	50.0		112	70-130				
Trichloroethylene	50.1		"	50.0		100	83-118				
Trichlorofluoromethane	44.7		"	50.0		89.4	54-141				
Vinyl Chloride	44.8		"	50.0		89.6	38-147				
Surrogate: 1,2-Dichloroethane-d4	51.5		"	50.0		103	67-130				
Surrogate: p-Bromofluorobenzene	52.5		"	50.0		105	75-127				
Surrogate: Toluene-d8	52.7		"	50.0		105	90-112				



## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BH40876 - EPA 5035A</b>											
<b>LCS Dup (BH40876-BSD1)</b>						Prepared & Analyzed: 08/15/2014					
1,1,1,2-Tetrachloroethane	50.9		ug/L	50.0		102	72-126		1.16	30	
1,1,1-Trichloroethane	50.0		"	50.0		100	74-126		0.678	30	
1,1,2,2-Tetrachloroethane	52.9		"	50.0		106	72-133		3.03	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	70.0		"	50.0		140	47-160		4.29	30	
1,1,2-Trichloroethane	51.8		"	50.0		104	81-124		1.28	30	
1,1-Dichloroethane	50.4		"	50.0		101	80-125		1.56	30	
1,1-Dichloroethylene	47.6		"	50.0		95.2	62-136		1.23	30	
1,1-Dichloropropylene	47.9		"	50.0		95.8	81-121		0.749	30	
1,2,3-Trichlorobenzene	51.1		"	50.0		102	63-154		3.89	30	
1,2,3-Trichloropropane	49.2		"	50.0		98.4	70-126		3.12	30	
1,2,4-Trichlorobenzene	50.3		"	50.0		101	61-158		0.719	30	
1,2,4-Trimethylbenzene	51.5		"	50.0		103	83-123		3.10	30	
1,2-Dibromo-3-chloropropane	56.0		"	50.0		112	48-152		9.41	30	
1,2-Dibromoethane	52.3		"	50.0		105	81-123		1.01	30	
1,2-Dichlorobenzene	50.5		"	50.0		101	81-117		5.76	30	
1,2-Dichloroethane	49.4		"	50.0		98.8	67-129		1.15	30	
1,2-Dichloropropane	53.7		"	50.0		107	74-127		3.06	30	
1,3,5-Trimethylbenzene	51.2		"	50.0		102	81-120		2.85	30	
1,3-Dichlorobenzene	49.3		"	50.0		98.6	84-117		0.651	30	
1,3-Dichloropropane	53.2		"	50.0		106	77-125		1.65	30	
1,4-Dichlorobenzene	49.0		"	50.0		97.9	85-118		3.43	30	
2,2-Dichloropropane	49.9		"	50.0		99.8	69-129		1.08	30	
2-Butanone	50.4		"	50.0		101	58-159		0.672	30	
2-Chlorotoluene	50.2		"	50.0		100	75-123		2.30	30	
2-Hexanone	52.8		"	50.0		106	50-154		3.59	30	
4-Chlorotoluene	52.1		"	50.0		104	76-121		0.0960	30	
4-Methyl-2-pentanone	54.2		"	50.0		108	53-149		1.39	30	
Acetone	50.0		"	50.0		100	32-173		4.54	30	
Acrylonitrile	48.1		"	50.0		96.2	50-158		3.37	30	
Benzene	48.2		"	50.0		96.4	83-126		2.17	30	
Bromobenzene	54.8		"	50.0		110	70-130		2.61	30	
Bromochloromethane	50.5		"	50.0		101	73-128		3.25	30	
Bromodichloromethane	54.1		"	50.0		108	74-126		0.553	30	
Bromoform	52.2		"	50.0		104	63-137		2.44	30	
Bromomethane	55.0		"	50.0		110	24-144		2.21	30	
Carbon disulfide	47.6		"	50.0		95.3	29-64	High Bias	1.73	30	
Carbon tetrachloride	48.7		"	50.0		97.5	68-132		1.43	30	
Chlorobenzene	49.2		"	50.0		98.4	87-115		1.91	30	
Chloroethane	48.2		"	50.0		96.3	39-146		10.2	30	
Chloroform	49.0		"	50.0		97.9	84-120		1.38	30	
Chloromethane	47.9		"	50.0		95.7	35-153		2.09	30	
cis-1,2-Dichloroethylene	49.0		"	50.0		98.1	86-121		0.655	30	
cis-1,3-Dichloropropylene	54.2		"	50.0		108	78-122		1.08	30	
Dibromochloromethane	53.0		"	50.0		106	41-149		0.454	30	
Dibromomethane	50.8		"	50.0		102	82-118		1.51	30	
Dichlorodifluoromethane	44.1		"	50.0		88.2	52-143		0.957	30	
Ethyl Benzene	51.1		"	50.0		102	81-118		2.72	30	
Hexachlorobutadiene	52.6		"	50.0		105	70-133		6.01	30	
Isopropylbenzene	53.6		"	50.0		107	78-122		3.43	30	
Methyl Methacrylate	54.4		"	50.0		109	73-131		1.02	30	
Methyl tert-butyl ether (MTBE)	47.0		"	50.0		94.0	62-140		6.41	30	



## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
---------	--------	-----------------	-------	-------------	----------------	------	-------------	------	-----	-----------	------

#### Batch BH40876 - EPA 5035A

##### LCS Dup (BH40876-BSD1)

Prepared & Analyzed: 08/15/2014

Methylene chloride	49.0		ug/L	50.0		97.9	48-143		0.409	30	
Naphthalene	50.0		"	50.0		100	55-160		2.68	30	
n-Butylbenzene	52.1		"	50.0		104	71-142		1.39	30	
n-Propylbenzene	52.8		"	50.0		106	80-123		0.741	30	
o-Xylene	54.5		"	50.0		109	81-118		1.24	30	
p- & m- Xylenes	98.6		"	100		98.6	80-120		3.01	30	
p-Isopropyltoluene	50.6		"	50.0		101	83-126		2.18	30	
sec-Butylbenzene	51.5		"	50.0		103	84-123		0.638	30	
Styrene	52.7		"	50.0		105	85-115		2.75	30	
tert-Butylbenzene	55.5		"	50.0		111	78-122		1.49	30	
Tetrachloroethylene	50.6		"	50.0		101	76-129		1.64	30	
Tetrahydrofuran	49.2		"	50.0		98.5	67-127		1.06	30	
Toluene	52.1		"	50.0		104	85-116		2.17	30	
trans-1,2-Dichloroethylene	47.3		"	50.0		94.6	66-136		1.64	30	
trans-1,3-Dichloropropylene	55.8		"	50.0		112	71-128		1.50	30	
trans-1,4-dichloro-2-butene	51.2		"	50.0		102	70-130		9.35	30	
Trichloroethylene	51.9		"	50.0		104	83-118		3.53	30	
Trichlorofluoromethane	45.4		"	50.0		90.9	54-141		1.62	30	
Vinyl Chloride	46.2		"	50.0		92.4	38-147		3.10	30	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>48.9</i>		<i>"</i>	<i>50.0</i>		<i>97.9</i>	<i>67-130</i>				
<i>Surrogate: p-Bromofluorobenzene</i>	<i>51.9</i>		<i>"</i>	<i>50.0</i>		<i>104</i>	<i>75-127</i>				
<i>Surrogate: Toluene-d8</i>	<i>50.6</i>		<i>"</i>	<i>50.0</i>		<i>101</i>	<i>90-112</i>				

#### Batch BH40890 - EPA 5030B

##### Blank (BH40890-BLK1)

Prepared & Analyzed: 08/15/2014

Acetone	2.8	2.0	ug/L
Acrylonitrile	ND	0.50	"
Benzene	ND	0.50	"
Bromobenzene	ND	0.50	"
Bromochloromethane	ND	0.50	"
Bromodichloromethane	ND	0.50	"
Bromoform	ND	0.50	"
Bromomethane	ND	0.50	"
2-Butanone	ND	0.50	"
sec-Butylbenzene	ND	0.50	"
n-Butylbenzene	ND	0.50	"
tert-Butylbenzene	ND	0.50	"
Carbon disulfide	ND	0.50	"
Carbon tetrachloride	ND	0.50	"
Chlorobenzene	ND	0.50	"
Chloroethane	ND	0.50	"
Chloroform	ND	0.50	"
Chloromethane	ND	0.50	"
2-Chlorotoluene	ND	0.50	"
4-Chlorotoluene	ND	0.50	"
1,2-Dibromo-3-chloropropane	ND	0.50	"
Dibromochloromethane	ND	0.50	"
1,2-Dibromoethane	ND	0.50	"
Dibromomethane	ND	0.50	"
trans-1,4-dichloro-2-butene	ND	0.50	"
1,3-Dichlorobenzene	ND	0.50	"



## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
---------	--------	--------------------	-------	----------------	-------------------	------	----------------	------	-----	--------------	------

#### Batch BH40890 - EPA 5030B

#### Blank (BH40890-BLK1)

Prepared & Analyzed: 08/15/2014

1,4-Dichlorobenzene	ND	0.50	ug/L								
1,2-Dichlorobenzene	ND	0.50	"								
Dichlorodifluoromethane	ND	0.50	"								
1,1-Dichloroethane	ND	0.50	"								
1,2-Dichloroethane	ND	0.50	"								
cis-1,2-Dichloroethylene	ND	0.50	"								
1,1-Dichloroethylene	ND	0.50	"								
trans-1,2-Dichloroethylene	ND	0.50	"								
2,2-Dichloropropane	ND	0.50	"								
1,2-Dichloropropane	ND	0.50	"								
1,3-Dichloropropane	ND	0.50	"								
trans-1,3-Dichloropropylene	ND	0.50	"								
1,1-Dichloropropylene	ND	0.50	"								
cis-1,3-Dichloropropylene	ND	0.50	"								
Ethyl Benzene	ND	0.50	"								
Hexachlorobutadiene	ND	0.50	"								
2-Hexanone	ND	0.50	"								
Isopropylbenzene	ND	0.50	"								
p-Isopropyltoluene	ND	0.50	"								
Methyl tert-butyl ether (MTBE)	ND	0.50	"								
Methylene chloride	ND	2.0	"								
Methyl Methacrylate	ND	0.50	"								
4-Methyl-2-pentanone	ND	0.50	"								
Naphthalene	3.0	2.0	"								
n-Propylbenzene	ND	0.50	"								
Styrene	ND	0.50	"								
1,1,1,2-Tetrachloroethane	ND	0.50	"								
1,1,2,2-Tetrachloroethane	ND	0.50	"								
Tetrachloroethylene	ND	0.50	"								
Tetrahydrofuran	ND	2.0	"								
Toluene	ND	0.50	"								
1,2,3-Trichlorobenzene	1.6	0.50	"								
1,2,4-Trichlorobenzene	1.0	0.50	"								
1,1,1-Trichloroethane	ND	0.50	"								
1,1,2-Trichloroethane	ND	0.50	"								
Trichloroethylene	ND	0.50	"								
Trichlorofluoromethane	ND	0.50	"								
1,2,3-Trichloropropane	ND	0.50	"								
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.50	"								
1,3,5-Trimethylbenzene	ND	0.50	"								
1,2,4-Trimethylbenzene	ND	0.50	"								
Vinyl Chloride	ND	0.50	"								
o-Xylene	ND	0.50	"								
p- & m- Xylenes	ND	1.0	"								
Surrogate: 1,2-Dichloroethane-d4	51.2		"	50.0		102	81-123				
Surrogate: Toluene-d8	50.3		"	50.0		101	88-114				
Surrogate: p-Bromofluorobenzene	50.2		"	50.0		100	70-128				



## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BH40890 - EPA 5030B</b>											
<b>LCS (BH40890-BS1)</b>						Prepared & Analyzed: 08/15/2014					
Acetone	47.8		ug/L	50.0		95.6	21-172				
Acrylonitrile	49.7		"	50.0		99.5	49-160				
Benzene	49.3		"	50.0		98.5	82-120				
Bromobenzene	53.4		"	50.0		107	82-119				
Bromochloromethane	52.2		"	50.0		104	69-125				
Bromodichloromethane	54.4		"	50.0		109	84-117				
Bromoform	53.5		"	50.0		107	77-130				
Bromomethane	53.8		"	50.0		108	16-162				
2-Butanone	50.8		"	50.0		102	48-156				
sec-Butylbenzene	51.8		"	50.0		104	85-119				
n-Butylbenzene	51.4		"	50.0		103	76-125				
tert-Butylbenzene	54.7		"	50.0		109	83-119				
Carbon disulfide	48.5		"	50.0		96.9	21-78	High Bias			
Carbon tetrachloride	48.0		"	50.0		96.1	72-132				
Chlorobenzene	48.3		"	50.0		96.5	88-112				
Chloroethane	43.5		"	50.0		86.9	29-172				
Chloroform	49.6		"	50.0		99.3	77-124				
Chloromethane	46.9		"	50.0		93.8	37-131				
2-Chlorotoluene	51.4		"	50.0		103	81-118				
4-Chlorotoluene	52.1		"	50.0		104	81-117				
1,2-Dibromo-3-chloropropane	51.0		"	50.0		102	60-146				
Dibromochloromethane	52.7		"	50.0		105	72-131				
1,2-Dibromoethane	52.8		"	50.0		106	82-122				
Dibromomethane	50.0		"	50.0		100	85-116				
trans-1,4-dichloro-2-butene	56.2		"	50.0		112	70-130				
1,3-Dichlorobenzene	49.0		"	50.0		98.0	83-117				
1,4-Dichlorobenzene	47.3		"	50.0		94.6	83-118				
1,2-Dichlorobenzene	47.7		"	50.0		95.4	85-115				
Dichlorodifluoromethane	43.7		"	50.0		87.4	47-152				
1,1-Dichloroethane	49.7		"	50.0		99.3	70-131				
1,2-Dichloroethane	50.0		"	50.0		99.9	72-126				
cis-1,2-Dichloroethylene	48.7		"	50.0		97.4	77-124				
1,1-Dichloroethylene	48.2		"	50.0		96.4	60-143				
trans-1,2-Dichloroethylene	48.1		"	50.0		96.2	55-148				
2,2-Dichloropropane	50.4		"	50.0		101	60-135				
1,2-Dichloropropane	52.0		"	50.0		104	78-119				
1,3-Dichloropropane	52.3		"	50.0		105	79-121				
trans-1,3-Dichloropropylene	55.0		"	50.0		110	77-120				
1,1-Dichloropropylene	48.2		"	50.0		96.5	78-122				
cis-1,3-Dichloropropylene	53.6		"	50.0		107	81-117				
Ethyl Benzene	49.7		"	50.0		99.5	86-114				
Hexachlorobutadiene	49.6		"	50.0		99.2	68-139				
2-Hexanone	54.8		"	50.0		110	50-151				
Isopropylbenzene	51.8		"	50.0		104	84-118				
p-Isopropyltoluene	49.5		"	50.0		99.0	84-121				
Methyl tert-butyl ether (MTBE)	50.1		"	50.0		100	49-156				
Methylene chloride	48.8		"	50.0		97.5	51-145				
Methyl Methacrylate	53.8		"	50.0		108	70-130				
4-Methyl-2-pentanone	53.4		"	50.0		107	55-147				
Naphthalene	51.4		"	50.0		103	67-141				
n-Propylbenzene	52.4		"	50.0		105	84-118				





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
---------	--------	--------------------	-------	----------------	-------------------	------	----------------	------	-----	--------------	------

#### Batch BH40890 - EPA 5030B

##### LCS (BH40890-BS1)

Prepared & Analyzed: 08/15/2014

Styrene	51.3		ug/L	50.0		103	77-126				
1,1,1,2-Tetrachloroethane	50.4		"	50.0		101	85-118				
1,1,2,2-Tetrachloroethane	54.5		"	50.0		109	71-130				
Tetrachloroethylene	49.7		"	50.0		99.5	75-129				
Tetrahydrofuran	48.7		"	50.0		97.5	70-130				
Toluene	51.0		"	50.0		102	86-113				
1,2,3-Trichlorobenzene	49.1		"	50.0		98.2	68-140				
1,2,4-Trichlorobenzene	49.9		"	50.0		99.8	65-143				
1,1,1-Trichloroethane	50.3		"	50.0		101	74-128				
1,1,2-Trichloroethane	51.2		"	50.0		102	80-122				
Trichloroethylene	50.1		"	50.0		100	85-115				
Trichlorofluoromethane	44.7		"	50.0		89.4	69-131				
1,2,3-Trichloropropane	50.7		"	50.0		101	77-125				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	73.0		"	50.0		146	51-157				
1,3,5-Trimethylbenzene	52.7		"	50.0		105	84-118				
1,2,4-Trimethylbenzene	53.1		"	50.0		106	83-121				
Vinyl Chloride	44.8		"	50.0		89.6	44-152				
o-Xylene	53.8		"	50.0		108	85-114				
p- & m- Xylenes	102		"	100		102	84-117				
Surrogate: 1,2-Dichloroethane-d4	51.5		"	50.0		103	81-123				
Surrogate: Toluene-d8	52.7		"	50.0		105	88-114				
Surrogate: p-Bromofluorobenzene	52.5		"	50.0		105	70-128				

##### LCS Dup (BH40890-BSD1)

Prepared & Analyzed: 08/15/2014

Acetone	50.0		ug/L	50.0		100	21-172		4.54	30	
Acrylonitrile	48.1		"	50.0		96.2	49-160		3.37	30	
Benzene	48.2		"	50.0		96.4	82-120		2.17	30	
Bromobenzene	54.8		"	50.0		110	82-119		2.61	30	
Bromochloromethane	50.5		"	50.0		101	69-125		3.25	30	
Bromodichloromethane	54.1		"	50.0		108	84-117		0.553	30	
Bromoform	52.2		"	50.0		104	77-130		2.44	30	
Bromomethane	55.0		"	50.0		110	16-162		2.21	30	
2-Butanone	50.4		"	50.0		101	48-156		0.672	30	
sec-Butylbenzene	51.5		"	50.0		103	85-119		0.638	30	
n-Butylbenzene	52.1		"	50.0		104	76-125		1.39	30	
tert-Butylbenzene	55.5		"	50.0		111	83-119		1.49	30	
Carbon disulfide	47.6		"	50.0		95.3	21-78	High Bias	1.73	30	
Carbon tetrachloride	48.7		"	50.0		97.5	72-132		1.43	30	
Chlorobenzene	49.2		"	50.0		98.4	88-112		1.91	30	
Chloroethane	48.2		"	50.0		96.3	29-172		10.2	30	
Chloroform	49.0		"	50.0		97.9	77-124		1.38	30	
Chloromethane	47.9		"	50.0		95.7	37-131		2.09	30	
2-Chlorotoluene	50.2		"	50.0		100	81-118		2.30	30	
4-Chlorotoluene	52.1		"	50.0		104	81-117		0.0960	30	
1,2-Dibromo-3-chloropropane	56.0		"	50.0		112	60-146		9.41	30	
Dibromochloromethane	53.0		"	50.0		106	72-131		0.454	30	
1,2-Dibromoethane	52.3		"	50.0		105	82-122		1.01	30	
Dibromomethane	50.8		"	50.0		102	85-116		1.51	30	
trans-1,4-dichloro-2-butene	51.2		"	50.0		102	70-130		9.35	30	
1,3-Dichlorobenzene	49.3		"	50.0		98.6	83-117		0.651	30	
1,4-Dichlorobenzene	49.0		"	50.0		97.9	83-118		3.43	30	
1,2-Dichlorobenzene	50.5		"	50.0		101	85-115		5.76	30	



## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BH40890 - EPA 5030B</b>											
<b>LCS Dup (BH40890-BSD1)</b>						Prepared & Analyzed: 08/15/2014					
Dichlorodifluoromethane	44.1		ug/L	50.0		88.2	47-152		0.957	30	
1,1-Dichloroethane	50.4		"	50.0		101	70-131		1.56	30	
1,2-Dichloroethane	49.4		"	50.0		98.8	72-126		1.15	30	
cis-1,2-Dichloroethylene	49.0		"	50.0		98.1	77-124		0.655	30	
1,1-Dichloroethylene	47.6		"	50.0		95.2	60-143		1.23	30	
trans-1,2-Dichloroethylene	47.3		"	50.0		94.6	55-148		1.64	30	
2,2-Dichloropropane	49.9		"	50.0		99.8	60-135		1.08	30	
1,2-Dichloropropane	53.7		"	50.0		107	78-119		3.06	30	
1,3-Dichloropropane	53.2		"	50.0		106	79-121		1.65	30	
trans-1,3-Dichloropropylene	55.8		"	50.0		112	77-120		1.50	30	
1,1-Dichloropropylene	47.9		"	50.0		95.8	78-122		0.749	30	
cis-1,3-Dichloropropylene	54.2		"	50.0		108	81-117		1.08	30	
Ethyl Benzene	51.1		"	50.0		102	86-114		2.72	30	
Hexachlorobutadiene	52.6		"	50.0		105	68-139		6.01	30	
2-Hexanone	52.8		"	50.0		106	50-151		3.59	30	
Isopropylbenzene	53.6		"	50.0		107	84-118		3.43	30	
p-Isopropyltoluene	50.6		"	50.0		101	84-121		2.18	30	
Methyl tert-butyl ether (MTBE)	47.0		"	50.0		94.0	49-156		6.41	30	
Methylene chloride	49.0		"	50.0		97.9	51-145		0.409	30	
Methyl Methacrylate	54.4		"	50.0		109	70-130		1.02	30	
4-Methyl-2-pentanone	54.2		"	50.0		108	55-147		1.39	30	
Naphthalene	50.0		"	50.0		100	67-141		2.68	30	
n-Propylbenzene	52.8		"	50.0		106	84-118		0.741	30	
Styrene	52.7		"	50.0		105	77-126		2.75	30	
1,1,1,2-Tetrachloroethane	50.9		"	50.0		102	85-118		1.16	30	
1,1,2,2-Tetrachloroethane	52.9		"	50.0		106	71-130		3.03	30	
Tetrachloroethylene	50.6		"	50.0		101	75-129		1.64	30	
Tetrahydrofuran	49.2		"	50.0		98.5	70-130		1.06	30	
Toluene	52.1		"	50.0		104	86-113		2.17	30	
1,2,3-Trichlorobenzene	51.1		"	50.0		102	68-140		3.89	30	
1,2,4-Trichlorobenzene	50.3		"	50.0		101	65-143		0.719	30	
1,1,1-Trichloroethane	50.0		"	50.0		100	74-128		0.678	30	
1,1,2-Trichloroethane	51.8		"	50.0		104	80-122		1.28	30	
Trichloroethylene	51.9		"	50.0		104	85-115		3.53	30	
Trichlorofluoromethane	45.4		"	50.0		90.9	69-131		1.62	30	
1,2,3-Trichloropropane	49.2		"	50.0		98.4	77-125		3.12	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	70.0		"	50.0		140	51-157		4.29	30	
1,3,5-Trimethylbenzene	51.2		"	50.0		102	84-118		2.85	30	
1,2,4-Trimethylbenzene	51.5		"	50.0		103	83-121		3.10	30	
Vinyl Chloride	46.2		"	50.0		92.4	44-152		3.10	30	
o-Xylene	54.5		"	50.0		109	85-114		1.24	30	
p- & m- Xylenes	98.6		"	100		98.6	84-117		3.01	30	
Surrogate: 1,2-Dichloroethane-d4	48.9		"	50.0		97.9	81-123				
Surrogate: Toluene-d8	50.6		"	50.0		101	88-114				
Surrogate: p-Bromofluorobenzene	51.9		"	50.0		104	70-128				



## Semivolatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
---------	--------	--------------------	-------	----------------	-------------------	------	----------------	------	-----	--------------	------

#### Batch BH40720 - EPA 3545A

##### Blank (BH40720-BLK1)

Prepared: 08/13/2014 Analyzed: 08/14/2014

Acenaphthene	ND	250	ug/kg wet
Acenaphthylene	ND	250	"
Aniline	ND	250	"
Anthracene	ND	250	"
Benzo(a)anthracene	ND	250	"
Benzo(a)pyrene	ND	250	"
Benzo(b)fluoranthene	ND	250	"
Benzo(g,h,i)perylene	ND	250	"
Benzo(k)fluoranthene	ND	250	"
Benzyl butyl phthalate	ND	250	"
4-Bromophenyl phenyl ether	ND	250	"
4-Chloro-3-methylphenol	ND	250	"
4-Chloroaniline	ND	250	"
Bis(2-chloroethoxy)methane	ND	250	"
Bis(2-chloroethyl)ether	ND	250	"
Bis(2-chloroisopropyl)ether	ND	250	"
2-Chloronaphthalene	ND	250	"
2-Chlorophenol	ND	250	"
4-Chlorophenyl phenyl ether	ND	250	"
Chrysene	ND	250	"
Dibenzo(a,h)anthracene	ND	250	"
Dibenzofuran	ND	250	"
Di-n-butyl phthalate	ND	250	"
3,3'-Dichlorobenzidine	ND	250	"
2,4-Dichlorophenol	ND	250	"
Carbazole	ND	250	"
Diethyl phthalate	ND	250	"
2,4-Dimethylphenol	ND	250	"
Dimethyl phthalate	ND	250	"
4,6-Dinitro-2-methylphenol	ND	500	"
2,4-Dinitrophenol	ND	500	"
2,6-Dinitrotoluene	ND	250	"
2,4-Dinitrotoluene	ND	250	"
Di-n-octyl phthalate	ND	250	"
Bis(2-ethylhexyl)phthalate	ND	250	"
Fluoranthene	ND	250	"
Fluorene	ND	250	"
Hexachlorobenzene	ND	250	"
Hexachlorobutadiene	ND	250	"
Hexachlorocyclopentadiene	ND	250	"
Hexachloroethane	ND	250	"
Indeno(1,2,3-cd)pyrene	ND	250	"
Isophorone	ND	250	"
1-Methylnaphthalene	ND	250	"
2-Methylnaphthalene	ND	250	"
2-Methylphenol	ND	250	"
3- & 4-Methylphenols	ND	250	"
Naphthalene	ND	250	"
3-Nitroaniline	ND	250	"
4-Nitroaniline	ND	250	"
2-Nitroaniline	ND	250	"



## Semivolatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
---------	--------	-----------------	-------	-------------	----------------	------	-------------	------	-----	-----------	------

#### Batch BH40720 - EPA 3545A

##### Blank (BH40720-BLK1)

Prepared: 08/13/2014 Analyzed: 08/14/2014

Nitrobenzene	ND	250	ug/kg wet
2-Nitrophenol	ND	250	"
4-Nitrophenol	ND	250	"
N-nitroso-di-n-propylamine	ND	250	"
N-Nitrosodiphenylamine	ND	250	"
Pentachloronitrobenzene	ND	250	"
Pentachlorophenol	ND	250	"
Phenanthrene	ND	250	"
Phenol	ND	250	"
Pyrene	ND	250	"
Pyridine	ND	250	"
1,2,4,5-Tetrachlorobenzene	ND	250	"
1,2,4-Trichlorobenzene	ND	250	"
2,4,6-Trichlorophenol	ND	250	"
2,4,5-Trichlorophenol	ND	250	"

Surrogate: 2-Fluorophenol	2600	"	3760	69.0	10-105
Surrogate: Phenol-d5	1940	"	3750	51.7	10-118
Surrogate: Nitrobenzene-d5	1680	"	2510	66.8	10-140
Surrogate: 2-Fluorobiphenyl	1790	"	2500	71.6	10-126
Surrogate: 2,4,6-Tribromophenol	2470	"	3750	65.8	10-150
Surrogate: Terphenyl-d14	2660	"	2500	106	10-137

##### LCS (BH40720-BS1)

Prepared: 08/13/2014 Analyzed: 08/14/2014

Acenaphthene	2340	250	ug/kg wet	2500	93.8	17-124
Acenaphthylene	2090	250	"	2500	83.5	16-124
Aniline	1250	250	"	2500	50.1	10-111
Anthracene	2440	250	"	2500	97.4	24-124
Benzo(a)anthracene	2260	250	"	2500	90.3	25-134
Benzo(a)pyrene	2820	250	"	2500	113	29-144
Benzo(b)fluoranthene	2990	250	"	2500	120	20-151
Benzo(g,h,i)perylene	1970	250	"	2500	78.7	10-153
Benzo(k)fluoranthene	2340	250	"	2500	93.5	10-148
Benzyl butyl phthalate	2680	250	"	2500	107	10-132
4-Bromophenyl phenyl ether	2360	250	"	2500	94.5	30-138
4-Chloro-3-methylphenol	2210	250	"	2500	88.4	16-138
4-Chloroaniline	2000	250	"	2500	79.8	10-117
Bis(2-chloroethoxy)methane	1570	250	"	2500	62.6	10-129
Bis(2-chloroethyl)ether	1290	250	"	2500	51.5	14-125
Bis(2-chloroisopropyl)ether	778	250	"	2500	31.1	14-122
2-Chloronaphthalene	2060	250	"	2500	82.6	22-115
2-Chlorophenol	1580	250	"	2500	63.0	25-121
4-Chlorophenyl phenyl ether	2120	250	"	2500	84.8	18-132
Chrysene	2730	250	"	2500	109	24-116
Dibenzo(a,h)anthracene	1940	250	"	2500	77.7	17-147
Dibenzofuran	2140	250	"	2500	85.7	23-123
Di-n-butyl phthalate	2340	250	"	2500	93.4	19-123
3,3'-Dichlorobenzidine	2610	250	"	2500	104	10-147
2,4-Dichlorophenol	1920	250	"	2500	76.8	23-133
Carbazole	2630	250	"	2500	105	31-120
Diethyl phthalate	2460	250	"	2500	98.6	23-122
2,4-Dimethylphenol	1800	250	"	2500	72.1	15-131



## Semivolatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
---------	--------	--------------------	-------	----------------	-------------------	------	----------------	------	-----	--------------	------

#### Batch BH40720 - EPA 3545A

#### LCS (BH40720-BS1)

Prepared: 08/13/2014 Analyzed: 08/14/2014

Dimethyl phthalate	2390	250	ug/kg wet	2500		95.8	28-127				
4,6-Dinitro-2-methylphenol	1300	500	"	2500		52.1	10-149				
2,4-Dinitrophenol	1800	500	"	2500		72.1	10-149				
2,6-Dinitrotoluene	2280	250	"	2500		91.1	30-125				
2,4-Dinitrotoluene	2770	250	"	2500		111	30-123				
Di-n-octyl phthalate	2740	250	"	2500		110	10-132				
Bis(2-ethylhexyl)phthalate	2150	250	"	2500		86.1	10-141				
Fluoranthene	2500	250	"	2500		99.9	36-125				
Fluorene	2210	250	"	2500		88.5	16-130				
Hexachlorobenzene	2500	250	"	2500		100	10-129				
Hexachlorobutadiene	2080	250	"	2500		83.3	22-153				
Hexachlorocyclopentadiene	704	250	"	2500		28.2	10-134				
Hexachloroethane	1600	250	"	2500		63.8	20-112				
Indeno(1,2,3-cd)pyrene	1900	250	"	2500		76.2	10-155				
Isophorone	1700	250	"	2500		67.8	14-131				
1-Methylnaphthalene	2000	250	"	2500		79.9	40-140				
2-Methylnaphthalene	2050	250	"	2500		81.9	16-127				
2-Methylphenol	2440	250	"	2500		97.5	10-146				
3- & 4-Methylphenols	1300	250	"	2500		52.0	20-109				
Naphthalene	1930	250	"	2500		77.1	20-121				
3-Nitroaniline	2040	250	"	2500		81.6	23-123				
4-Nitroaniline	2740	250	"	2500		110	14-125				
2-Nitroaniline	2360	250	"	2500		94.4	24-126				
Nitrobenzene	1580	250	"	2500		63.0	20-121				
2-Nitrophenol	1980	250	"	2500		79.3	17-129				
4-Nitrophenol	2100	250	"	2500		84.1	10-136				
N-nitroso-di-n-propylamine	1350	250	"	2500		53.9	21-119				
N-Nitrosodiphenylamine	2610	250	"	2500		105	10-163				
Pentachloronitrobenzene	3090	250	"	2500		124	40-140				
Pentachlorophenol	1680	250	"	2500		67.3	10-143				
Phenanthrene	2460	250	"	2500		98.2	24-123				
Phenol	1260	250	"	2500		50.2	15-123				
Pyrene	2800	250	"	2500		112	24-132				
Pyridine	897	250	"	2500		35.9	10-92				
1,2,4,5-Tetrachlorobenzene	2010	250	"	2500		80.6	10-144				
1,2,4-Trichlorobenzene	1920	250	"	2500		77.0	23-130				
2,4,6-Trichlorophenol	1880	250	"	2500		75.2	27-122				
2,4,5-Trichlorophenol	2010	250	"	2500		80.6	14-138				
Surrogate: 2-Fluorophenol	2460		"	3760		65.3	10-105				
Surrogate: Phenol-d5	1940		"	3750		51.6	10-118				
Surrogate: Nitrobenzene-d5	1660		"	2510		66.0	10-140				
Surrogate: 2-Fluorobiphenyl	1860		"	2500		74.3	10-126				
Surrogate: 2,4,6-Tribromophenol	3050		"	3750		81.4	30-130				
Surrogate: Terphenyl-d14	2700		"	2500		108	10-137				



## Semivolatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BH40720 - EPA 3545A</b>											
<b>LCS Dup (BH40720-BSD1)</b>						Prepared: 08/13/2014 Analyzed: 08/14/2014					
Acenaphthene	2310	250	ug/kg wet	2500		92.6	17-124		1.27	30	
Acenaphthylene	2090	250	"	2500		83.5	16-124		0.0958	30	
Aniline	1230	250	"	2500		49.3	10-111		1.57	30	
Anthracene	2380	250	"	2500		95.3	24-124		2.20	30	
Benzo(a)anthracene	2300	250	"	2500		92.1	25-134		1.89	30	
Benzo(a)pyrene	2890	250	"	2500		116	29-144		2.41	30	
Benzo(b)fluoranthene	2780	250	"	2500		111	20-151		7.12	30	
Benzo(g,h,i)perylene	2250	250	"	2500		89.9	10-153		13.2	30	
Benzo(k)fluoranthene	2900	250	"	2500		116	10-148		21.6	30	
Benzyl butyl phthalate	2760	250	"	2500		110	10-132		2.70	30	
4-Bromophenyl phenyl ether	2290	250	"	2500		91.6	30-138		3.14	30	
4-Chloro-3-methylphenol	2100	250	"	2500		84.2	16-138		4.84	30	
4-Chloroaniline	2110	250	"	2500		84.4	10-117		5.55	30	
Bis(2-chloroethoxy)methane	1550	250	"	2500		62.1	10-129		0.930	30	
Bis(2-chloroethyl)ether	1360	250	"	2500		54.4	14-125		5.44	30	
Bis(2-chloroisopropyl)ether	826	250	"	2500		33.0	14-122		5.92	30	
2-Chloronaphthalene	2000	250	"	2500		80.1	22-115		3.10	30	
2-Chlorophenol	1630	250	"	2500		65.1	25-121		3.25	30	
4-Chlorophenyl phenyl ether	2060	250	"	2500		82.5	18-132		2.70	30	
Chrysene	2750	250	"	2500		110	24-116		0.656	30	
Dibenzo(a,h)anthracene	2210	250	"	2500		88.5	17-147		13.0	30	
Dibenzofuran	2110	250	"	2500		84.4	23-123		1.58	30	
Di-n-butyl phthalate	2360	250	"	2500		94.5	19-123		1.17	30	
3,3'-Dichlorobenzidine	2750	250	"	2500		110	10-147		5.26	30	
2,4-Dichlorophenol	1890	250	"	2500		75.4	23-133		1.84	30	
Carbazole	2630	250	"	2500		105	31-120		0.171	30	
Diethyl phthalate	2460	250	"	2500		98.5	23-122		0.0609	30	
2,4-Dimethylphenol	1780	250	"	2500		71.2	15-131		1.17	30	
Dimethyl phthalate	2390	250	"	2500		95.5	28-127		0.251	30	
4,6-Dinitro-2-methylphenol	1500	500	"	2500		60.0	10-149		14.2	30	
2,4-Dinitrophenol	1860	500	"	2500		74.5	10-149		3.25	30	
2,6-Dinitrotoluene	2260	250	"	2500		90.3	30-125		0.882	30	
2,4-Dinitrotoluene	2750	250	"	2500		110	30-123		0.887	30	
Di-n-octyl phthalate	2800	250	"	2500		112	10-132		2.36	30	
Bis(2-ethylhexyl)phthalate	2220	250	"	2500		88.7	10-141		3.00	30	
Fluoranthene	2440	250	"	2500		97.5	36-125		2.43	30	
Fluorene	2210	250	"	2500		88.4	16-130		0.0678	30	
Hexachlorobenzene	2410	250	"	2500		96.5	10-129		3.70	30	
Hexachlorobutadiene	2090	250	"	2500		83.7	22-153		0.527	30	
Hexachlorocyclopentadiene	680	250	"	2500		27.2	10-134		3.47	30	
Hexachloroethane	1610	250	"	2500		64.3	20-112		0.750	30	
Indeno(1,2,3-cd)pyrene	2280	250	"	2500		91.1	10-155		17.9	30	
Isophorone	1690	250	"	2500		67.7	14-131		0.207	30	
1-Methylnaphthalene	2030	250	"	2500		81.2	40-140		1.66	30	
2-Methylnaphthalene	2050	250	"	2500		82.0	16-127		0.195	30	
2-Methylphenol	2510	250	"	2500		100	10-146		2.89	30	
3- & 4-Methylphenols	1280	250	"	2500		51.2	20-109		1.55	30	
Naphthalene	1950	250	"	2500		77.9	20-121		1.06	30	
3-Nitroaniline	2010	250	"	2500		80.5	23-123		1.41	30	
4-Nitroaniline	2620	250	"	2500		105	14-125		4.45	30	
2-Nitroaniline	2390	250	"	2500		95.5	24-126		1.16	30	



## Semivolatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
---------	--------	-----------------	-------	-------------	----------------	------	-------------	------	-----	-----------	------

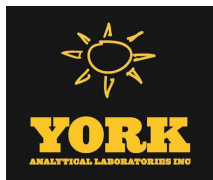
#### Batch BH40720 - EPA 3545A

#### LCS Dup (BH40720-BSD1)

Prepared: 08/13/2014 Analyzed: 08/14/2014

Nitrobenzene	1640	250	ug/kg wet	2500		65.5	20-121		3.83	30	
2-Nitrophenol	1930	250	"	2500		77.3	17-129		2.63	30	
4-Nitrophenol	2080	250	"	2500		83.4	10-136		0.836	30	
N-nitroso-di-n-propylamine	1350	250	"	2500		54.0	21-119		0.148	30	
N-Nitrosodiphenylamine	2600	250	"	2500		104	10-163		0.729	30	
Pentachloronitrobenzene	3030	250	"	2500		121	40-140		1.91	30	
Pentachlorophenol	1660	250	"	2500		66.2	10-143		1.68	30	
Phenanthrene	2450	250	"	2500		98.0	24-123		0.265	30	
Phenol	1210	250	"	2500		48.2	15-123		4.10	30	
Pyrene	2870	250	"	2500		115	24-132		2.66	30	
Pyridine	900	250	"	2500		36.0	10-92		0.389	30	
1,2,4,5-Tetrachlorobenzene	1990	250	"	2500		79.5	10-144		1.35	30	
1,2,4-Trichlorobenzene	1940	250	"	2500		77.4	23-130		0.596	30	
2,4,6-Trichlorophenol	1880	250	"	2500		75.4	27-122		0.212	30	
2,4,5-Trichlorophenol	2030	250	"	2500		81.3	14-138		0.890	30	
Surrogate: 2-Fluorophenol	2430		"	3760		64.7	10-105				
Surrogate: Phenol-d5	2000		"	3750		53.5	10-118				
Surrogate: Nitrobenzene-d5	1660		"	2510		66.1	10-140				
Surrogate: 2-Fluorobiphenyl	1850		"	2500		73.9	10-126				
Surrogate: 2,4,6-Tribromophenol	2960		"	3750		78.8	30-130				
Surrogate: Terphenyl-d14	2690		"	2500		108	10-137				





## Organochlorine Pesticides by GC/ECD - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
---------	--------	-----------------	-------	-------------	----------------	------	-------------	------	-----	-----------	------

#### Batch BH40723 - EPA 3545 A

##### Blank (BH40723-BLK1)

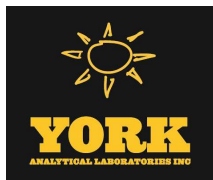
Prepared: 08/13/2014 Analyzed: 08/14/2014

4,4'-DDD	ND	0.330	ug/kg wet								
4,4'-DDE	ND	0.330	"								
4,4'-DDT	ND	0.330	"								
Alachlor	ND	0.330	"								
Aldrin	ND	0.330	"								
alpha-BHC	ND	0.330	"								
beta-BHC	ND	0.330	"								
Chlordane, total	ND	1.32	"								
delta-BHC	ND	0.330	"								
Dieldrin	ND	0.330	"								
Endosulfan I	ND	0.330	"								
Endosulfan II	ND	0.330	"								
Endosulfan sulfate	ND	0.330	"								
Endrin	ND	0.330	"								
Endrin aldehyde	ND	0.330	"								
Endrin ketone	ND	0.330	"								
gamma-BHC (Lindane)	ND	0.330	"								
Heptachlor	ND	0.330	"								
Heptachlor epoxide	ND	0.330	"								
Methoxychlor	ND	1.65	"								
Toxaphene	ND	16.7	"								
<hr/>											
Surrogate: Decachlorobiphenyl	82.2		"	100		82.2	30-140				
Surrogate: Tetrachloro-m-xylene	79.2		"	100		79.2	30-140				

##### LCS (BH40723-BS1)

Prepared: 08/13/2014 Analyzed: 08/14/2014

4,4'-DDD	46.4	0.330	ug/kg wet	50.0		92.8	40-140				
4,4'-DDE	48.5	0.330	"	50.0		97.0	40-140				
4,4'-DDT	50.5	0.330	"	50.0		101	40-140				
Alachlor	42.6	0.330	"	50.0		85.1	40-140				
Aldrin	40.5	0.330	"	50.0		80.9	40-140				
alpha-BHC	46.7	0.330	"	50.0		93.3	40-140				
beta-BHC	45.7	0.330	"	50.0		91.5	40-140				
delta-BHC	50.1	0.330	"	50.0		100	40-140				
Dieldrin	46.0	0.330	"	50.0		92.1	40-140				
Endosulfan I	45.4	0.330	"	50.0		90.7	40-140				
Endosulfan II	43.2	0.330	"	50.0		86.4	40-140				
Endosulfan sulfate	49.1	0.330	"	50.0		98.2	40-140				
Endrin	44.6	0.330	"	50.0		89.3	40-140				
Endrin aldehyde	40.2	0.330	"	50.0		80.4	40-140				
Endrin ketone	45.1	0.330	"	50.0		90.2	40-140				
gamma-BHC (Lindane)	45.6	0.330	"	50.0		91.3	40-140				
Heptachlor	41.7	0.330	"	50.0		83.5	40-140				
Heptachlor epoxide	43.2	0.330	"	50.0		86.4	40-140				
Methoxychlor	43.1	1.65	"	50.0		86.2	40-140				
<hr/>											
Surrogate: Decachlorobiphenyl	112		"	100		112	30-140				
Surrogate: Tetrachloro-m-xylene	112		"	100		112	30-140				



## Organochlorine Pesticides by GC/ECD - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BH40723 - EPA 3545 A</b>											
<b>LCS Dup (BH40723-BSD1)</b>						Prepared: 08/13/2014 Analyzed: 08/14/2014					
4,4'-DDD	48.2	0.330	ug/kg wet	50.0		96.4	40-140		3.78	30	
4,4'-DDE	50.6	0.330	"	50.0		101	40-140		4.16	30	
4,4'-DDT	52.6	0.330	"	50.0		105	40-140		3.95	30	
Alachlor	43.9	0.330	"	50.0		87.8	40-140		3.14	30	
Aldrin	41.9	0.330	"	50.0		83.9	40-140		3.53	30	
alpha-BHC	48.2	0.330	"	50.0		96.5	40-140		3.32	30	
beta-BHC	47.0	0.330	"	50.0		94.1	40-140		2.78	30	
delta-BHC	51.6	0.330	"	50.0		103	40-140		2.79	30	
Dieldrin	47.7	0.330	"	50.0		95.4	40-140		3.57	30	
Endosulfan I	47.3	0.330	"	50.0		94.6	40-140		4.18	30	
Endosulfan II	44.9	0.330	"	50.0		89.8	40-140		3.86	30	
Endosulfan sulfate	50.4	0.330	"	50.0		101	40-140		2.65	30	
Endrin	46.2	0.330	"	50.0		92.4	40-140		3.45	30	
Endrin aldehyde	41.3	0.330	"	50.0		82.6	40-140		2.73	30	
Endrin ketone	46.8	0.330	"	50.0		93.6	40-140		3.65	30	
gamma-BHC (Lindane)	47.0	0.330	"	50.0		94.1	40-140		3.03	30	
Heptachlor	43.1	0.330	"	50.0		86.3	40-140		3.28	30	
Heptachlor epoxide	44.7	0.330	"	50.0		89.3	40-140		3.36	30	
Methoxychlor	44.8	1.65	"	50.0		89.6	40-140		3.79	30	
Surrogate: Decachlorobiphenyl	117		"	100		117	30-140				
Surrogate: Tetrachloro-m-xylene	114		"	100		114	30-140				



## Polychlorinated Biphenyls by GC/ECD - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
---------	--------	--------------------	-------	----------------	-------------------	------	----------------	------	-----	--------------	------

#### Batch BH40723 - EPA 3545\_A

##### Blank (BH40723-BLK1)

Prepared: 08/13/2014 Analyzed: 08/14/2014

Aroclor 1016	ND	0.0250	mg/kg wet								
Aroclor 1221	ND	0.0250	"								
Aroclor 1232	ND	0.0250	"								
Aroclor 1242	ND	0.0250	"								
Aroclor 1248	ND	0.0250	"								
Aroclor 1254	ND	0.0250	"								
Aroclor 1260	ND	0.0250	"								
Aroclor 1262	ND	0.0250	"								
Aroclor 1268	ND	0.0250	"								
Total PCBs	ND	0.0250	"								

Surrogate: Tetrachloro-m-xylene

0.0870

"

0.100

87.0

30-140

Surrogate: Decachlorobiphenyl

0.0605

"

0.100

60.5

30-140

##### LCS (BH40723-BS2)

Prepared: 08/13/2014 Analyzed: 08/14/2014

Aroclor 1016	0.489	0.0250	mg/kg wet	0.500		97.9	40-130				
Aroclor 1260	0.417	0.0250	"	0.500		83.3	40-130				
Surrogate: Tetrachloro-m-xylene	0.0850		"	0.100		85.0	30-140				
Surrogate: Decachlorobiphenyl	0.0540		"	0.100		54.0	30-140				



## Chlorinated Herbicides by GC/ECD - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
---------	--------	--------------------	-------	----------------	-------------------	------	----------------	------	-----	--------------	------

#### Batch BH40763 - EPA 3550B/8151A

##### Blank (BH40763-BLK1)

Prepared: 08/13/2014 Analyzed: 08/14/2014

Dicamba	ND	20.0	ug/kg wet								
2,4-D	ND	20.0	"								
2,4,5-TP (Silvex)	ND	20.0	"								
2,4,5-T	ND	20.0	"								
Dalapon	ND	20.0	"								
<i>Surrogate: 2,4-Dichlorophenylacetic acid (DCAA)</i>	425		"	500		85.0	30-150				

##### LCS (BH40763-BS1)

Prepared: 08/13/2014 Analyzed: 08/14/2014

Dicamba	75.0	20.0	ug/kg wet	160		46.9	40-140				
2,4-D	79.0	20.0	"	160		49.4	40-140				
2,4,5-TP (Silvex)	73.0	20.0	"	160		45.6	40-140				
2,4,5-T	71.0	20.0	"	160		44.4	40-140				
Dalapon	25.0	20.0	"	160		15.6	40-140	Low Bias			
<i>Surrogate: 2,4-Dichlorophenylacetic acid (DCAA)</i>	306		"	500		61.2	30-150				

##### LCS Dup (BH40763-BSD1)

Prepared: 08/13/2014 Analyzed: 08/14/2014

Dicamba	78.0	20.0	ug/kg wet	160		48.8	40-140		3.92	30	
2,4-D	85.0	20.0	"	160		53.1	40-140		7.32	30	
2,4,5-TP (Silvex)	83.0	20.0	"	160		51.9	40-140		12.8	30	
2,4,5-T	80.0	20.0	"	160		50.0	40-140		11.9	30	
Dalapon	29.0	20.0	"	160		18.1	40-140	Low Bias	14.8	30	
<i>Surrogate: 2,4-Dichlorophenylacetic acid (DCAA)</i>	273		"	500		54.6	30-150				



## Gas Chromatography/Flame Ionization Detector - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
---------	--------	--------------------	-------	----------------	-------------------	------	----------------	------	-----	--------------	------

#### Batch BH40908 - EPA 3545A

##### Blank (BH40908-BLK1)

Prepared: 08/18/2014 Analyzed: 08/19/2014

ETPH (Extractable Total Petroleum Hydrocarbons)	ND	10.0	mg/kg wet								
Surrogate: 1-Chlorooctadecane	7.79		"	10.0		77.9	50-150				

##### LCS (BH40908-BS1)

Prepared: 08/18/2014 Analyzed: 08/19/2014

ETPH (Extractable Total Petroleum Hydrocarbons)	60.9	10.0	mg/kg wet	75.0		81.2	60-120				
Surrogate: 1-Chlorooctadecane	8.66		"	10.0		86.6	50-150				

##### LCS Dup (BH40908-BSD1)

Prepared: 08/18/2014 Analyzed: 08/19/2014

ETPH (Extractable Total Petroleum Hydrocarbons)	60.8	10.0	mg/kg wet	75.0		81.1	60-120		0.164	30	
Surrogate: 1-Chlorooctadecane	8.09		"	10.0		80.9	50-150				



## Metals by ICP - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
---------	--------	--------------------	-------	----------------	-------------------	------	----------------	------	-----	--------------	------

#### Batch BH40842 - EPA 3050B

##### Blank (BH40842-BLK1)

Prepared & Analyzed: 08/15/2014

Antimony	ND	0.500	mg/kg wet								
Arsenic	ND	1.00	"								
Barium	ND	1.00	"								
Beryllium	ND	0.100	"								
Cadmium	ND	0.300	"								
Chromium	ND	0.500	"								
Copper	ND	0.500	"								
Lead	ND	0.300	"								
Nickel	ND	0.500	"								
Selenium	ND	1.00	"								
Silver	ND	0.500	"								
Thallium	ND	1.00	"								
Vanadium	ND	1.00	"								
Zinc	ND	1.00	"								

##### Reference (BH40842-SRM1)

Prepared & Analyzed: 08/15/2014

Antimony	119	0.500	mg/kg wet	129		92.2	22.4-250
Arsenic	81.2	1.00	"	88.4		91.8	69-131
Barium	183	1.00	"	210		87.3	73.3-127
Beryllium	51.5	0.100	"	55.8		92.2	73.1-127
Cadmium	125	0.300	"	142		87.8	73.2-128
Chromium	74.2	0.500	"	86.8		85.5	69.1-131
Copper	255	0.500	"	268		95.3	76.1-124
Lead	85.6	0.300	"	97.9		87.4	70.8-129
Nickel	221	0.500	"	236		93.8	74.2-128
Selenium	117	1.00	"	127		92.1	66.6-134
Silver	57.3	0.500	"	66.2		86.6	67.1-133
Thallium	124	1.00	"	140		88.7	68.3-132
Vanadium	134	1.00	"	156		85.6	71.8-129
Zinc	111	1.00	"	161		69.1	66.9-133



Mercury by EPA 7000/200 Series Methods - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC Limits	Flag	RPD Limit	Flag
---------	--------	--------------------	-------	----------------	-------------------	----------------	------	--------------	------

Batch BH40795 - EPA 7473 soil

Blank (BH40795-BLK1)

Prepared & Analyzed: 08/14/2014

Mercury ND 0.0300 mg/kg wet

Reference (BH40795-SRM1)

Prepared & Analyzed: 08/14/2014

Mercury 3.2393 mg/kg 3.73 86.8 68.6-131





### Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
14H0523-06	SB-6 2-3'	40mL Vial with Stir Bar-Cool 4° C
14H0523-07	SB-7 1-2'	40mL Vial with Stir Bar-Cool 4° C
14H0523-08	SB-8 1-2'	40mL Vial with Stir Bar-Cool 4° C
14H0523-11	TB-1	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C



## Notes and Definitions

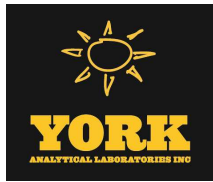
VOA-Air	Air bubbles were present in vial upon receipt by lab.
QL-02	This LCS analyte is outside Laboratory Recovery limits due the analyte behavior using the referenced method. The reference method has certain limitations with respect to analytes of this nature.
M-BCCB	Analyte in CCB > MDL. Sample conc. >10 X blank conc.
M-ACCB	Analyte in CCB. Run is bracketed by acceptable CCBs.
GC-Surr	Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the alternate surrogate.
B	Analyte is found in the associated analysis batch blank. For volatiles, methylene chloride and acetone are common lab contaminants. Data users should consider anything <10x the blank value as artifact.
<hr/>	
*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
Non-Dir.	Non-dir. flag (Non-Directional Bias ) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.



Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.

---

Corrective Action: The client requested additional testing for sample SB-3 0-1 on 8/19/14.

Revision Description: Separate report per Client



YORK ANALYTICAL LABORATORIES  
120 RESEARCH DR.  
STRATFORD, CT 06615  
(203) 325-1371  
FAX (203) 357-0166

**YORK**  
ANALYTICAL LABORATORIES INC.

# Field Chain-of-Custody Record

NOTE: York's Std. Terms & Conditions are listed on the back side of this document.  
This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions.

Page 1 of 2

York Project No. 1440523

<b>YOUR INFORMATION</b> Company: <u>Langan CT Inc</u> Address: <u>555 Long Wharf</u> <u>Mine, New Haven</u> Phone No. <u>203-362-5771</u> Contact Person: <u>H. Griesbach</u> E-Mail Address: <u>H.Griesbach@LANGAN.COM</u>		<b>Report To:</b> Company: <u>same</u> Address: _____ Phone No. _____ Attention: _____ E-Mail Address: _____		<b>Invoice To:</b> Company: <u>same</u> Address: _____ Phone No. _____ Attention: _____ E-Mail Address: _____		<b>YOUR PROJECT ID</b> <u>NEW Langan</u> <u>School</u> <b>Purchase Order No.</b> <u>140709001</u>		<b>Turn-Around Time</b> <input type="checkbox"/> RUSH - Same Day <input type="checkbox"/> RUSH - Next Day <input type="checkbox"/> RUSH - Two Day <input type="checkbox"/> RUSH - Three Day <input type="checkbox"/> RUSH - Four Day <b>Standard (5-7 Days)</b> <input checked="" type="checkbox"/>		<b>Report Type</b> <input type="checkbox"/> Summary Report <input type="checkbox"/> Summary w/ QA Summary <input checked="" type="checkbox"/> CT RCP Package <input type="checkbox"/> CTRCP DQA/DUE Pkg <input type="checkbox"/> NY ASP A Package <input type="checkbox"/> NY ASP B Package <input type="checkbox"/> NIDEP Red. Deliv. <b>Electronic Data Deliverables (EDD)</b> <input type="checkbox"/> Simple Excel <input checked="" type="checkbox"/> <input type="checkbox"/> NYSDEC EQUIS <input type="checkbox"/> EQUIS (std) <input type="checkbox"/> EZ-EDD (EQUIS) <input type="checkbox"/> NIDEP SRP HazSite EDD <input type="checkbox"/> GIS/KEY (std) <input type="checkbox"/> Other <b>York Regulatory Comparison</b> <input type="checkbox"/> Excel Spreadsheet Compare to the following Regs. (please fill in):	
---	--	---	--	--	--	---	--	---	--	--	--

Sample Identification	Date/Time Sampled	Sample Matrix	Choose Analyses Needed from the Menu Above and Enter Below	Container Description(s)
SB-1 4-5'	8-11-14 9:15	S	ETPH, VOCs, SVOCs, PCBs, pest./Herb, Metals	18oz jar
SB-2 5-6'	10:05			
SB-3 10-11'	10:30			
SB-4 4-5'	11:00			
SB-5 2-3'	11:30			
SB-6 2-3'	12:00			
SB-7 1-2'	12:20			
SB-8 1-2'	12:45			
SB-9 1-2'	10:25			
DUP 1-2'				
<b>Comments</b> RLs must meet CT RSR criteria please. ge <u>on deliverables</u> <u>(RWSH) STONY CO Langan. COM</u>		<b>Preservation</b> Check those Applicable Special Instructions <input type="checkbox"/> Field Filtered <input type="checkbox"/> Lab to Filter		
<b>Temperature on Receipt</b> <u>4.2</u> °C		<b>Samples Received By</b> <u>Michael G. Langan</u> <b>Date/Time</b> <u>8/11/14 14:50</u> <b>Samples Relinquished By</b> _____ <b>Date/Time</b> _____ <b>Samples Relinquished By</b> _____ <b>Date/Time</b> _____		





YORK ANALYTICAL LABORATORIES  
120 RESEARCH DR.  
STRATFORD, CT 06615  
(203) 325-1371  
FAX (203) 357-0166

# Field Chain-of-Custody Record

Page 2 of 2

York Project No. 14H0523

NOTE: York's Std. Terms & Conditions are listed on the back side of this document.  
This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions.

<b>YOUR Information</b> Company: Langan CT Inc Address: 555 Long Wharf Dr New Haven CT 06511 Phone No: 203-562-5771 Contact Person: H. Griesbach E-Mail Address: hgriesbach@langan.com		<b>Report To:</b> Company: Same Address: Phone No: Attention: E-Mail Address:		<b>Invoice To:</b> Company: same Address: Phone No: Attention: E-Mail Address:		<b>YOUR Project ID</b> New Lebanon School <b>Purchase Order No.</b> 140109001		<b>Turn-Around Time</b> <input type="checkbox"/> RUSH - Same Day <input type="checkbox"/> RUSH - Next Day <input type="checkbox"/> RUSH - Two Day <input type="checkbox"/> RUSH - Three Day <input type="checkbox"/> RUSH - Four Day <b>Standard (5-7 Days)</b> <input checked="" type="checkbox"/>		<b>Report Type</b> <input type="checkbox"/> Summary Report <input type="checkbox"/> Summary w/ QA Summary <input checked="" type="checkbox"/> CT RCP Package <input type="checkbox"/> CT RCP DOA/DUE Pkg <input type="checkbox"/> NY ASP A Package <input type="checkbox"/> NY ASP B Package <input type="checkbox"/> NIDEP Red. Deliv. Electronic Data Deliverables (EDD) <input type="checkbox"/> Simple Excel <input checked="" type="checkbox"/> Simple Excel <input type="checkbox"/> NYSDEC EQuIS <input type="checkbox"/> EQuIS (std) <input type="checkbox"/> EZ-EDD (EQuIS) <input type="checkbox"/> NIDEP SRP HazSite EDD <input type="checkbox"/> GIS/KEY (std) <input type="checkbox"/> Other <b>York Regulatory Comparison</b> <b>Excel Spreadsheet</b> Compare to the following Regs. (please fill in):	
--	--	--	--	---	--	--	--	---	--	--	--

<b>Sample Identification</b> TB-1		<b>Date/Time Sampled</b> - -	<b>Sample Matrix</b> Ag	<b>Choose Analyses Needed from the Menu Above and Enter Below</b> VOCs		<b>Container Description(s)</b> 2 VOCs
<b>Comments</b> L's must meet CT RSR criteria ease cc rwohlstrom@langan.com on deliverables		<b>Preservation</b> Check those Applicable Special Instructions <input type="checkbox"/> Field Filtered <input type="checkbox"/> Lab to Filter		<b>Temperature on Receipt</b> 4.2 °C		<b>Date/Time</b> 8/11/14 14:50

## **APPENDIX D**

# **WETLAND DELINEATION REPORT**

August 8, 2014

Ryan J Wohlstrom  
Project Engineer  
LANGAN Engineering  
Long Wharf Maritime Center  
555 Long Wharf Drive  
New Haven, CT 06511-6107

RE: Wetland delineation, New Lebanon School property, Greenwich

Dear Mr. Wohlstrom,

EPS was retained to delineate the wetlands and watercourses on the above referenced site. The wetland delineation was conducted by a soil scientist, according to the requirements of the CT Inland Wetlands and Watercourses Act (P.A. 155). Wetlands are defined as areas of poorly drained, very poorly drained, floodplain, and alluvial soils, as delineated by a soil scientist. Watercourses are defined as bogs, swamps, or marshes, as well as lakes, ponds, rivers, streams, etc., whether natural or man-made, permanent or intermittent.

The wetland and watercourse delineation was conducted on August 7, 2014 by examining the upper 20" of the soil profile with an auger. Those areas meeting the requirements noted above were marked with blue plastic tape labeled "WL" and numbered 1/16. A single wetland was delineated in the low swale located downslope (southeast) of the existing building. This wetland has been historically altered, as indicated by the presence of shallow fill, the presence of underdrains (two inlets were observed, outlet location unknown) and compacted gravelly fill located in areas immediately adjacent to the wetland.

Based on field observations as well as a review of the Natural Resources Conservation Service's Soil Survey Geographic Database (SSURGO), wetland soils consist of Aquents. The Aquents map unit is a miscellaneous land type used to denote man-made or man-disturbed areas that are wet. These soils have an aquic soil moisture regime and can be expected to support hydrophytic vegetation. Typically, these soils occur in places where less than 2 feet of earthen material have been placed over poorly or very poorly drained soils; areas where the natural soils have been mixed so that the natural soil layers are not identifiable; or where the soil materials have been excavated to the watertable.

Upland (non-wetland) soils consist of the Udorthents as well as the Hollis-Chatfield-rock outcrop complex. The Hollis series consists of shallow, well drained and somewhat excessively drained soils formed in a thin mantle of glacial till derived mainly from gneiss, schist, and granite. They are nearly level to very steep upland soils on bedrock controlled hills and ridges. Depth to hard bedrock ranges from 10 to 20 inches. Bedrock outcrops vary from few to many.

The Chatfield series consists of moderately deep, well drained, and somewhat excessively drained soils formed in till. They are nearly level to very steep soils on glaciated plains, hills, and ridges. Slope ranges



from 0 to 70 percent. Crystalline bedrock is at depths of 20 to 40 inches. The soils formed in a moderately thick mantle of glacial till overlying granite, gneiss, or schist bedrock. Rock outcrops are rare to common and are limited to the more resistant bedrock.

Udorthents is a miscellaneous land type used to denote moderately well to excessively drained earthen material which has been so disturbed by cutting, filling, or grading that the original soil profile can no longer be discerned.

If you have any questions regarding my findings please feel free to contact me.

Respectfully submitted,



Eric Davison

*Registered Soil Scientist*

*Certified Professional Wetland Scientist*



**WETLAND SKETCH MAP**  
New Lebanon School,  
Greenwich

Map showing wetlands  
delineated by Eric Davison of  
Environmental Planning  
Services, LLC, August 8, 2014.  
The location and extent of  
wetlands is approximate only.  
This map is intended for  
surveying purposes.

Wetland  
demarcated by  
flags 1/16  
(closed loop)





20 April 2015

Mr. Ryan Malin  
AKT Group, LLC  
750 East Main Street, Suite 501  
Stamford, CT 06902

**Re: Limited Supplemental Phase II Environmental Site Investigation  
William Street Baseball Field  
William Street West and Church Street  
Greenwich, Connecticut  
Langan Project No.: 140109002**

Dear Mr. Malin,

Langan CT, Inc. (Langan) prepared this report to document the results of the Limited Supplemental Phase II Environmental Site Investigation (ESI) performed on behalf of AKF Group, LLC (AKF) for the William Street Baseball Field located at the intersection of William Street West and Church Street in the Town of Greenwich, Connecticut (hereafter referred to as the "Site"). The Site encompasses approximately 55,000 square feet (SF) and is part of three tax lots designated as Parcel ID's 04-4500/S, 04-4502/S, and 04-4506/S by the Greenwich Tax Assessor. The Site is improved with a public baseball field.

This letter report describes the sampling methodology, field observations, and analytical results of the shallow subsurface investigation, which included the completion of 20 shallow hand auger soil borings (0 to 1 feet bgs) to further investigate the presence and/or extent of arsenic-impacted soils at the Site.

## **PREVIOUS ENVIRONMENTAL INVESTIGATION**

Langan conducted a Limited Phase II ESI on the Site on 11 August 2014, which included the completion of a geophysical survey, the oversight of three environmental soil borings, and the collection/analysis of three shallow soil samples. Soil analytical testing data obtained during the Limited Phase II ESI was compared to the Connecticut Department of Energy and Environmental Protection's (CTDEEP) Remediation Standard Regulations (RSRs) Residential Direct Exposure Criteria (RDEC) and the Industrial/Commercial Direct Exposure Criteria (I/C DEC), which in both cases is 10 milligrams per kilogram (mg/kg). The DEC is established to protect human health from risks associated with direct exposure to pollutants in contaminated soil within 15 feet of the ground surface. Laboratory analytical results of the subsurface material identified concentrations of arsenic exceeding the DEC in two of the three borings at depths ranging from 1 to 2 feet below grade surface (bgs). Arsenic was detected at a

concentration of 144 and 89.2 mg/kg in SB-7 and SB-8, respectively, above the DEC of 10 mg/kg.

Based on a review of historical aerial photographs, the baseball field was constructed sometime before 1934 and the source of material used to grade and construct the baseball field is unknown.

## **FIELD INVESTIGATION**

Langan implemented a supplemental field investigation on 24 March 2015 to further investigate the presence and/or extent of shallow arsenic-impacted soils at the William Street Baseball Field. Our scope included the completion of 20 shallow hand auger soil borings (0 to 1 feet bgs) and collection of 20 grab soil samples (plus one duplicate sample). Soil sampling procedures and results are discussed below. A summary of the environmental samples laboratory analytical data is provided in Table 1 and the soil boring locations are shown on Figure 2. All samples were analyzed by a CTDPH certified laboratory, York Analytical Laboratories of Stratford, Connecticut.

### Soil Investigation

On 24 March 2015, 20 soil borings (HA-1 through HA-20) were advanced by a Langan field engineer at the locations shown on Figure 2. The sampling locations were spatially located based on a grid system to cover the entire footprint of the baseball field (including the infield and dugout areas) at a frequency of approximately 1 sample per 2,700 SF. A hand auger and posthole digger were used to collect the samples. The borings were advanced to a depth of approximately 1 ft bgs, and one discrete (grab) soil sample was collected from each boring. The hand auger and posthole digger were decontaminated between boring locations with a non-phosphate detergent (Liquinox) and water wash and fresh water rinse. Quality assurance/quality control (QA/QC) measures included the collection of one duplicate soil sample (DUP-1), which was collected from boring HA-13, and the collection of one field blank off of the decontaminated sampling equipment. The soil samples and QA/QC samples were submitted to York Analytical Laboratories under a standard chain-of-custody protocol for analysis of Arsenic. A summary of soil analytical data is presented in Table 1. Analytical reports and chain-of-custody documentation are provided in Attachment A.

## **OBSERVATIONS AND RESULTS**

### Soil Sample Analytical Results

Twenty-one soil samples were submitted for laboratory analysis, including one duplicate sample. Analytical results were compared to the RDEC and I/C DEC. The soil analytical results are presented in Table 1 and Figure 2.

## **Arsenic**

Arsenic was detected at concentrations exceeding the RDEC and I/C DEC, both established at 10 mg/kg, in five soil samples (plus the duplicate QA/QC sample). These samples included HA-5 (94.3 mg/kg), HA-6 (214 mg/kg), HA-8 (16.7 mg/kg), HA-10 (18 mg/kg), HA-13 (132 mg/kg), and DUP-1 (152 mg/kg). Arsenic was detected in the remaining samples at concentrations above laboratory report limits but below the RDEC and I/C DEC. Arsenic was not detected in the field blank above laboratory reporting limits.

## **CONCLUSIONS**

This Limited Supplemental Phase II ESI included the completion of 20 environmental soil borings, and the collection/analysis of 21 soil samples for arsenic. Soil analytical testing data was compared to the CTDEEP RSR Direct Exposure Criteria (DEC). Our conclusions are as follows:

- Laboratory analytical results of the shallow subsurface material (0 to 1 feet bgs) identified concentrations of arsenic ranging from 16.7 to 214 mg/kg, exceeding the DEC of 10 mg/kg, in 5 of the 20 sampling locations throughout the Site.

This letter report does not constitute a full characterization of the site soils. Should future work yield an export of soils, we would recommend a waste characterization sampling program to characterize those soils slated for export.

## **LIMITATIONS**

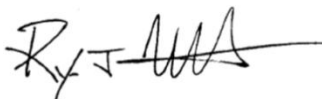
This Supplementary Limited Phase II ESI report was prepared expressly for the AKF Group, LLC for the William Street Baseball Field property located at the intersection of William Street West and Church Street, and for the objectives defined herein. Langan cannot assume responsibility for the use of this report for any property other than the specific site addressed in this report, or by any third party without specific written authorization from Langan.

The conclusions and opinions provided in this report are based on subsurface conditions ascertained from the analysis of a limited number of samples. Actual conditions encountered may differ substantially from those presented herein and should be brought to our attention whereby we may determine how such changes may affect our conclusions.

## CLOSURE

Should you have any questions regarding the findings presented in this report, please feel free to call us at 203-784-3069.

Sincerely,  
**Langan CT, Inc.**



Ryan J. Wohlstrom  
Project Engineer



Jamie P. Barr, L.E.P.  
Senior Associate/Vice President

Enclosures: Table 1 – Soil Sample Analytical Results  
Figure 1 – Site Location Map  
Figure 2 – Soil Analytical Results Map  
Attachment A – Laboratory Analytical Report

## TABLES



Table 1  
Soil Sample Analytical Results  
William Street Baseball Field  
Greenwich, Connecticut  
140109002

Sample ID Depth of Sample (ft)	Residential Direct Exposure Criteria (mg/kg)	Indus./Comm. Direct Exposure Criteria (mg/kg)	HA-1 0 - 1	HA-2 0 - 1	HA-3 0 - 1	HA-4 0 - 1	HA-5 0 - 1	HA-6 0 - 1	HA-7 0 - 1	HA-8 0 - 1	HA-9 0 - 1	HA-10 0 - 1	HA-11 0 - 1	HA-12 0 - 1	HA-13 0 - 1
Parameters Sample Date			3/24/2015	3/24/2015	3/24/2015	3/24/2015	3/24/2015	3/24/2015	3/24/2015	3/24/2015	3/24/2015	3/24/2015	3/24/2015	3/24/2015	3/24/2015
Metals (mg/kg)															
Arsenic	10	10	9.35	5.85	5.94	7.46	94.3	214	6.36	16.7	5.89	18	6.83	7.36	132

NOTES:

Soil analytical results were compared to Connecticut Department of Energy and Environmental Protection’s (CTDEEP) Remediation Standard Regulations (RSRs) esidential Direct Exposure Criteria (RDEC) and the Industrial/Commercial Direct Exposure Criteria (I/C DEC),

Shading indicates an exceedance of the Residential and Indus./Comm. Direct Exposure Criteria

Table 1  
Soil Sample Analytical Results  
William Street Baseball Field  
Greenwich, Connecticut  
140109002

Sample ID	Residential	Indus./Comm.	DUP-1	HA-14	HA-15	HA-16	HA-17	HA-18	HA-19	HA-20
Depth of Sample (ft)	Direct Exposure	Direct Exposure	(HA-13)	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1
Parameters	Criteria	Criteria	3/24/2015	3/24/2015	3/24/2015	3/24/2015	3/24/2015	3/24/2015	3/24/2015	3/24/2015
Sample Date	(mg/kg)	(mg/kg)								
<b>Metals (mg/kg)</b>										
Arsenic	10	10	152	6.39	7.51	4.73	8.9	5.22	4.21	6.93

NOTES:

Soil analytical results were compared to Connecticut Department of Energy and Environmental Protection’s (CTDEEP) Remediation Standard Regulations (RSRs) residential Direct Exposure Criteria (RDEC) and the Industrial/Commercial Direct Exposure Criteria (I/C DEC),

Shading indicates an exceedance of the Residential and Indus./Comm. Direct Exposure Criteria

## FIGURES



**LANGAN**  
ENGINEERING & ENVIRONMENTAL SERVICES

555 Long Wharf Drive  
New Haven, CT 06511-6107  
T: 203.562.5771 F: 203.789.6142  
www.langan.com

NEW JERSEY NEW YORK VIRGINIA CALIFORNIA  
PENNSYLVANIA CONNECTICUT FLORIDA

ABU DHABI ATHENS DOHA  
DUBAI ISTANBUL

Project

**WILLIAM STREET  
BASEBALL FIELD**

GREENWICH

FAIRFIELD COUNTY CONNECTICUT

Drawing Title

**SITE LOCATION  
PLAN**

Project No.

140109002

Date

4/13/2015

Scale

1"=1,000'

Drawn By

KTZ

Submission Date

4/13/2015

Figure

1





LEGEND

SOIL BORING SAMPLE LOCATION WITH ARSENIC CONCENTRATIONS EXCEEDING DIRECT EXPOSURE CRITERIA

SOIL BORING SAMPLE LOCATION WITH ARSENIC CONCENTRATIONS BELOW CTDEEP RSR CRITERIA

NOTES

1.

SOIL SAMPLES WERE COLLECTED BY LANGAN FIELD ENGINEERING ON 3/24/2015. ALL SAMPLES WERE COLLECTED AT A DEPTH OF 0 TO 1 FEET BELOW GROUND SURFACE.

2.

AERIAL BASEMAP IS PROVIDED THROUGH LANGAN'S ESRI ARCGIS SOFTWARE LICENSING AND ARCGIS ONLINE.

3.

BORING LOCATIONS ARE LOCATED BASED ON GPS COORDINATES COLLECTED DURING SAMPLING.

4.

SHADED ARSENIC CONCENTRATIONS INDICATE AN EXCEEDENCE OF CT DEEP DIRECT EXPOSURE CRITERIA.

CT DEEP REMEDIATION REGULATION STANDARDS		
	Residential Direct Exposure Criteria (mg/kg)	Indus./Comm. Direct Exposure Criteria (mg/kg)
Metals		
Arsenic	10	10



WARNING: IT IS A VIOLATION OF THE NYS EDUCATION LAW ARTICLE 145 FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS ITEM IN ANY WAY.

**LANGAN**

555 Long Wharf Drive  
New Haven, CT 06511  
T: 203.562.5771 F: 203.789.6142 www.langan.com  
Langan Engineering, Environmental, Surveying and Landscape Architecture, D.P.C. S.A.  
Langan Engineering, Environmental, Surveying and Landscape Architecture, D.P.C.  
Langan Engineering and Environmental Services, Inc.  
Langan CT, Inc.  
Langan International LLC  
Collectively known as Langan

Project

**WILLIAM STREET  
BASEBALL FIELD**

GREENWICH  
FAIRFIELD COUNTY CONNECTICUT

Drawing Title

**SOIL  
ANALYTICAL  
RESULTS  
MAP**

Project No.  
140109002

Date  
4/13/2015

Scale  
1"=40'

Drawn By  
KTZ

Checked By  
RW

Submission Date  
4/13/2015

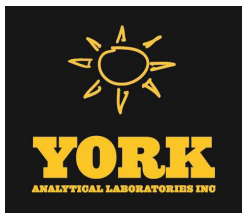
Figure No.

**2**

Sheet 2 of 2

## **ATTACHMENT A**

Laboratory Analytical Report



# Technical Report

prepared for:

**Langan Engineering & Environmental Services (CT)**

Long Wharf Maritime Center, 555 Long Wharf Drive

New Haven CT, 06511

**Attention: Kyle Zalaski**

Report Date: 03/26/2015

**Client Project ID: 140109001**

York Project (SDG) No.: 15C0756

CT Cert. No. PH-0723

New Jersey Cert. No. CT-005



New York Cert. No. 10854

PA Cert. No. 68-04440



Report Date: 03/26/2015  
Client Project ID: 140109001  
York Project (SDG) No.: 15C0756

**Langan Engineering & Environmental Services (CT)**  
Long Wharf Maritime Center, 555 Long Wharf Drive  
New Haven CT, 06511  
Attention: Kyle Zalaski

---

## Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on March 24, 2015 and listed below. The project was identified as your project: **140109001**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Notes section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the attachment to this report, and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
15C0756-01	HA-1 0-1	Soil	03/24/2015	03/24/2015
15C0756-02	HA-2 0-1	Soil	03/24/2015	03/24/2015
15C0756-03	HA-3 0-1	Soil	03/24/2015	03/24/2015
15C0756-04	HA-4 0-1	Soil	03/24/2015	03/24/2015
15C0756-05	HA-5 0-1	Soil	03/24/2015	03/24/2015
15C0756-06	HA-6 0-1	Soil	03/24/2015	03/24/2015
15C0756-07	HA-7 0-1	Soil	03/24/2015	03/24/2015
15C0756-08	HA-8 0-1	Soil	03/24/2015	03/24/2015
15C0756-09	HA-9 0-1	Soil	03/24/2015	03/24/2015
15C0756-10	HA-10 0-1	Soil	03/24/2015	03/24/2015
15C0756-11	HA-11 0-1	Soil	03/24/2015	03/24/2015
15C0756-12	HA-12 0-1	Soil	03/24/2015	03/24/2015
15C0756-13	HA-13 0-1	Soil	03/24/2015	03/24/2015
15C0756-14	HA-14 0-1	Soil	03/24/2015	03/24/2015
15C0756-15	HA-15 0-1	Soil	03/24/2015	03/24/2015
15C0756-16	HA-16 0-1	Soil	03/24/2015	03/24/2015
15C0756-17	HA-17 0-1	Soil	03/24/2015	03/24/2015
15C0756-18	HA-18 0-1	Soil	03/24/2015	03/24/2015
15C0756-19	HA-19 0-1	Soil	03/24/2015	03/24/2015
15C0756-20	HA-20 0-1	Soil	03/24/2015	03/24/2015
15C0756-21	DUP-1	Soil	03/24/2015	03/24/2015
15C0756-22	Field Blank	Water	03/24/2015	03/24/2015

## **General Notes for York Project (SDG) No.: 15C0756**

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All samples were received in proper condition for analysis with proper documentation, unless otherwise noted.
6. All analyses conducted met method or Laboratory SOP requirements. See the Qualifiers and/or Narrative sections for further information.
7. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
8. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.

**Approved By:**



**Benjamin Gulizia**  
Laboratory Director

**Date:** 03/26/2015





### Sample Information

**Client Sample ID:** HA-1 0-1

**York Sample ID:** 15C0756-01

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

15C0756

140109001

Soil

March 24, 2015 9:49 am

03/24/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	9.35		mg/kg dry	1.32	1.32	1	EPA 6010C	03/25/2015 14:06	03/25/2015 17:19	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	75.5		%	0.100	0.100	1	SM 2540G	03/24/2015 22:15	03/25/2015 16:13	KK

### Sample Information

**Client Sample ID:** HA-2 0-1

**York Sample ID:** 15C0756-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

15C0756

140109001

Soil

March 24, 2015 9:59 am

03/24/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	5.85		mg/kg dry	1.23	1.23	1	EPA 6010C	03/25/2015 14:06	03/25/2015 17:36	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	81.3		%	0.100	0.100	1	SM 2540G	03/24/2015 22:15	03/25/2015 16:13	KK

### Sample Information

**Client Sample ID:** HA-3 0-1

**York Sample ID:** 15C0756-03

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

15C0756

140109001

Soil

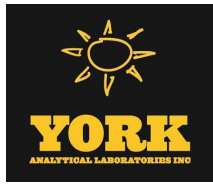
March 24, 2015 10:08 am

03/24/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:



### Sample Information

**Client Sample ID:** HA-3 0-1

**York Sample ID:** 15C0756-03

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
15C0756	140109001	Soil	March 24, 2015 10:08 am	03/24/2015

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	5.94		mg/kg dry	1.32	1.32	1	EPA 6010C	03/25/2015 14:06	03/25/2015 17:41	MW

### Total Solids

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	75.5		%	0.100	0.100	1	SM 2540G	03/24/2015 22:16	03/25/2015 16:17	KK

### Sample Information

**Client Sample ID:** HA-4 0-1

**York Sample ID:** 15C0756-04

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
15C0756	140109001	Soil	March 24, 2015 10:16 am	03/24/2015

### Arsenic by EPA 6010

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	7.46		mg/kg dry	1.26	1.26	1	EPA 6010C	03/25/2015 14:06	03/25/2015 17:46	MW

### Total Solids

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	79.6		%	0.100	0.100	1	SM 2540G	03/24/2015 22:16	03/25/2015 16:17	KK

### Sample Information

**Client Sample ID:** HA-5 0-1

**York Sample ID:** 15C0756-05

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
15C0756	140109001	Soil	March 24, 2015 10:49 am	03/24/2015

### Arsenic by EPA 6010

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
---------	-----------	--------	------	-------	---------	--------------------	----------	------------------	-----------------------	-----------------------	---------



### Sample Information

**Client Sample ID:** HA-5 0-1

**York Sample ID:** 15C0756-05

York Project (SDG) No.  
15C0756

Client Project ID  
140109001

Matrix  
Soil

Collection Date/Time  
March 24, 2015 10:49 am

Date Received  
03/24/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	94.3		mg/kg dry	1.23	1.23	1	EPA 6010C	03/25/2015 14:06	03/25/2015 17:50	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	81.6		%	0.100	0.100	1	SM 2540G	03/24/2015 22:16	03/25/2015 16:17	KK

### Sample Information

**Client Sample ID:** HA-6 0-1

**York Sample ID:** 15C0756-06

York Project (SDG) No.  
15C0756

Client Project ID  
140109001

Matrix  
Soil

Collection Date/Time  
March 24, 2015 10:40 am

Date Received  
03/24/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	214		mg/kg dry	1.21	1.21	1	EPA 6010C	03/25/2015 14:06	03/25/2015 17:55	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	82.6		%	0.100	0.100	1	SM 2540G	03/24/2015 22:16	03/25/2015 16:17	KK

### Sample Information

**Client Sample ID:** HA-7 0-1

**York Sample ID:** 15C0756-07

York Project (SDG) No.  
15C0756

Client Project ID  
140109001

Matrix  
Soil

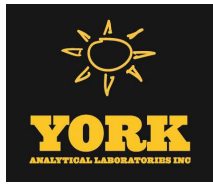
Collection Date/Time  
March 24, 2015 10:32 am

Date Received  
03/24/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:



### Sample Information

**Client Sample ID:** HA-7 0-1

**York Sample ID:** 15C0756-07

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
15C0756	140109001	Soil	March 24, 2015 10:32 am	03/24/2015

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	6.36		mg/kg dry	1.24	1.24	1	EPA 6010C	03/25/2015 14:06	03/25/2015 18:12	MW

### Total Solids

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	81.0		%	0.100	0.100	1	SM 2540G	03/24/2015 22:16	03/25/2015 16:17	KK

### Sample Information

**Client Sample ID:** HA-8 0-1

**York Sample ID:** 15C0756-08

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
15C0756	140109001	Soil	March 24, 2015 10:24 am	03/24/2015

### Arsenic by EPA 6010

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	16.7		mg/kg dry	1.26	1.26	1	EPA 6010C	03/25/2015 14:06	03/25/2015 18:17	MW

### Total Solids

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	79.1		%	0.100	0.100	1	SM 2540G	03/24/2015 22:16	03/25/2015 16:17	KK

### Sample Information

**Client Sample ID:** HA-9 0-1

**York Sample ID:** 15C0756-09

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
15C0756	140109001	Soil	March 24, 2015 10:58 am	03/24/2015

### Arsenic by EPA 6010

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
---------	-----------	--------	------	-------	---------	--------------------	----------	------------------	-----------------------	-----------------------	---------



### Sample Information

**Client Sample ID:** HA-9 0-1

**York Sample ID:** 15C0756-09

York Project (SDG) No.  
15C0756

Client Project ID  
140109001

Matrix  
Soil

Collection Date/Time  
March 24, 2015 10:58 am

Date Received  
03/24/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	5.89		mg/kg dry	1.16	1.16	1	EPA 6010C	03/25/2015 14:06	03/25/2015 18:21	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	86.4		%	0.100	0.100	1	SM 2540G	03/24/2015 22:16	03/25/2015 16:17	KK

### Sample Information

**Client Sample ID:** HA-10 0-1

**York Sample ID:** 15C0756-10

York Project (SDG) No.  
15C0756

Client Project ID  
140109001

Matrix  
Soil

Collection Date/Time  
March 24, 2015 11:07 am

Date Received  
03/24/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	18.0		mg/kg dry	1.16	1.16	1	EPA 6010C	03/25/2015 14:06	03/25/2015 18:26	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	86.3		%	0.100	0.100	1	SM 2540G	03/24/2015 22:16	03/25/2015 16:17	KK

### Sample Information

**Client Sample ID:** HA-11 0-1

**York Sample ID:** 15C0756-11

York Project (SDG) No.  
15C0756

Client Project ID  
140109001

Matrix  
Soil

Collection Date/Time  
March 24, 2015 11:21 am

Date Received  
03/24/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:





### Sample Information

**Client Sample ID:** HA-11 0-1

**York Sample ID:** 15C0756-11

York Project (SDG) No.  
15C0756

Client Project ID  
140109001

Matrix  
Soil

Collection Date/Time  
March 24, 2015 11:21 am

Date Received  
03/24/2015

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	6.83		mg/kg dry	1.22	1.22	1	EPA 6010C	03/25/2015 14:06	03/25/2015 18:31	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	82.3		%	0.100	0.100	1	SM 2540G	03/24/2015 22:16	03/25/2015 16:17	KK

### Sample Information

**Client Sample ID:** HA-12 0-1

**York Sample ID:** 15C0756-12

York Project (SDG) No.  
15C0756

Client Project ID  
140109001

Matrix  
Soil

Collection Date/Time  
March 24, 2015 11:30 am

Date Received  
03/24/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	7.36		mg/kg dry	1.21	1.21	1	EPA 6010C	03/25/2015 14:06	03/25/2015 18:36	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	82.7		%	0.100	0.100	1	SM 2540G	03/24/2015 22:16	03/25/2015 16:17	KK

### Sample Information

**Client Sample ID:** HA-13 0-1

**York Sample ID:** 15C0756-13

York Project (SDG) No.  
15C0756

Client Project ID  
140109001

Matrix  
Soil

Collection Date/Time  
March 24, 2015 11:56 am

Date Received  
03/24/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
---------	-----------	--------	------	-------	---------	--------------------	----------	------------------	-----------------------	-----------------------	---------



### Sample Information

**Client Sample ID:** HA-13 0-1

**York Sample ID:** 15C0756-13

York Project (SDG) No.  
15C0756

Client Project ID  
140109001

Matrix  
Soil

Collection Date/Time  
March 24, 2015 11:56 am

Date Received  
03/24/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	132		mg/kg dry	1.26	1.26	1	EPA 6010C	03/25/2015 14:06	03/25/2015 18:40	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	79.6		%	0.100	0.100	1	SM 2540G	03/24/2015 22:16	03/25/2015 16:17	KK

### Sample Information

**Client Sample ID:** HA-14 0-1

**York Sample ID:** 15C0756-14

York Project (SDG) No.  
15C0756

Client Project ID  
140109001

Matrix  
Soil

Collection Date/Time  
March 24, 2015 11:46 am

Date Received  
03/24/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	6.39		mg/kg dry	1.21	1.21	1	EPA 6010C	03/25/2015 14:06	03/25/2015 18:45	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	82.6		%	0.100	0.100	1	SM 2540G	03/24/2015 22:16	03/25/2015 16:17	KK

### Sample Information

**Client Sample ID:** HA-15 0-1

**York Sample ID:** 15C0756-15

York Project (SDG) No.  
15C0756

Client Project ID  
140109001

Matrix  
Soil

Collection Date/Time  
March 24, 2015 11:38 am

Date Received  
03/24/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:



### Sample Information

**Client Sample ID:** HA-15 0-1

**York Sample ID:** 15C0756-15

York Project (SDG) No.  
15C0756

Client Project ID  
140109001

Matrix  
Soil

Collection Date/Time  
March 24, 2015 11:38 am

Date Received  
03/24/2015

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	7.51		mg/kg dry	1.21	1.21	1	EPA 6010C	03/25/2015 14:06	03/25/2015 18:49	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	82.6		%	0.100	0.100	1	SM 2540G	03/24/2015 22:16	03/25/2015 16:17	KK

### Sample Information

**Client Sample ID:** HA-16 0-1

**York Sample ID:** 15C0756-16

York Project (SDG) No.  
15C0756

Client Project ID  
140109001

Matrix  
Soil

Collection Date/Time  
March 24, 2015 12:07 pm

Date Received  
03/24/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	4.73		mg/kg dry	1.15	1.15	1	EPA 6010C	03/25/2015 14:06	03/25/2015 18:54	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	87.3		%	0.100	0.100	1	SM 2540G	03/24/2015 22:16	03/25/2015 16:17	KK

### Sample Information

**Client Sample ID:** HA-17 0-1

**York Sample ID:** 15C0756-17

York Project (SDG) No.  
15C0756

Client Project ID  
140109001

Matrix  
Soil

Collection Date/Time  
March 24, 2015 12:16 pm

Date Received  
03/24/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
---------	-----------	--------	------	-------	---------	--------------------	----------	------------------	-----------------------	-----------------------	---------



### Sample Information

**Client Sample ID:** HA-17 0-1

**York Sample ID:** 15C0756-17

York Project (SDG) No.  
15C0756

Client Project ID  
140109001

Matrix  
Soil

Collection Date/Time  
March 24, 2015 12:16 pm

Date Received  
03/24/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	8.90		mg/kg dry	1.14	1.14	1	EPA 6010C	03/25/2015 14:06	03/25/2015 19:11	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	87.5		%	0.100	0.100	1	SM 2540G	03/24/2015 22:16	03/25/2015 16:17	KK

### Sample Information

**Client Sample ID:** HA-18 0-1

**York Sample ID:** 15C0756-18

York Project (SDG) No.  
15C0756

Client Project ID  
140109001

Matrix  
Soil

Collection Date/Time  
March 24, 2015 12:25 pm

Date Received  
03/24/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	5.22		mg/kg dry	1.24	1.24	1	EPA 6010C	03/25/2015 14:06	03/25/2015 19:16	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	80.9		%	0.100	0.100	1	SM 2540G	03/24/2015 22:16	03/25/2015 16:17	KK

### Sample Information

**Client Sample ID:** HA-19 0-1

**York Sample ID:** 15C0756-19

York Project (SDG) No.  
15C0756

Client Project ID  
140109001

Matrix  
Soil

Collection Date/Time  
March 24, 2015 12:38 pm

Date Received  
03/24/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:



### Sample Information

**Client Sample ID:** HA-19 0-1

**York Sample ID:** 15C0756-19

York Project (SDG) No.  
15C0756

Client Project ID  
140109001

Matrix  
Soil

Collection Date/Time  
March 24, 2015 12:38 pm

Date Received  
03/24/2015

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	4.21		mg/kg dry	1.27	1.27	1	EPA 6010C	03/25/2015 14:06	03/25/2015 19:21	MW

### Total Solids

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	78.7		%	0.100	0.100	1	SM 2540G	03/24/2015 22:16	03/25/2015 16:17	KK

### Sample Information

**Client Sample ID:** HA-20 0-1

**York Sample ID:** 15C0756-20

York Project (SDG) No.  
15C0756

Client Project ID  
140109001

Matrix  
Soil

Collection Date/Time  
March 24, 2015 12:48 pm

Date Received  
03/24/2015

### Arsenic by EPA 6010

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	6.93		mg/kg dry	1.22	1.22	1	EPA 6010C	03/25/2015 14:06	03/25/2015 19:25	MW

### Total Solids

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	81.9		%	0.100	0.100	1	SM 2540G	03/24/2015 22:16	03/25/2015 16:17	KK

### Sample Information

**Client Sample ID:** DUP-1

**York Sample ID:** 15C0756-21

York Project (SDG) No.  
15C0756

Client Project ID  
140109001

Matrix  
Soil

Collection Date/Time  
March 24, 2015 12:00 am

Date Received  
03/24/2015

### Arsenic by EPA 6010

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
---------	-----------	--------	------	-------	---------	--------------------	----------	------------------	-----------------------	-----------------------	---------



### Sample Information

**Client Sample ID:** DUP-1

**York Sample ID:** 15C0756-21

York Project (SDG) No.  
15C0756

Client Project ID  
140109001

Matrix  
Soil

Collection Date/Time  
March 24, 2015 12:00 am

Date Received  
03/24/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	152		mg/kg dry	1.27	1.27	1	EPA 6010C	03/25/2015 14:07	03/25/2015 20:17	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	79.1		%	0.100	0.100	1	SM 2540G	03/24/2015 22:16	03/25/2015 16:17	KK

### Sample Information

**Client Sample ID:** Field Blank

**York Sample ID:** 15C0756-22

York Project (SDG) No.  
15C0756

Client Project ID  
140109001

Matrix  
Water

Collection Date/Time  
March 24, 2015 1:00 pm

Date Received  
03/24/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	ND		mg/L	0.00400	0.00400	1	EPA 6010C	03/25/2015 14:15	03/26/2015 01:48	MW



## Analytical Batch Summary

**Batch ID:** BC50936

**Preparation Method:** % Solids Prep

**Prepared By:** KK

YORK Sample ID	Client Sample ID	Preparation Date
15C0756-01	HA-1 0-1	03/24/15
15C0756-02	HA-2 0-1	03/24/15
BC50936-DUP1	Duplicate	03/24/15

**Batch ID:** BC50937

**Preparation Method:** % Solids Prep

**Prepared By:** KK

YORK Sample ID	Client Sample ID	Preparation Date
15C0756-03	HA-3 0-1	03/24/15
15C0756-04	HA-4 0-1	03/24/15
15C0756-05	HA-5 0-1	03/24/15
15C0756-06	HA-6 0-1	03/24/15
15C0756-07	HA-7 0-1	03/24/15
15C0756-08	HA-8 0-1	03/24/15
15C0756-09	HA-9 0-1	03/24/15
15C0756-10	HA-10 0-1	03/24/15
15C0756-11	HA-11 0-1	03/24/15
15C0756-12	HA-12 0-1	03/24/15
15C0756-13	HA-13 0-1	03/24/15
15C0756-14	HA-14 0-1	03/24/15
15C0756-15	HA-15 0-1	03/24/15
15C0756-16	HA-16 0-1	03/24/15
15C0756-17	HA-17 0-1	03/24/15
15C0756-18	HA-18 0-1	03/24/15
15C0756-19	HA-19 0-1	03/24/15
15C0756-20	HA-20 0-1	03/24/15
15C0756-21	DUP-1	03/24/15

**Batch ID:** BC50979

**Preparation Method:** EPA 3050B

**Prepared By:** MW

YORK Sample ID	Client Sample ID	Preparation Date
15C0756-01	HA-1 0-1	03/25/15
15C0756-02	HA-2 0-1	03/25/15
15C0756-03	HA-3 0-1	03/25/15
15C0756-04	HA-4 0-1	03/25/15
15C0756-05	HA-5 0-1	03/25/15
15C0756-06	HA-6 0-1	03/25/15
15C0756-07	HA-7 0-1	03/25/15
15C0756-08	HA-8 0-1	03/25/15
15C0756-09	HA-9 0-1	03/25/15
15C0756-10	HA-10 0-1	03/25/15
15C0756-11	HA-11 0-1	03/25/15
15C0756-12	HA-12 0-1	03/25/15
15C0756-13	HA-13 0-1	03/25/15
15C0756-14	HA-14 0-1	03/25/15
15C0756-15	HA-15 0-1	03/25/15





15C0756-16	HA-16 0-1	03/25/15
15C0756-17	HA-17 0-1	03/25/15
15C0756-18	HA-18 0-1	03/25/15
15C0756-19	HA-19 0-1	03/25/15
15C0756-20	HA-20 0-1	03/25/15
BC50979-BLK1	Blank	03/25/15
BC50979-DUP1	Duplicate	03/25/15
BC50979-MS1	Matrix Spike	03/25/15
BC50979-SRM1	Reference	03/25/15

**Batch ID:** BC50980      **Preparation Method:** EPA 3050B      **Prepared By:** MW

YORK Sample ID	Client Sample ID	Preparation Date
15C0756-21	DUP-1	03/25/15
BC50980-BLK1	Blank	03/25/15
BC50980-SRM1	Reference	03/25/15

**Batch ID:** BC50984      **Preparation Method:** EPA 3010A      **Prepared By:** MW

YORK Sample ID	Client Sample ID	Preparation Date
15C0756-22	Field Blank	03/25/15
BC50984-BLK1	Blank	03/25/15
BC50984-SRM1	Reference	03/25/15



## Metals by ICP - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BC50979 - EPA 3050B</b>											
<b>Blank (BC50979-BLK1)</b>						Prepared & Analyzed: 03/25/2015					
Arsenic	ND	1.00	mg/kg wet								
<b>Duplicate (BC50979-DUP1)</b>						*Source sample: 15C0756-01 (HA-1 0-1) Prepared & Analyzed: 03/25/2015					
Arsenic	9.05	1.32	mg/kg dry		9.35				3.27	35	
<b>Matrix Spike (BC50979-MS1)</b>						*Source sample: 15C0756-01 (HA-1 0-1) Prepared & Analyzed: 03/25/2015					
Arsenic	271	1.32	mg/kg dry	265	9.35	98.9	75-125				
<b>Reference (BC50979-SRM1)</b>						Prepared & Analyzed: 03/25/2015					
Arsenic	155	1.00	mg/kg wet	151		103	70.9-130				
<b>Batch BC50980 - EPA 3050B</b>											
<b>Blank (BC50980-BLK1)</b>						Prepared & Analyzed: 03/25/2015					
Arsenic	ND	1.00	mg/kg wet								
<b>Reference (BC50980-SRM1)</b>						Prepared & Analyzed: 03/25/2015					
Arsenic	149	1.00	mg/kg wet	151		98.9	70.9-130				
<b>Batch BC50984 - EPA 3010A</b>											
<b>Blank (BC50984-BLK1)</b>						Prepared: 03/25/2015 Analyzed: 03/26/2015					
Arsenic	ND	0.00400	mg/L								
<b>Reference (BC50984-SRM1)</b>						Prepared: 03/25/2015 Analyzed: 03/26/2015					
Arsenic	0.653	0.00400	mg/L	0.681		95.8	84.4-114				



## Miscellaneous Physical Parameters - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
---------	--------	--------------------	-------	----------------	-------------------	------	----------------	------	-----	--------------	------

#### Batch BC50936 - % Solids Prep

<b>Duplicate (BC50936-DUP1)</b>		*Source sample: 15C0756-02 (HA-2 0-1)						Prepared: 03/24/2015 Analyzed: 03/25/2015			
% Solids	80.9	0.100	%		81.3				0.522	20	



## Notes and Definitions

M-ACCB Analyte in CCB. Run is bracketed by acceptable CCBs.

---

*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
Non-Dir.	Non-dir. flag (Non-Directional Bias ) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.

---



YORK ANALYTICAL LABORATORIES  
120 RESEARCH DR.  
STRATFORD, CT 06615  
(203) 325-1371  
FAX (203) 357-0166

**YORK**  
ANALYTICAL LABORATORIES INC

# Field Chain-of-Custody Record

NOTE: York's Std. Terms & Conditions are listed on the back side of this document.  
This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions.

Page 1 of 3

York Project No. 15C0756

<b>YOUR Information</b> Company: <u>Lungan Engineering</u> Address: <u>558 Long Wharf Dr.</u> <u>New Haven, CT 06511</u> Phone No. <u>203-562-5771</u> Contact Person: <u>Ryan Wahlstrom</u> E-Mail Address: <u>RWahlstrom@lungan.com</u>		<b>Report To:</b> Company: <u>Same</u> Address: _____ Phone No. _____ Attention: _____ E-Mail Address: <u>KZalaski@lungan.com</u>		<b>Invoice To:</b> Company: <u>Same</u> Address: _____ Phone No. _____ Attention: _____ E-Mail Address: _____		<b>YOUR Project ID</b> <u>1A0109001</u> <b>Purchase Order No.</b> _____		<b>Turn-Around Time</b> <input type="checkbox"/> RUSH - Same Day <input type="checkbox"/> RUSH - Next Day <input type="checkbox"/> RUSH - Two Day <input type="checkbox"/> RUSH - Three Day <input type="checkbox"/> RUSH - Four Day <b>Standard (5-7 Days)</b> <input checked="" type="checkbox"/>		<b>Report Type</b> <input type="checkbox"/> Summary Report <input type="checkbox"/> Summary w/ QA Summary <input checked="" type="checkbox"/> CT RCP Package <input type="checkbox"/> CTRCP DQA/DUE Pkg <input type="checkbox"/> NY ASP A Package <input type="checkbox"/> NY ASP B Package <input type="checkbox"/> NJDEP Red. Deliv. <u>Electronic Data Deliverables (EDD)</u> <input type="checkbox"/> Simple Excel <input type="checkbox"/> NY SDEC EQuIS <input type="checkbox"/> EQuIS (std) <input type="checkbox"/> EZ-EDD (EQuIS) <input type="checkbox"/> NJDEP SRP HazSite EDD <input type="checkbox"/> GIS/KEY (std) <input type="checkbox"/> Other <u>pdf</u> <input type="checkbox"/> York Regulatory Comparison <input type="checkbox"/> Excel Spreadsheet Compare to the following Regs. (please fill in): <u>CT DEEP RSR-3</u>	
---	--	--	--	--	--	--	--	---	--	--	--

Sample Identification	Date/Time Sampled	Sample Matrix	Choose Analyses Needed from the Menu Above and Enter Below	Container Description(s)
HA-1 0-1	3/21/15 0949	S	Arsenic → → → → → → → → →	1202 glass
HA-2 0-1	0959			
HA-3 0-1	1008			
HA-4 0-1	1016			
HA-5 0-1	1049			
HA-6 0-1	1040			
HA-7 0-1	1032			
HA-8 0-1	1024			
HA-9 0-1	1058			
HA-10 0-1	1107			
<b>Comments</b> <u>RLs must meet CT DEEP RSR-3</u>			Temperature on Receipt <u>3.7°C</u>	





YORK ANALYTICAL LABORATORIES  
120 RESEARCH DR.  
STRATFORD, CT 06615  
(203) 325-1371  
FAX (203) 357-0166

**YORK**  
ANALYTICAL LABORATORIES INC

# Field Chain-of-Custody Record

Page 2 of 3

York Project No. 1500756

NOTE: York's Std. Terms & Conditions are listed on the back side of this document.  
This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions.

YOUR Information		Report To:		Invoice To:		YOUR Project ID		Turn-Around Time		Report Type	
Company: <u>Lungon Engineering</u>	Company: <u>same</u>	Company: <u>same</u>									
Address: <u>555 Long Wharf Drive</u>	Address: <u>same</u>	Address: <u>same</u>									
Phone No. <u>203-562-5771</u>	Phone No. <u>same</u>	Phone No. <u>same</u>									
Contact Person: <u>Ryan Workstrom</u>	Attention: <u>same</u>	Attention: <u>same</u>									
E-Mail Address: <u>RW@lungon.com</u>	E-Mail Address: <u>KZ@lungon.com</u>	E-Mail Address: <u>KZ@lungon.com</u>									
<p><b>Print Clearly and Legibly. All Information must be complete. Samples will NOT be logged in and the turn-around time clock will not begin until any questions by York are resolved.</b></p>											
<p>Samples Collected/Authorized By (Signature) <u>Kyle Zukowski</u></p> <p>Name (printed) <u>Kyle Zukowski</u></p>											
<p>Matrix Codes S - soil Other - specify (oil, etc.) WW - wastewater GW - groundwater DW - drinking water Air-A - ambient air Air-SV - soil vapor</p>											
<p>Choose Analyses Needed from the Menu Above and Enter Below</p>											
Sample Identification	Date/Time Sampled	Sample Matrix	4°C	Frozen	HCl	ZnAc	MeOH	Ascorbic Acid	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	NaOH
HA-11 0-1	3/21/15 1121	S									
HA-12 0-1	1130										
HA-13 0-1	1156										
HA-14 0-1	1146										
HA-15 0-1	1138										
HA-16 0-1	1207										
HA-17 0-1	1216										
HA-18 0-1	1225										
HA-19 0-1	1238										
HA-20 0-1	1248										
<p>Container Description(s) <u>12oz glass</u></p>											
<p>Comments <u>RLS must meet CT DEEP RSRs</u></p>											
<p>Temperature on Receipt <u>3.7°C</u></p>											
<p>Samples Received By <u>RLS</u> Date/Time <u>3-24-15 1440</u></p> <p>Samples Relinquished By <u>RLS</u> Date/Time <u>3-24-15 1440</u></p>											





YORK ANALYTICAL LABORATORIES  
120 RESEARCH DR.  
STRATFORD, CT 06615  
(203) 325-1371  
FAX (203) 357-0166

## Field Chain-of-Custody Record

Page 3 of 3

**NOTE:** York's Std. Terms & Conditions are listed on the back side of this document. This document serves as your written authorization to York to proceed with the analyses requested. \_\_\_\_\_ signature binds you to York's Std. Terms & Conditions.

York Project No. 1500756

[illegible]



## **ATTACHMENT B**

Geophysical Engineering Survey Report

# **GEOPHYSICAL ENGINEERING SURVEY REPORT**

Commercial Property

25 Mead Avenue

Greenwich, Connecticut 06830

**NOVA PROJECT NUMBER**

15-665

**DATED**

June 22, 2015

**PREPARED FOR:**

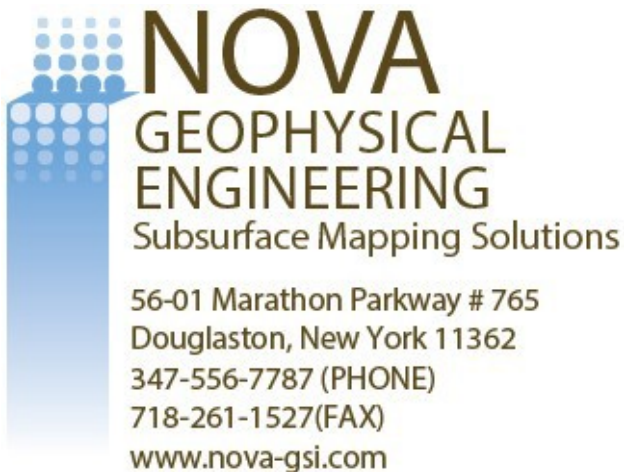
***LANGAN***

Long Wharf Maritime Center

555 Long Wharf Drive

New Haven, CT 06511-6107

**PREPARED BY:**



# NOVA GEOPHYSICAL SERVICES

## SUBSURFACE MAPPING SOLUTIONS

56-01 Marathon Parkway, # 765, Douglaston, New York 11362  
Ph. 347-556-7787 Fax. 718-261-1527  
www.nova-gsi.com

---

June 22, 2015

Ryan J Wohlstrom  
Project Engineer  
**Direct: 203.784.3069**  
**Mobile: 203.464.2731**

## LANGAN

Long Wharf Maritime Center  
555 Long Wharf Drive  
New Haven, CT 06511-6107

Re: Geophysical Engineering Survey (GES) Report  
Commercial Property  
25 Mead Avenue  
Greenwich, Connecticut 06830

Dear Ms. Rice:

Nova Geophysical Services (NOVA) is pleased to provide findings of the geophysical engineering survey (GES) at the above referenced project site: Commercial Property, 25 Mead Avenue, Greenwich, Connecticut (the "Site"). Please see attached Site Location and Geophysical Survey maps for more details.

### INTRODUCTION TO GEOPHYSICAL ENGINEERING SURVEY (GES)

---

NOVA performed a Geophysical engineering surveys (GES) consisting of Ground Penetrating Radar (GPR) and Utility/cable locator surveys at the site. The purpose of this survey is to locate and identify the existing natural gas line and other substructures and to clear and mark proposed environmental boring areas on June 18, 2015.

The equipment selected for this investigation was Noggin's 250 MHz ground penetrating radar (GPR) shielded antenna and a 3M Dynatel Cable/Utility Locator.

A GPR system consists of a radar control unit, control cable and a transducer (antenna). The control unit transmits a trigger pulse at a normal repetition rate of 250 MHz (Noggin). The trigger pulse is sent to the transmitter electronics in the transducer via the control cable. The transmitter electronics amplify the trigger pulses into bipolar pulses that are radiated to the surface. The transformed pulses vary in shape and frequency according to the transducer used. In the subsurface, variations of the signal occur at boundaries where there is a dielectric contrast (void, steel, soil type, etc.). Signal reflections travel back to the control unit and are represented as color graphic images for interpolation.

## GEOPHYSICAL METHODS

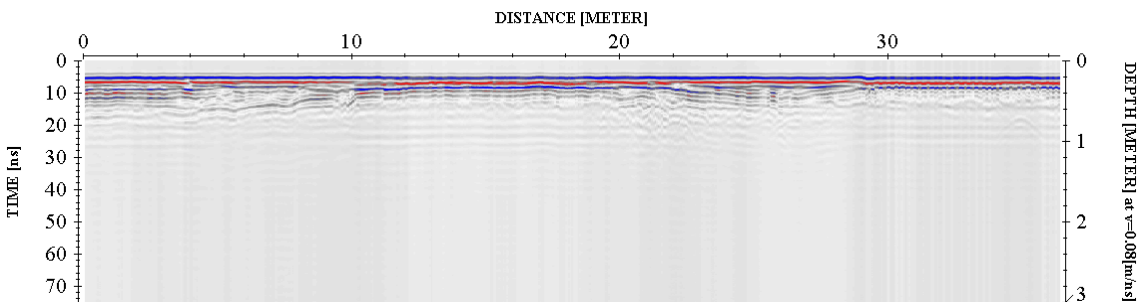
The project site was screened using the GPR to search the areas of interest and inspected for reflections, which could be indicative of major anomalies and substructures. Utility locations were confirmed using the Dynatel Cable/Utility Locator.

GPR data profiles were collected for the areas of the Site specified by the client. The surveyed areas consisted of grass surfaces.

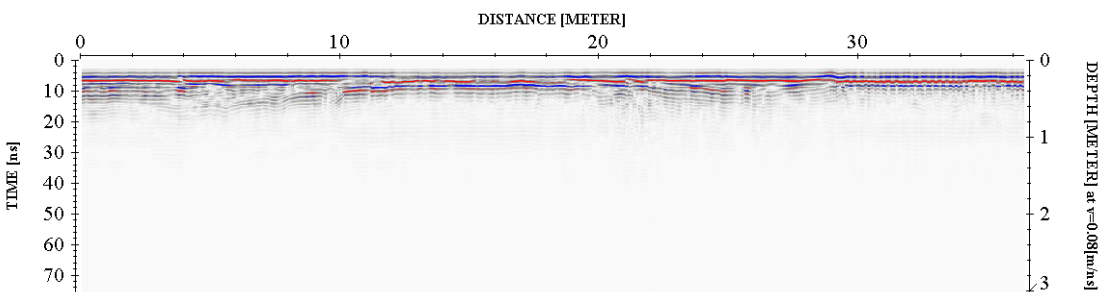
## DATA PROCESSING

In order to improve the quality of the results and to better identify subsurface anomalies NOVA processed the collected data. The processes flow is briefly described at this section.

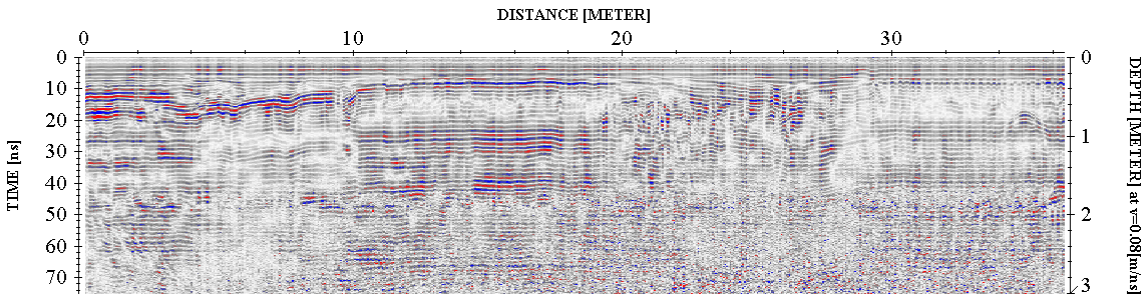
### Step 1. Import raw RAMAC data to standard processing format



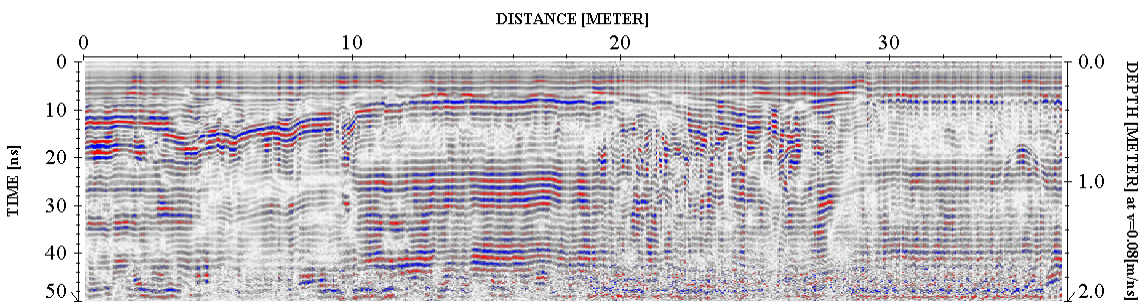
### Step 2. Remove instrument noise (*dewow*)



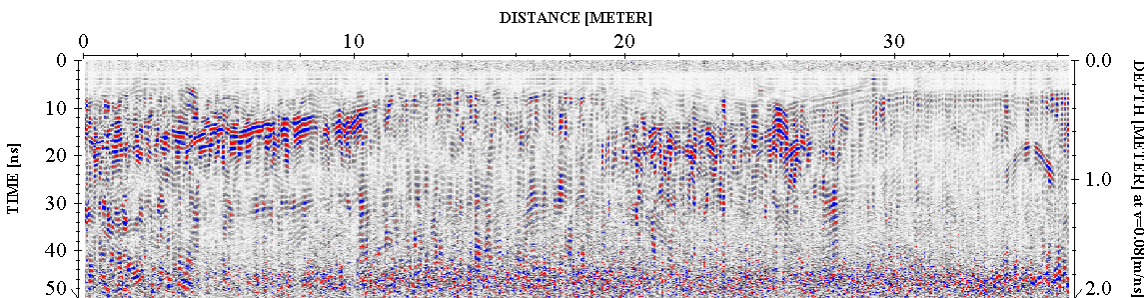
**Step 3. Correct for attenuation losses (*energy decay function*)**



**Step 4. Remove static from bottom of profile (*time cut*)**



**Step 5. Mute horizontal ringing/noise (*subtracting average*)**



The above example shows the significance of data processing. The last image (step 5) has higher resolution than the starting image (raw data – step 1) and describes the subsurface anomalies more accurately.

## GEOPHYSICAL ENGINEERING SURVEY / GES REPORT

*Commercial Property*

25 Mead Avenue  
Greenwich, Connecticut 06830

---

### PHYSICAL SETTINGS

Nova observed following physical conditions at the time of the survey:

**The weather:** Overcast

**Temp:** 65 Degrees (F).

**Surface:** Grass surfaces

**Geophysical Noise Level (GNL):** Geophysical Noise Level (GNL) was medium to high at the site. The noise was a result of the fill material below the surface.

---

### RESULTS

The results of the geophysical engineering survey (GES) identified following at the project Site:

- GES survey identified scattered anomalies located throughout the project site. Based on their rates and proximity, these anomalies were inconsistent with any USTs.
- A gas line was located on the site. This is indicated both on site and on the survey map.
- Geophysical Survey Plan portrays the areas investigated during the geophysical survey.

If you have any questions please do not hesitate to contact the undersigned.

Sincerely,

#### NOVA Geophysical Services

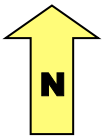


Levent Eskicakit, P.G., E.P.  
Project Engineer

#### Attachments:

Figure 1 Site Location Map  
Geophysical Survey Plan  
Geophysical Images





200 ft.

**NOVA**  
**Geophysical Services**  
Subsurface Mapping Solutions

(347) 556-7787 Fax (718) 261-1528  
[www.nova-gsi.com](http://www.nova-gsi.com)

**SITE:** Commercial Property  
25 Mead Avenue  
Greenwich, Connecticut 06830

**SCALE:** See Map





1- All anomalies were marked in the field.

## NOVA Geophysical Services

**Subsurface Mapping Solutions**  
56-01 Marathon Parkway, PO Box 765  
Douglaston, New York 11362  
Phone (347) 556-7787 \* Fax (718) 261-1527  
[www.nova-gsi.com](http://www.nova-gsi.com)

### GEOPHYSICAL SURVEY PLAN

SITE : **Commercial Property**  
25 Mead Avenue  
Greenwich, Connecticut 06830

CLIENT: **LANGAN**  
DATE: June 18, 2015  
Scale See Map

### INFORMATION

 Survey Area

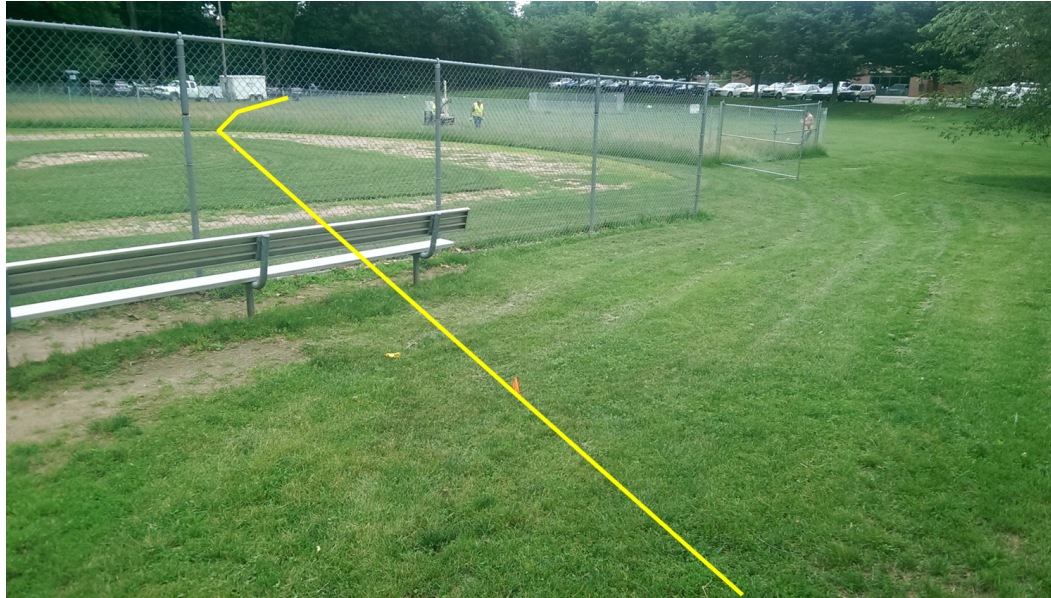
 Gas Line



**50 ft.**

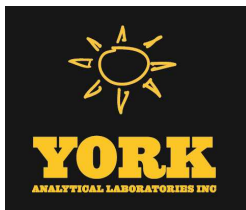


**GEOPHYSICAL IMAGES**  
**Commercial Property**  
25 Mead Avenue  
Greenwich, Connecticut 06830  
June 18<sup>th</sup>, 2015



# **ATTACHMENT A**

## **Laboratory Analytical Results**



# Technical Report

prepared for:

**Langan Engineering & Environmental Services (CT)**

Long Wharf Maritime Center, 555 Long Wharf Drive

New Haven CT, 06511

**Attention: Ryan Wohlstrom**

Report Date: 06/03/2015

**Client Project ID: 140109003**

York Project (SDG) No.: 15E0072

Revision No. 3.0

CT Cert. No. PH-0723

New Jersey Cert. No. CT-005



New York Cert. No. 10854

PA Cert. No. 68-04440

**Langan Engineering & Environmental Services (CT)**  
Long Wharf Maritime Center, 555 Long Wharf Drive  
New Haven CT, 06511  
Attention: Ryan Wohlstrom

---

## Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on May 01, 2015 and listed below. The project was identified as your project: **140109003**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Notes section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the attachment to this report, and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
15E0072-01	FIELD BLANK-5012015	Water	05/01/2015	05/01/2015
15E0072-02	Dup-1	Soil	04/30/2015	05/01/2015
15E0072-03	Dup-2	Soil	04/30/2015	05/01/2015
15E0072-04	Dup-3	Soil	04/30/2015	05/01/2015
15E0072-09	HA-5-S2 (0-1)	Soil	04/30/2015	05/01/2015
15E0072-17	HA-6-W1 (0-1)	Soil	04/30/2015	05/01/2015
15E0072-22	HA-10-W2 (0-1)	Soil	04/30/2015	05/01/2015
15E0072-23	HA-10-W2 (1-2)	Soil	04/30/2015	05/01/2015
15E0072-24	HA-22-W2 (0-1)	Soil	04/30/2015	05/01/2015
15E0072-27	HA-22-W1 (0-1)	Soil	04/30/2015	05/01/2015
15E0072-28	HA-22-W1 (1-2)	Soil	04/30/2015	05/01/2015
15E0072-30	HA-13-E2 (0-1)	Soil	04/30/2015	05/01/2015
15E0072-31	HA-13-E2 (1-2)	Soil	04/30/2015	05/01/2015
15E0072-32	HA-13-W2 (0-1)	Soil	04/30/2015	05/01/2015
15E0072-33	HA-13-W2 (1-2)	Soil	04/30/2015	05/01/2015
15E0072-34	HA-13-W2 (2-3)	Soil	04/30/2015	05/01/2015
15E0072-36	HA-10-E2 (0-1)	Soil	04/30/2015	05/01/2015
15E0072-37	HA-10-E2 (1-2)	Soil	04/30/2015	05/01/2015
15E0072-38	HA-13-N1 (0-1)	Soil	04/30/2015	05/01/2015
15E0072-39	HA-13-N1 (1-2)	Soil	04/30/2015	05/01/2015
15E0072-42	HA-13-N2 (0-1)	Soil	04/30/2015	05/01/2015
15E0072-43	HA-13-N2 (1-2)	Soil	04/30/2015	05/01/2015
15E0072-46	HA-13 (1-2)	Soil	04/30/2015	05/01/2015

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
15E0072-49	HA-13-W1 (0-1)	Soil	04/30/2015	05/01/2015
15E0072-50	HA-13-W1 (1-2)	Soil	04/30/2015	05/01/2015
15E0072-51	HA-13-S1 (0-1)	Soil	04/30/2015	05/01/2015
15E0072-52	HA-13-S1 (1-2)	Soil	04/30/2015	05/01/2015
15E0072-55	HA-13-E1 (0-1)	Soil	04/30/2015	05/01/2015
15E0072-56	HA-13-E1 (1-2)	Soil	04/30/2015	05/01/2015
15E0072-59	HA-13-S2 (0-1)	Soil	04/30/2015	05/01/2015
15E0072-60	HA-13-S2 (1-2)	Soil	04/30/2015	05/01/2015
15E0072-63	HA-22-N1 (0-1)	Soil	04/30/2015	05/01/2015
15E0072-64	HA-22-N1 (1-2)	Soil	04/30/2015	05/01/2015
15E0072-65	HA-22-N1 (2-3)	Soil	04/30/2015	05/01/2015
15E0072-67	HA-22 (2-3)	Soil	04/30/2015	05/01/2015
15E0072-69	HA-22-S1 (0-1)	Soil	04/30/2015	05/01/2015
15E0072-70	HA-22-S1 (1-2)	Soil	04/30/2015	05/01/2015
15E0072-71	HA-10-N1 (0-1)	Soil	04/30/2015	05/01/2015
15E0072-72	HA-10-N1 (1-2)	Soil	04/30/2015	05/01/2015
15E0072-75	HA-10-W1 (0-1)	Soil	04/30/2015	05/01/2015
15E0072-76	HA-10 (1-2)	Soil	04/30/2015	05/01/2015
15E0072-79	HA-10-E1 (0-1)	Soil	04/30/2015	05/01/2015
15E0072-80	HA-10-E1 (1-2)	Soil	04/30/2015	05/01/2015
15E0072-83	HA-10-S1 (0-1)	Soil	04/30/2015	05/01/2015
15E0072-84	HA-10-S1 (1-2)	Soil	04/30/2015	05/01/2015
15E0072-87	HA-10-S2 (0-1)	Soil	04/30/2015	05/01/2015
15E0072-88	HA-10-S2 (1-2)	Soil	04/30/2015	05/01/2015
15E0072-91	HA-6 (1-2)	Soil	04/30/2015	05/01/2015
15E0072-94	HA-6-N1 (0-1)	Soil	04/30/2015	05/01/2015
15E0072-95	HA-6-N1 (1-2)	Soil	04/30/2015	05/01/2015
15E0072-98	HA-6-S1 (0-1)	Soil	04/30/2015	05/01/2015

### **General Notes for York Project (SDG) No.: 15E0072**

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All samples were received in proper condition for analysis with proper documentation, unless otherwise noted.
6. All analyses conducted met method or Laboratory SOP requirements. See the Qualifiers and/or Narrative sections for further information.
7. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
8. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.

**Approved By:**



Benjamin Gulizia  
Laboratory Director

**Date:** 06/03/2015





### Sample Information

**Client Sample ID:** FIELD BLANK-5012015

**York Sample ID:** 15E0072-01

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

15E0072

140109003

Water

May 1, 2015 11:30 am

05/01/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	ND		mg/L	0.00400	1	EPA 6010C	05/04/2015 14:44	05/05/2015 03:33	MW

### Sample Information

**Client Sample ID:** Dup-1

**York Sample ID:** 15E0072-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

15E0072

140109003

Soil

April 30, 2015 3:00 pm

05/01/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	8.12		mg/kg dry	1.16	1	EPA 6010C	05/05/2015 14:24	05/05/2015 21:02	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	86.4		%	0.100	1	SM 2540G	05/06/2015 17:12	05/07/2015 13:24	KK

### Sample Information

**Client Sample ID:** Dup-2

**York Sample ID:** 15E0072-03

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

15E0072

140109003

Soil

April 30, 2015 3:00 pm

05/01/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	169		mg/kg dry	1.15	1	EPA 6010C	05/05/2015 14:24	05/05/2015 21:07	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
---------	-----------	--------	------	-------	----	----------	------------------	--------------------	--------------------	---------





### Sample Information

**Client Sample ID:** Dup-2

**York Sample ID:** 15E0072-03

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

15E0072

140109003

Soil

April 30, 2015 3:00 pm

05/01/2015

### Total Solids

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	87.1		%	0.100	1	SM 2540G	05/06/2015 17:12	05/07/2015 13:24	KK

### Sample Information

**Client Sample ID:** Dup-3

**York Sample ID:** 15E0072-04

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

15E0072

140109003

Soil

April 30, 2015 3:00 pm

05/01/2015

### Arsenic by EPA 6010

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	3.13		mg/kg dry	1.18	1	EPA 6010C	05/05/2015 14:24	05/05/2015 21:36	MW

### Total Solids

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	85.0		%	0.100	1	SM 2540G	05/06/2015 17:12	05/07/2015 13:24	KK

### Sample Information

**Client Sample ID:** HA-5-S2 (0-1)

**York Sample ID:** 15E0072-09

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

15E0072

140109003

Soil

April 30, 2015 9:24 am

05/01/2015

### Arsenic by EPA 6010

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	9.04		mg/kg dry	1.23	1	EPA 6010C	05/15/2015 13:44	05/15/2015 23:33	MW

### Total Solids

### Log-in Notes:

### Sample Notes:



### Sample Information

**Client Sample ID:** HA-5-S2 (0-1)

**York Sample ID:** 15E0072-09

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

15E0072

140109003

Soil

April 30, 2015 9:24 am

05/01/2015

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	81.5		%	0.100	1	SM 2540G	05/14/2015 16:31	05/15/2015 16:41	SCA

### Sample Information

**Client Sample ID:** HA-6-W1 (0-1)

**York Sample ID:** 15E0072-17

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

15E0072

140109003

Soil

April 30, 2015 10:10 am

05/01/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	3.52		mg/kg dry	1.11	1	EPA 6010C	05/05/2015 14:24	05/05/2015 21:40	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	90.1		%	0.100	1	SM 2540G	05/06/2015 17:12	05/07/2015 13:24	KK

### Sample Information

**Client Sample ID:** HA-10-W2 (0-1)

**York Sample ID:** 15E0072-22

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

15E0072

140109003

Soil

April 30, 2015 10:40 am

05/01/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	55.9		mg/kg dry	1.24	1	EPA 6010C	05/15/2015 13:46	05/15/2015 23:56	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	80.7		%	0.100	1	SM 2540G	05/14/2015 16:28	05/15/2015 09:03	KK



### Sample Information

**Client Sample ID:** HA-10-W2 (0-1)

**York Sample ID:** 15E0072-22

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
15E0072	140109003	Soil	April 30, 2015 10:40 am	05/01/2015

### Sample Information

**Client Sample ID:** HA-10-W2 (1-2)

**York Sample ID:** 15E0072-23

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
15E0072	140109003	Soil	April 30, 2015 10:41 am	05/01/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	19.9		mg/kg dry	1.16	1	EPA 6010C	05/27/2015 15:04	05/27/2015 18:43	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	85.9		%	0.100	1	SM 2540G	05/27/2015 09:12	05/27/2015 16:38	KK

### Sample Information

**Client Sample ID:** HA-22-W2 (0-1)

**York Sample ID:** 15E0072-24

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
15E0072	140109003	Soil	April 30, 2015 11:20 am	05/01/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	6.85		mg/kg dry	1.13	1	EPA 6010C	05/15/2015 13:46	05/16/2015 00:13	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	88.8		%	0.100	1	SM 2540G	05/14/2015 16:28	05/15/2015 09:03	KK



### Sample Information

**Client Sample ID:** HA-22-W1 (0-1)

**York Sample ID:** 15E0072-27

York Project (SDG) No.  
15E0072

Client Project ID  
140109003

Matrix  
Soil

Collection Date/Time  
April 30, 2015 11:25 am

Date Received  
05/01/2015

#### Arsenic by EPA 6010

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	94.5		mg/kg dry	1.14	1	EPA 6010C	05/05/2015 14:24	05/05/2015 21:45	MW

#### Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	88.1		%	0.100	1	SM 2540G	05/06/2015 17:12	05/07/2015 13:24	KK

### Sample Information

**Client Sample ID:** HA-22-W1 (1-2)

**York Sample ID:** 15E0072-28

York Project (SDG) No.  
15E0072

Client Project ID  
140109003

Matrix  
Soil

Collection Date/Time  
April 30, 2015 11:26 am

Date Received  
05/01/2015

#### Arsenic by EPA 6010

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	4.88		mg/kg dry	1.21	1	EPA 6010C	05/15/2015 13:46	05/16/2015 00:18	MW

#### Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	82.8		%	0.100	1	SM 2540G	05/14/2015 16:28	05/15/2015 09:03	KK

### Sample Information

**Client Sample ID:** HA-13-E2 (0-1)

**York Sample ID:** 15E0072-30

York Project (SDG) No.  
15E0072

Client Project ID  
140109003

Matrix  
Soil

Collection Date/Time  
April 30, 2015 12:05 pm

Date Received  
05/01/2015

#### Arsenic by EPA 6010

Log-in Notes:

Sample Notes:



### Sample Information

**Client Sample ID:** HA-13-E2 (0-1)

**York Sample ID:** 15E0072-30

York Project (SDG) No.  
15E0072

Client Project ID  
140109003

Matrix  
Soil

Collection Date/Time  
April 30, 2015 12:05 pm

Date Received  
05/01/2015

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	15.0		mg/kg dry	1.09	1	EPA 6010C	05/15/2015 13:46	05/16/2015 00:22	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	92.0		%	0.100	1	SM 2540G	05/14/2015 16:28	05/15/2015 09:03	KK

### Sample Information

**Client Sample ID:** HA-13-E2 (1-2)

**York Sample ID:** 15E0072-31

York Project (SDG) No.  
15E0072

Client Project ID  
140109003

Matrix  
Soil

Collection Date/Time  
April 30, 2015 12:06 pm

Date Received  
05/01/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	3.90		mg/kg dry	1.17	1	EPA 6010C	05/27/2015 15:04	05/27/2015 18:48	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	85.7		%	0.100	1	SM 2540G	05/27/2015 09:12	05/27/2015 16:38	KK

### Sample Information

**Client Sample ID:** HA-13-W2 (0-1)

**York Sample ID:** 15E0072-32

York Project (SDG) No.  
15E0072

Client Project ID  
140109003

Matrix  
Soil

Collection Date/Time  
April 30, 2015 11:40 am

Date Received  
05/01/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	104		mg/kg dry	1.20	1	EPA 6010C	05/15/2015 13:46	05/16/2015 00:40	MW



### Sample Information

**Client Sample ID:** HA-13-W2 (0-1)

**York Sample ID:** 15E0072-32

York Project (SDG) No.  
15E0072

Client Project ID  
140109003

Matrix  
Soil

Collection Date/Time  
April 30, 2015 11:40 am

Date Received  
05/01/2015

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	83.6		%	0.100	1	SM 2540G	05/14/2015 16:28	05/15/2015 09:03	KK

### Sample Information

**Client Sample ID:** HA-13-W2 (1-2)

**York Sample ID:** 15E0072-33

York Project (SDG) No.  
15E0072

Client Project ID  
140109003

Matrix  
Soil

Collection Date/Time  
April 30, 2015 11:41 am

Date Received  
05/01/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	16.8		mg/kg dry	1.21	1	EPA 6010C	06/01/2015 15:44	06/01/2015 20:58	AMC

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	82.5		%	0.100	1	SM 2540G	06/01/2015 19:08	06/02/2015 10:52	KK

### Sample Information

**Client Sample ID:** HA-13-W2 (2-3)

**York Sample ID:** 15E0072-34

York Project (SDG) No.  
15E0072

Client Project ID  
140109003

Matrix  
Soil

Collection Date/Time  
April 30, 2015 11:42 am

Date Received  
05/01/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

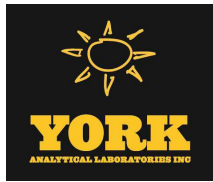
Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	5.51		mg/kg dry	1.21	1	EPA 6010C	06/02/2015 16:53	06/02/2015 21:13	AMC

#### Total Solids

#### Log-in Notes:

#### Sample Notes:



### Sample Information

**Client Sample ID:** HA-13-W2 (2-3)

**York Sample ID:** 15E0072-34

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

15E0072

140109003

Soil

April 30, 2015 11:42 am

05/01/2015

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	82.3		%	0.100	1	SM 2540G	06/03/2015 10:02	06/03/2015 15:43	SCA

### Sample Information

**Client Sample ID:** HA-10-E2 (0-1)

**York Sample ID:** 15E0072-36

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

15E0072

140109003

Soil

April 30, 2015 12:10 pm

05/01/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	18.7		mg/kg dry	1.12	1	EPA 6010C	05/15/2015 13:46	05/16/2015 00:44	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	89.1		%	0.100	1	SM 2540G	05/14/2015 16:28	05/15/2015 09:03	KK

### Sample Information

**Client Sample ID:** HA-10-E2 (1-2)

**York Sample ID:** 15E0072-37

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

15E0072

140109003

Soil

April 30, 2015 12:11 pm

05/01/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	4.94		mg/kg dry	1.24	1	EPA 6010C	06/01/2015 15:44	06/01/2015 21:03	AMC

#### Total Solids

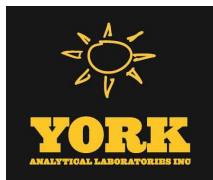
#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	80.7		%	0.100	1	SM 2540G	06/01/2015 19:08	06/02/2015 10:52	KK





### Sample Information

**Client Sample ID:** HA-10-E2 (1-2)

**York Sample ID:** 15E0072-37

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
15E0072	140109003	Soil	April 30, 2015 12:11 pm	05/01/2015

### Sample Information

**Client Sample ID:** HA-13-N1 (0-1)

**York Sample ID:** 15E0072-38

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
15E0072	140109003	Soil	April 30, 2015 12:50 pm	05/01/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	56.3		mg/kg dry	1.15	1	EPA 6010C	05/05/2015 14:24	05/05/2015 21:50	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	86.6		%	0.100	1	SM 2540G	05/06/2015 17:12	05/07/2015 13:24	KK

### Sample Information

**Client Sample ID:** HA-13-N1 (1-2)

**York Sample ID:** 15E0072-39

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
15E0072	140109003	Soil	April 30, 2015 12:51 pm	05/01/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	6.21		mg/kg dry	1.20	1	EPA 6010C	05/15/2015 13:46	05/16/2015 00:49	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	83.2		%	0.100	1	SM 2540G	05/14/2015 16:28	05/15/2015 09:03	KK



### Sample Information

**Client Sample ID:** HA-13-N2 (0-1)

**York Sample ID:** 15E0072-42

York Project (SDG) No.  
15E0072

Client Project ID  
140109003

Matrix  
Soil

Collection Date/Time  
April 30, 2015 12:54 pm

Date Received  
05/01/2015

#### Arsenic by EPA 6010

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	108		mg/kg dry	1.18	1	EPA 6010C	05/15/2015 13:46	05/16/2015 00:54	MW

#### Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	84.6		%	0.100	1	SM 2540G	05/14/2015 16:28	05/15/2015 09:03	KK

### Sample Information

**Client Sample ID:** HA-13-N2 (1-2)

**York Sample ID:** 15E0072-43

York Project (SDG) No.  
15E0072

Client Project ID  
140109003

Matrix  
Soil

Collection Date/Time  
April 30, 2015 12:55 pm

Date Received  
05/01/2015

#### Arsenic by EPA 6010

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	6.78		mg/kg dry	1.17	1	EPA 6010C	05/27/2015 15:04	05/27/2015 18:52	MW

#### Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	85.7		%	0.100	1	SM 2540G	05/27/2015 09:12	05/27/2015 16:38	KK

### Sample Information

**Client Sample ID:** HA-13 (1-2)

**York Sample ID:** 15E0072-46

York Project (SDG) No.  
15E0072

Client Project ID  
140109003

Matrix  
Soil

Collection Date/Time  
April 30, 2015 1:20 pm

Date Received  
05/01/2015

#### Arsenic by EPA 6010

Log-in Notes:

Sample Notes:



### Sample Information

**Client Sample ID:** HA-13 (1-2)

**York Sample ID:** 15E0072-46

York Project (SDG) No.  
15E0072

Client Project ID  
140109003

Matrix  
Soil

Collection Date/Time  
April 30, 2015 1:20 pm

Date Received  
05/01/2015

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	9.33		mg/kg dry	1.16	1	EPA 6010C	05/05/2015 14:24	05/05/2015 21:55	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	85.9		%	0.100	1	SM 2540G	05/06/2015 17:12	05/07/2015 13:24	KK

### Sample Information

**Client Sample ID:** HA-13-W1 (0-1)

**York Sample ID:** 15E0072-49

York Project (SDG) No.  
15E0072

Client Project ID  
140109003

Matrix  
Soil

Collection Date/Time  
April 30, 2015 1:25 pm

Date Received  
05/01/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	122		mg/kg dry	1.15	1	EPA 6010C	05/05/2015 14:24	05/05/2015 22:00	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	87.1		%	0.100	1	SM 2540G	05/06/2015 17:12	05/07/2015 13:24	KK

### Sample Information

**Client Sample ID:** HA-13-W1 (1-2)

**York Sample ID:** 15E0072-50

York Project (SDG) No.  
15E0072

Client Project ID  
140109003

Matrix  
Soil

Collection Date/Time  
April 30, 2015 1:26 pm

Date Received  
05/01/2015

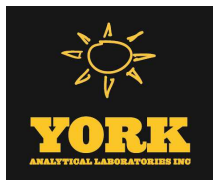
#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	15.3		mg/kg dry	1.18	1	EPA 6010C	05/15/2015 13:46	05/16/2015 00:58	MW



### Sample Information

**Client Sample ID:** HA-13-W1 (1-2)

**York Sample ID:** 15E0072-50

York Project (SDG) No.  
15E0072

Client Project ID  
140109003

Matrix  
Soil

Collection Date/Time  
April 30, 2015 1:26 pm

Date Received  
05/01/2015

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	84.5		%	0.100	1	SM 2540G	05/14/2015 16:28	05/15/2015 09:03	KK

### Sample Information

**Client Sample ID:** HA-13-S1 (0-1)

**York Sample ID:** 15E0072-51

York Project (SDG) No.  
15E0072

Client Project ID  
140109003

Matrix  
Soil

Collection Date/Time  
April 30, 2015 1:50 pm

Date Received  
05/01/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	46.3		mg/kg dry	1.14	1	EPA 6010C	05/05/2015 14:24	05/05/2015 22:04	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	87.8		%	0.100	1	SM 2540G	05/06/2015 17:12	05/07/2015 13:24	KK

### Sample Information

**Client Sample ID:** HA-13-S1 (1-2)

**York Sample ID:** 15E0072-52

York Project (SDG) No.  
15E0072

Client Project ID  
140109003

Matrix  
Soil

Collection Date/Time  
April 30, 2015 1:51 pm

Date Received  
05/01/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	5.78		mg/kg dry	1.20	1	EPA 6010C	05/15/2015 13:46	05/16/2015 01:03	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:



### Sample Information

**Client Sample ID:** HA-13-S1 (1-2)

**York Sample ID:** 15E0072-52

York Project (SDG) No.  
15E0072

Client Project ID  
140109003

Matrix  
Soil

Collection Date/Time  
April 30, 2015 1:51 pm

Date Received  
05/01/2015

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	83.4		%	0.100	1	SM 2540G	05/14/2015 16:28	05/15/2015 09:03	KK

### Sample Information

**Client Sample ID:** HA-13-E1 (0-1)

**York Sample ID:** 15E0072-55

York Project (SDG) No.  
15E0072

Client Project ID  
140109003

Matrix  
Soil

Collection Date/Time  
April 30, 2015 1:54 pm

Date Received  
05/01/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	133		mg/kg dry	1.18	1	EPA 6010C	05/05/2015 14:24	05/05/2015 22:09	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	84.9		%	0.100	1	SM 2540G	05/06/2015 17:12	05/07/2015 13:24	KK

### Sample Information

**Client Sample ID:** HA-13-E1 (1-2)

**York Sample ID:** 15E0072-56

York Project (SDG) No.  
15E0072

Client Project ID  
140109003

Matrix  
Soil

Collection Date/Time  
April 30, 2015 1:55 pm

Date Received  
05/01/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	9.81		mg/kg dry	1.18	1	EPA 6010C	05/15/2015 13:46	05/16/2015 01:08	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	85.0		%	0.100	1	SM 2540G	05/14/2015 16:28	05/15/2015 09:03	KK



### Sample Information

**Client Sample ID:** HA-13-E1 (1-2)

**York Sample ID:** 15E0072-56

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
15E0072	140109003	Soil	April 30, 2015 1:55 pm	05/01/2015

### Sample Information

**Client Sample ID:** HA-13-S2 (0-1)

**York Sample ID:** 15E0072-59

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
15E0072	140109003	Soil	April 30, 2015 2:20 pm	05/01/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	27.3		mg/kg dry	1.16	1	EPA 6010C	05/15/2015 13:46	05/16/2015 01:13	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	86.3		%	0.100	1	SM 2540G	05/14/2015 16:28	05/15/2015 09:03	KK

### Sample Information

**Client Sample ID:** HA-13-S2 (1-2)

**York Sample ID:** 15E0072-60

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
15E0072	140109003	Soil	April 30, 2015 2:21 pm	05/01/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	4.53		mg/kg dry	1.22	1	EPA 6010C	05/27/2015 15:04	05/27/2015 18:57	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	82.0		%	0.100	1	SM 2540G	05/27/2015 09:12	05/27/2015 16:38	KK



### Sample Information

**Client Sample ID:** HA-22-N1 (0-1)

**York Sample ID:** 15E0072-63

York Project (SDG) No.  
15E0072

Client Project ID  
140109003

Matrix  
Soil

Collection Date/Time  
April 30, 2015 2:40 pm

Date Received  
05/01/2015

#### Arsenic by EPA 6010

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	257		mg/kg dry	1.12	1	EPA 6010C	05/05/2015 14:24	05/05/2015 22:14	MW

#### Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	89.6		%	0.100	1	SM 2540G	05/06/2015 17:14	05/07/2015 13:29	KK

### Sample Information

**Client Sample ID:** HA-22-N1 (1-2)

**York Sample ID:** 15E0072-64

York Project (SDG) No.  
15E0072

Client Project ID  
140109003

Matrix  
Soil

Collection Date/Time  
April 30, 2015 2:41 pm

Date Received  
05/01/2015

#### Arsenic by EPA 6010

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	15.6		mg/kg dry	1.17	1	EPA 6010C	05/15/2015 13:46	05/16/2015 01:18	MW

#### Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	85.2		%	0.100	1	SM 2540G	05/14/2015 16:28	05/15/2015 09:03	KK

### Sample Information

**Client Sample ID:** HA-22-N1 (2-3)

**York Sample ID:** 15E0072-65

York Project (SDG) No.  
15E0072

Client Project ID  
140109003

Matrix  
Soil

Collection Date/Time  
April 30, 2015 2:42 pm

Date Received  
05/01/2015

#### Arsenic by EPA 6010

Log-in Notes:

Sample Notes:





### Sample Information

**Client Sample ID:** HA-22-N1 (2-3)

**York Sample ID:** 15E0072-65

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

15E0072

140109003

Soil

April 30, 2015 2:42 pm

05/01/2015

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	5.79		mg/kg dry	1.24	1	EPA 6010C	05/27/2015 15:04	05/27/2015 19:02	MW

### Total Solids

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	80.9		%	0.100	1	SM 2540G	05/27/2015 09:12	05/27/2015 16:38	KK

### Sample Information

**Client Sample ID:** HA-22 (2-3)

**York Sample ID:** 15E0072-67

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

15E0072

140109003

Soil

April 30, 2015 3:01 pm

05/01/2015

### Arsenic by EPA 6010

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	2.77		mg/kg dry	1.23	1	EPA 6010C	05/05/2015 14:24	05/05/2015 22:32	MW

### Total Solids

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	81.3		%	0.100	1	SM 2540G	05/06/2015 17:14	05/07/2015 13:29	KK

### Sample Information

**Client Sample ID:** HA-22-S1 (0-1)

**York Sample ID:** 15E0072-69

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

15E0072

140109003

Soil

April 30, 2015 3:05 pm

05/01/2015

### Arsenic by EPA 6010

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	500		mg/kg dry	1.15	1	EPA 6010C	05/05/2015 14:24	05/05/2015 22:36	MW



### Sample Information

**Client Sample ID:** HA-22-S1 (0-1)

**York Sample ID:** 15E0072-69

York Project (SDG) No.  
15E0072

Client Project ID  
140109003

Matrix  
Soil

Collection Date/Time  
April 30, 2015 3:05 pm

Date Received  
05/01/2015

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	87.1		%	0.100	1	SM 2540G	05/06/2015 17:14	05/07/2015 13:29	KK

### Sample Information

**Client Sample ID:** HA-22-S1 (1-2)

**York Sample ID:** 15E0072-70

York Project (SDG) No.  
15E0072

Client Project ID  
140109003

Matrix  
Soil

Collection Date/Time  
April 30, 2015 3:06 pm

Date Received  
05/01/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	40.8		mg/kg dry	1.16	1	EPA 6010C	05/15/2015 13:46	05/16/2015 01:22	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	86.1		%	0.100	1	SM 2540G	05/14/2015 16:28	05/15/2015 09:03	KK

### Sample Information

**Client Sample ID:** HA-10-N1 (0-1)

**York Sample ID:** 15E0072-71

York Project (SDG) No.  
15E0072

Client Project ID  
140109003

Matrix  
Soil

Collection Date/Time  
April 30, 2015 4:05 pm

Date Received  
05/01/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	51.0		mg/kg dry	1.14	1	EPA 6010C	05/05/2015 14:24	05/05/2015 22:41	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:



### Sample Information

**Client Sample ID:** HA-10-N1 (0-1)

**York Sample ID:** 15E0072-71

York Project (SDG) No.  
15E0072

Client Project ID  
140109003

Matrix  
Soil

Collection Date/Time  
April 30, 2015 4:05 pm

Date Received  
05/01/2015

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	87.9		%	0.100	1	SM 2540G	05/06/2015 17:14	05/07/2015 13:29	KK

### Sample Information

**Client Sample ID:** HA-10-N1 (1-2)

**York Sample ID:** 15E0072-72

York Project (SDG) No.  
15E0072

Client Project ID  
140109003

Matrix  
Soil

Collection Date/Time  
April 30, 2015 4:06 pm

Date Received  
05/01/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	3.06		mg/kg dry	1.19	1	EPA 6010C	05/15/2015 13:46	05/16/2015 01:40	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	83.9		%	0.100	1	SM 2540G	05/14/2015 16:28	05/15/2015 09:03	KK

### Sample Information

**Client Sample ID:** HA-10-W1 (0-1)

**York Sample ID:** 15E0072-75

York Project (SDG) No.  
15E0072

Client Project ID  
140109003

Matrix  
Soil

Collection Date/Time  
April 30, 2015 4:25 pm

Date Received  
05/01/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	33.0		mg/kg dry	1.13	1	EPA 6010C	05/05/2015 14:24	05/05/2015 22:46	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	88.4		%	0.100	1	SM 2540G	05/06/2015 17:14	05/07/2015 13:29	KK



### Sample Information

**Client Sample ID:** HA-10-W1 (0-1)

**York Sample ID:** 15E0072-75

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
15E0072	140109003	Soil	April 30, 2015 4:25 pm	05/01/2015

### Sample Information

**Client Sample ID:** HA-10 (1-2)

**York Sample ID:** 15E0072-76

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
15E0072	140109003	Soil	April 30, 2015 4:30 pm	05/01/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	4.35		mg/kg dry	1.21	1	EPA 6010C	05/15/2015 13:46	05/16/2015 01:45	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	82.9		%	0.100	1	SM 2540G	05/14/2015 16:28	05/15/2015 09:03	KK

### Sample Information

**Client Sample ID:** HA-10-E1 (0-1)

**York Sample ID:** 15E0072-79

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
15E0072	140109003	Soil	April 30, 2015 4:45 pm	05/01/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	23.2		mg/kg dry	1.10	1	EPA 6010C	05/05/2015 14:24	05/05/2015 22:50	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	90.9		%	0.100	1	SM 2540G	05/06/2015 17:14	05/07/2015 13:29	KK



### Sample Information

**Client Sample ID:** HA-10-E1 (1-2)

**York Sample ID:** 15E0072-80

York Project (SDG) No.  
15E0072

Client Project ID  
140109003

Matrix  
Soil

Collection Date/Time  
April 30, 2015 4:46 pm

Date Received  
05/01/2015

#### Arsenic by EPA 6010

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	4.85		mg/kg dry	1.17	1	EPA 6010C	05/15/2015 13:46	05/16/2015 01:50	MW

#### Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	85.1		%	0.100	1	SM 2540G	05/14/2015 16:28	05/15/2015 09:03	KK

### Sample Information

**Client Sample ID:** HA-10-S1 (0-1)

**York Sample ID:** 15E0072-83

York Project (SDG) No.  
15E0072

Client Project ID  
140109003

Matrix  
Soil

Collection Date/Time  
April 30, 2015 5:00 pm

Date Received  
05/01/2015

#### Arsenic by EPA 6010

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	24.6		mg/kg dry	1.11	1	EPA 6010C	05/05/2015 14:24	05/05/2015 22:55	MW

#### Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	89.9		%	0.100	1	SM 2540G	05/06/2015 17:14	05/07/2015 13:29	KK

### Sample Information

**Client Sample ID:** HA-10-S1 (1-2)

**York Sample ID:** 15E0072-84

York Project (SDG) No.  
15E0072

Client Project ID  
140109003

Matrix  
Soil

Collection Date/Time  
April 30, 2015 5:01 pm

Date Received  
05/01/2015

#### Arsenic by EPA 6010

Log-in Notes:

Sample Notes:



### Sample Information

**Client Sample ID:** HA-10-S1 (1-2)

**York Sample ID:** 15E0072-84

York Project (SDG) No.  
15E0072

Client Project ID  
140109003

Matrix  
Soil

Collection Date/Time  
April 30, 2015 5:01 pm

Date Received  
05/01/2015

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	3.43		mg/kg dry	1.17	1	EPA 6010C	05/15/2015 13:46	05/16/2015 01:54	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	85.4		%	0.100	1	SM 2540G	05/14/2015 16:28	05/15/2015 09:03	KK

### Sample Information

**Client Sample ID:** HA-10-S2 (0-1)

**York Sample ID:** 15E0072-87

York Project (SDG) No.  
15E0072

Client Project ID  
140109003

Matrix  
Soil

Collection Date/Time  
April 30, 2015 5:05 pm

Date Received  
05/01/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	33.8		mg/kg dry	1.17	1	EPA 6010C	05/15/2015 13:46	05/16/2015 01:59	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	85.5		%	0.100	1	SM 2540G	05/14/2015 16:28	05/15/2015 09:03	KK

### Sample Information

**Client Sample ID:** HA-10-S2 (1-2)

**York Sample ID:** 15E0072-88

York Project (SDG) No.  
15E0072

Client Project ID  
140109003

Matrix  
Soil

Collection Date/Time  
April 30, 2015 5:06 pm

Date Received  
05/01/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	6.02		mg/kg dry	1.13	1	EPA 6010C	05/27/2015 15:04	05/27/2015 19:07	MW





### Sample Information

**Client Sample ID:** HA-10-S2 (1-2)

**York Sample ID:** 15E0072-88

York Project (SDG) No.  
15E0072

Client Project ID  
140109003

Matrix  
Soil

Collection Date/Time  
April 30, 2015 5:06 pm

Date Received  
05/01/2015

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	88.8		%	0.100	1	SM 2540G	05/27/2015 09:12	05/27/2015 16:38	KK

### Sample Information

**Client Sample ID:** HA-6 (1-2)

**York Sample ID:** 15E0072-91

York Project (SDG) No.  
15E0072

Client Project ID  
140109003

Matrix  
Soil

Collection Date/Time  
April 30, 2015 5:35 pm

Date Received  
05/01/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	8.83		mg/kg dry	1.23	1	EPA 6010C	05/05/2015 14:24	05/05/2015 23:00	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	81.0		%	0.100	1	SM 2540G	05/06/2015 17:14	05/07/2015 13:29	KK

### Sample Information

**Client Sample ID:** HA-6-N1 (0-1)

**York Sample ID:** 15E0072-94

York Project (SDG) No.  
15E0072

Client Project ID  
140109003

Matrix  
Soil

Collection Date/Time  
April 30, 2015 5:40 pm

Date Received  
05/01/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	12.2		mg/kg dry	1.14	1	EPA 6010C	05/05/2015 14:24	05/05/2015 23:05	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:



### Sample Information

**Client Sample ID:** HA-6-N1 (0-1)

**York Sample ID:** 15E0072-94

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

15E0072

140109003

Soil

April 30, 2015 5:40 pm

05/01/2015

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	87.7		%	0.100	1	SM 2540G	05/06/2015 17:14	05/07/2015 13:29	KK

### Sample Information

**Client Sample ID:** HA-6-N1 (1-2)

**York Sample ID:** 15E0072-95

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

15E0072

140109003

Soil

April 30, 2015 5:41 pm

05/01/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	7.37		mg/kg dry	1.23	1	EPA 6010C	05/15/2015 13:46	05/16/2015 02:04	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	81.2		%	0.100	1	SM 2540G	05/14/2015 16:28	05/15/2015 09:03	KK

### Sample Information

**Client Sample ID:** HA-6-S1 (0-1)

**York Sample ID:** 15E0072-98

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

15E0072

140109003

Soil

April 30, 2015 6:00 pm

05/01/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	5.88		mg/kg dry	1.15	1	EPA 6010C	05/05/2015 14:24	05/05/2015 23:09	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	86.6		%	0.100	1	SM 2540G	05/06/2015 17:14	05/07/2015 13:29	KK



---

### Sample Information

**Client Sample ID:**    HA-6-S1 (0-1)

**York Sample ID:**        15E0072-98

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

15E0072

140109003

Soil

April 30, 2015    6:00 pm

05/01/2015

---



## REASONABLE CONFIDENCE PROTOCOL

### LABORATORY ANALYSIS QA/QC CERTIFICATION FORM

Laboratory Name: York Analytical Laboratories, Inc.

Client: Langan Engineering & Environmental Serv

Project Location: 140109003

Lab Project No.: 15E0072

Laboratory Sample ID(s): 15E0072-01 - 15E0072-98

Sampling Date(s): 04/30/2015 - 05/01/2015

RCP Methods Used: See Narrative and Method Reference Section of this Technical Report

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed (including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP RCPs)?	YES
1A	Were the method specified preservation and holding time requirements met?	YES
1B	VPH and EPH Methods only: Was the VPH or EPH method conducted without significant modifications (see Section 11.3 of respective RCP methods)?	NR
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	YES
3	Were samples received at an appropriate temperature (<6°C )?	YES
4	Were all QA/QC performance criteria specified in the CTDEP Reasonable Confidence Protocol documents achieved?	NO
5A	Were reporting limits specified or referenced on the chain-of-custody?	YES
5B	Were these reporting limits met?	YES
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	NO
7	Are project-specific matrix spikes and laboratory duplicates included in this data set?	YES

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to questions #1, #1A, or #1B is "No", the data package does not meet the requirements for "Reasonable Confidence".

This form may not be altered and all questions must be answered.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.

Authorized  
Signature:

Position: Laboratory Director

Printed Name: Benjamin Gulizia

Date: 06/03/2015

# YORK



## **Case Narrative**

Client: Langan Engineering & Environmental Services (CT)

Client Project ID: 140109003

Prepared for: Ryan Wohlstrom

## **Introduction**

This Case Narrative applies to the following samples submitted to our laboratory on **5/1/2015 5:10:00 PM** :

<b>Dup-1</b>	<b>Soil</b>
<b>Dup-2</b>	<b>Soil</b>
<b>Dup-3</b>	<b>Soil</b>
<b>FIELD BLANK-5012015</b>	<b>Water</b>
<b>HA-10-E1 (0-1)</b>	<b>Soil</b>
<b>HA-10-N1 (0-1)</b>	<b>Soil</b>
<b>HA-10-S1 (0-1)</b>	<b>Soil</b>
<b>HA-10-W1 (0-1)</b>	<b>Soil</b>
<b>HA-13 (1-2)</b>	<b>Soil</b>
<b>HA-13-E1 (0-1)</b>	<b>Soil</b>
<b>HA-13-N1 (0-1)</b>	<b>Soil</b>
<b>HA-13-S1 (0-1)</b>	<b>Soil</b>
<b>HA-13-W1 (0-1)</b>	<b>Soil</b>
<b>HA-22 (2-3)</b>	<b>Soil</b>
<b>HA-22-N1 (0-1)</b>	<b>Soil</b>
<b>HA-22-S1 (0-1)</b>	<b>Soil</b>
<b>HA-22-W1 (0-1)</b>	<b>Soil</b>
<b>HA-6 (1-2)</b>	<b>Soil</b>
<b>HA-6-N1 (0-1)</b>	<b>Soil</b>
<b>HA-6-S1 (0-1)</b>	<b>Soil</b>
<b>HA-6-W1 (0-1)</b>	<b>Soil</b>

The 99 sample(s) were received intact in a custody-sealed cooler unless otherwise noted. Upon receipt, cooler temperature(s) was determined using a NIST traceable digital infrared thermometer. The cooler temperature was acceptable (2-6oC) and documented as:

## **Cooler 4 C**

Chain-of-custody was maintained from receipt through analysis in the laboratory.

## **Methodology**

Preparation and analysis were conducted according to the SW-846 methods, as detailed in the sample information table, and the requirements of the State of Connecticut Reasonable Confidence Protocols (RCP).



For initial calibrations (ICAL), initial calibration verifications (ICV) and continuing calibration verifications (CCV) for organics determined by GC/MS methods (TO15 volatiles, 8260 volatiles and 8270 semi-volatiles) all method criteria and laboratory SOP criteria were met unless otherwise noted below. Any compounds in the ICAL, ICV or CCV exceeding RCP specified limits are available upon request. This data is not used for Data Quality Assessment or Data Usability Evaluation (assignment of compound bias) which are determined from other lines of evidence. Therefore the data is not detailed in this narrative.

These terms may be used interchangeably. Both are measures of the accuracy of an analysis by measurement of a known material from a source other than that used for calibration. By definition, a **Standard Reference Material (SRM)** is a material containing known levels of analytes used to evaluate the performance of the analytical system with respect to a defined set of acceptance criteria. It is processed exactly as a sample. An **LCS (Laboratory Control Sample)** is second-source standard containing known levels of analyte(s), treated exactly as a sample, run with each analytical batch. Both are metrics used to establish accuracy of the preparation/analysis methods.

#### **Metals – Total (Arsenic)**

No problems were encountered during analysis of the samples, other than detailed below.

##### *Method Blank*

No target analyte was detected at or above the RL in the method blanks.

##### *Batch QC*

Seven Standard Reference Materials and MS/Dup analysis on samples “Dup-2” and “HA-10-W2 (0-1)” were run as batch QC for this project. Please refer to the Quality Control Data attached to this report for bias information.

##### *Dilutions*

No sample dilutions were required.





## Analytical Batch Summary

**Batch ID:** BE50141

**Preparation Method:** EPA 3010A

**Prepared By:** MW

YORK Sample ID	Client Sample ID	Preparation Date
15E0072-01	FIELD BLANK-5012015	05/04/15
BE50141-BLK1	Blank	05/04/15
BE50141-SRM1	Reference	05/04/15

**Batch ID:** BE50212

**Preparation Method:** EPA 3050B

**Prepared By:** MW

YORK Sample ID	Client Sample ID	Preparation Date
15E0072-02	Dup-1	05/05/15
15E0072-03	Dup-2	05/05/15
15E0072-04	Dup-3	05/05/15
15E0072-17	HA-6-W1 (0-1)	05/05/15
15E0072-27	HA-22-W1 (0-1)	05/05/15
15E0072-38	HA-13-N1 (0-1)	05/05/15
15E0072-46	HA-13 (1-2)	05/05/15
15E0072-49	HA-13-W1 (0-1)	05/05/15
15E0072-51	HA-13-S1 (0-1)	05/05/15
15E0072-55	HA-13-E1 (0-1)	05/05/15
15E0072-63	HA-22-N1 (0-1)	05/05/15
15E0072-67	HA-22 (2-3)	05/05/15
15E0072-69	HA-22-S1 (0-1)	05/05/15
15E0072-71	HA-10-N1 (0-1)	05/05/15
15E0072-75	HA-10-W1 (0-1)	05/05/15
15E0072-79	HA-10-E1 (0-1)	05/05/15
15E0072-83	HA-10-S1 (0-1)	05/05/15
15E0072-91	HA-6 (1-2)	05/05/15
15E0072-94	HA-6-N1 (0-1)	05/05/15
15E0072-98	HA-6-S1 (0-1)	05/05/15
BE50212-BLK1	Blank	05/05/15
BE50212-DUP1	Duplicate	05/05/15
BE50212-MS1	Matrix Spike	05/05/15
BE50212-SRM1	Reference	05/05/15

**Batch ID:** BE50312

**Preparation Method:** % Solids Prep

**Prepared By:** KK

YORK Sample ID	Client Sample ID	Preparation Date
15E0072-02	Dup-1	05/06/15
15E0072-03	Dup-2	05/06/15
15E0072-04	Dup-3	05/06/15
15E0072-17	HA-6-W1 (0-1)	05/06/15
15E0072-27	HA-22-W1 (0-1)	05/06/15
15E0072-38	HA-13-N1 (0-1)	05/06/15
15E0072-46	HA-13 (1-2)	05/06/15
15E0072-49	HA-13-W1 (0-1)	05/06/15
15E0072-51	HA-13-S1 (0-1)	05/06/15
15E0072-55	HA-13-E1 (0-1)	05/06/15



BE50312-DUP1

Duplicate

05/06/15

**Batch ID:** BE50314**Preparation Method:** % Solids Prep**Prepared By:** KK

YORK Sample ID	Client Sample ID	Preparation Date
15E0072-63	HA-22-N1 (0-1)	05/06/15
15E0072-67	HA-22 (2-3)	05/06/15
15E0072-69	HA-22-S1 (0-1)	05/06/15
15E0072-71	HA-10-N1 (0-1)	05/06/15
15E0072-75	HA-10-W1 (0-1)	05/06/15
15E0072-79	HA-10-E1 (0-1)	05/06/15
15E0072-83	HA-10-S1 (0-1)	05/06/15
15E0072-91	HA-6 (1-2)	05/06/15
15E0072-94	HA-6-N1 (0-1)	05/06/15
15E0072-98	HA-6-S1 (0-1)	05/06/15

**Batch ID:** BE50770**Preparation Method:** % Solids Prep**Prepared By:** SCA

YORK Sample ID	Client Sample ID	Preparation Date
15E0072-22	HA-10-W2 (0-1)	05/14/15
15E0072-24	HA-22-W2 (0-1)	05/14/15
15E0072-28	HA-22-W1 (1-2)	05/14/15
15E0072-30	HA-13-E2 (0-1)	05/14/15
15E0072-32	HA-13-W2 (0-1)	05/14/15
15E0072-36	HA-10-E2 (0-1)	05/14/15
15E0072-39	HA-13-N1 (1-2)	05/14/15
15E0072-42	HA-13-N2 (0-1)	05/14/15
15E0072-50	HA-13-W1 (1-2)	05/14/15
15E0072-52	HA-13-S1 (1-2)	05/14/15
15E0072-56	HA-13-E1 (1-2)	05/14/15
15E0072-59	HA-13-S2 (0-1)	05/14/15
15E0072-64	HA-22-N1 (1-2)	05/14/15
15E0072-70	HA-22-S1 (1-2)	05/14/15
15E0072-72	HA-10-N1 (1-2)	05/14/15
15E0072-76	HA-10 (1-2)	05/14/15
15E0072-80	HA-10-E1 (1-2)	05/14/15
15E0072-84	HA-10-S1 (1-2)	05/14/15
15E0072-87	HA-10-S2 (0-1)	05/14/15
15E0072-95	HA-6-N1 (1-2)	05/14/15
BE50770-DUP1	Duplicate	05/14/15

**Batch ID:** BE50771**Preparation Method:** % Solids Prep**Prepared By:** SCA

YORK Sample ID	Client Sample ID	Preparation Date
15E0072-09	HA-5-S2 (0-1)	05/14/15

**Batch ID:** BE50830**Preparation Method:** EPA 3050B**Prepared By:** MW

YORK Sample ID	Client Sample ID	Preparation Date
----------------	------------------	------------------



15E0072-09	HA-5-S2 (0-1)	05/15/15
BE50830-BLK1	Blank	05/15/15
BE50830-SRM1	Reference	05/15/15

**Batch ID:** BE50831      **Preparation Method:** EPA 3050B      **Prepared By:** MW

YORK Sample ID	Client Sample ID	Preparation Date
----------------	------------------	------------------

15E0072-22	HA-10-W2 (0-1)	05/15/15
15E0072-24	HA-22-W2 (0-1)	05/15/15
15E0072-28	HA-22-W1 (1-2)	05/15/15
15E0072-30	HA-13-E2 (0-1)	05/15/15
15E0072-32	HA-13-W2 (0-1)	05/15/15
15E0072-36	HA-10-E2 (0-1)	05/15/15
15E0072-39	HA-13-N1 (1-2)	05/15/15
15E0072-42	HA-13-N2 (0-1)	05/15/15
15E0072-50	HA-13-W1 (1-2)	05/15/15
15E0072-52	HA-13-S1 (1-2)	05/15/15
15E0072-56	HA-13-E1 (1-2)	05/15/15
15E0072-59	HA-13-S2 (0-1)	05/15/15
15E0072-64	HA-22-N1 (1-2)	05/15/15
15E0072-70	HA-22-S1 (1-2)	05/15/15
15E0072-72	HA-10-N1 (1-2)	05/15/15
15E0072-76	HA-10 (1-2)	05/15/15
15E0072-80	HA-10-E1 (1-2)	05/15/15
15E0072-84	HA-10-S1 (1-2)	05/15/15
15E0072-87	HA-10-S2 (0-1)	05/15/15
15E0072-95	HA-6-N1 (1-2)	05/15/15
BE50831-BLK1	Blank	05/15/15
BE50831-DUP1	Duplicate	05/15/15
BE50831-MS1	Matrix Spike	05/15/15
BE50831-SRM1	Reference	05/15/15

**Batch ID:** BE51304      **Preparation Method:** % Solids Prep      **Prepared By:** KK

YORK Sample ID	Client Sample ID	Preparation Date
----------------	------------------	------------------

15E0072-23	HA-10-W2 (1-2)	05/27/15
15E0072-31	HA-13-E2 (1-2)	05/27/15
15E0072-43	HA-13-N2 (1-2)	05/27/15
15E0072-60	HA-13-S2 (1-2)	05/27/15
15E0072-65	HA-22-N1 (2-3)	05/27/15
15E0072-88	HA-10-S2 (1-2)	05/27/15

**Batch ID:** BE51341      **Preparation Method:** EPA 3050B      **Prepared By:** MW

YORK Sample ID	Client Sample ID	Preparation Date
----------------	------------------	------------------

15E0072-23	HA-10-W2 (1-2)	05/27/15
15E0072-31	HA-13-E2 (1-2)	05/27/15
15E0072-43	HA-13-N2 (1-2)	05/27/15
15E0072-60	HA-13-S2 (1-2)	05/27/15
15E0072-65	HA-22-N1 (2-3)	05/27/15
15E0072-88	HA-10-S2 (1-2)	05/27/15



BE51341-BLK1	Blank	05/27/15
BE51341-SRM1	Reference	05/27/15

<b>Batch ID:</b> BF50060	<b>Preparation Method:</b> EPA 3050B	<b>Prepared By:</b> ALD
--------------------------	--------------------------------------	-------------------------

YORK Sample ID	Client Sample ID	Preparation Date
15E0072-33	HA-13-W2 (1-2)	06/01/15
15E0072-37	HA-10-E2 (1-2)	06/01/15
BF50060-BLK1	Blank	06/01/15
BF50060-SRM1	Reference	06/01/15

<b>Batch ID:</b> BF50072	<b>Preparation Method:</b> % Solids Prep	<b>Prepared By:</b> KK
--------------------------	--	------------------------

YORK Sample ID	Client Sample ID	Preparation Date
15E0072-33	HA-13-W2 (1-2)	06/01/15
15E0072-37	HA-10-E2 (1-2)	06/01/15

<b>Batch ID:</b> BF50134	<b>Preparation Method:</b> EPA 3050B	<b>Prepared By:</b> ALD
--------------------------	--------------------------------------	-------------------------

YORK Sample ID	Client Sample ID	Preparation Date
15E0072-34	HA-13-W2 (2-3)	06/02/15
BF50134-BLK1	Blank	06/02/15
BF50134-SRM1	Reference	06/02/15

<b>Batch ID:</b> BF50166	<b>Preparation Method:</b> % Solids Prep	<b>Prepared By:</b> KK
--------------------------	--	------------------------

YORK Sample ID	Client Sample ID	Preparation Date
15E0072-34	HA-13-W2 (2-3)	06/03/15



**Metals by ICP - Quality Control Data**  
**York Analytical Laboratories, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BE50141 - EPA 3010A</b>											
<b>Blank (BE50141-BLK1)</b>						Prepared: 05/04/2015 Analyzed: 05/05/2015					
Arsenic	ND	0.00400	mg/L								
<b>Reference (BE50141-SRM1)</b>						Prepared: 05/04/2015 Analyzed: 05/05/2015					
Arsenic	0.623	0.00400	mg/L	0.681		91.4	84.4-114				
<b>Batch BE50212 - EPA 3050B</b>											
<b>Blank (BE50212-BLK1)</b>						Prepared & Analyzed: 05/05/2015					
Arsenic	ND	1.00	mg/kg wet								
<b>Duplicate (BE50212-DUP1)</b>						*Source sample: 15E0072-03 (Dup-2) Prepared & Analyzed: 05/05/2015					
Arsenic	170	1.15	mg/kg dry		169				0.380	35	
<b>Matrix Spike (BE50212-MS1)</b>						*Source sample: 15E0072-03 (Dup-2) Prepared & Analyzed: 05/05/2015					
Arsenic	392	1.15	mg/kg dry	230	169	97.1	75-125				
<b>Reference (BE50212-SRM1)</b>						Prepared & Analyzed: 05/05/2015					
Arsenic	148	1.00	mg/kg wet	151		98.1	70.9-130				
<b>Batch BE50830 - EPA 3050B</b>											
<b>Blank (BE50830-BLK1)</b>						Prepared & Analyzed: 05/15/2015					
Arsenic	ND	1.00	mg/kg wet								
<b>Reference (BE50830-SRM1)</b>						Prepared & Analyzed: 05/15/2015					
Arsenic	139	1.00	mg/kg wet	151		92.4	70.9-130				



**Metals by ICP - Quality Control Data**  
**York Analytical Laboratories, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BE50831 - EPA 3050B</b>											
<b>Blank (BE50831-BLK1)</b>								Prepared & Analyzed: 05/15/2015			
Arsenic	ND	1.00	mg/kg wet								
<b>Duplicate (BE50831-DUP1)</b> *Source sample: 15E0072-22 (HA-10-W2 (0-1))								Prepared: 05/15/2015 Analyzed: 05/16/2015			
Arsenic	55.3	1.24	mg/kg dry		55.9				1.13	35	
<b>Matrix Spike (BE50831-MS1)</b> *Source sample: 15E0072-22 (HA-10-W2 (0-1))								Prepared: 05/15/2015 Analyzed: 05/16/2015			
Arsenic	294	1.24	mg/kg dry	248	55.9	96.2	75-125				
<b>Reference (BE50831-SRM1)</b>								Prepared & Analyzed: 05/15/2015			
Arsenic	142	1.00	mg/kg wet	151		94.0	70.9-130				
<b>Batch BE51341 - EPA 3050B</b>											
<b>Blank (BE51341-BLK1)</b>								Prepared & Analyzed: 05/27/2015			
Arsenic	ND	1.00	mg/kg wet								
<b>Reference (BE51341-SRM1)</b>								Prepared & Analyzed: 05/27/2015			
Arsenic	154	1.00	mg/kg wet	151		102	70.9-130				
<b>Batch BF50060 - EPA 3050B</b>											
<b>Blank (BF50060-BLK1)</b>								Prepared & Analyzed: 06/01/2015			
Arsenic	ND	1.00	mg/kg wet								
<b>Reference (BF50060-SRM1)</b>								Prepared & Analyzed: 06/01/2015			
Arsenic	153	1.00	mg/kg wet	151		101	70.9-130				





**Metals by ICP - Quality Control Data**  
**York Analytical Laboratories, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
---------	--------	--------------------	-------	----------------	-------------------	------	----------------	------	-----	--------------	------

**Batch BF50134 - EPA 3050B**

**Blank (BF50134-BLK1)**

Prepared & Analyzed: 06/02/2015

Arsenic	ND	1.00	mg/kg wet
---------	----	------	-----------

**Reference (BF50134-SRM1)**

Prepared & Analyzed: 06/02/2015

Arsenic	148	1.00	mg/kg wet	151	97.8	70.9-130
---------	-----	------	-----------	-----	------	----------



### Miscellaneous Physical Parameters - Quality Control Data

#### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC Limits	Flag	RPD Limit	Flag
---------	--------	--------------------	-------	----------------	-------------------	----------------	------	--------------	------

#### Batch BE50312 - % Solids Prep

<b>Duplicate (BE50312-DUP1)</b>		*Source sample: 15E0072-55 (HA-13-E1 (0-1))					Prepared: 05/06/2015 Analyzed: 05/07/2015				
% Solids	85.7	0.100	%		84.9			0.871	20		

#### Batch BE50770 - % Solids Prep

<b>Duplicate (BE50770-DUP1)</b>		*Source sample: 15E0072-95 (HA-6-N1 (1-2))					Prepared: 05/14/2015 Analyzed: 05/15/2015				
% Solids	82.4	0.100	%		81.2			1.43	20		



## Notes and Definitions

*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
Non-Dir.	Non-dir. flag (Non-Directional Bias ) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.

For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic performance.

Corrective Action: The client ID for COC sample HA-13-W2 (1-2) was revised to HA-13-W1 (1-2) per J. Hall request (collected 4/30/15 13:26).

Revision Description: Client took additional samples off hold



YORK ANALYTICAL LABORATORIES  
120 RESEARCH DR.  
STRATFORD, CT 06615  
(203) 325-1371  
FAX (203) 357-0166

**YORK**  
ANALYTICAL LABORATORIES INC

# Field Chain-of-Custody Record

NOTE: York's Std. Terms & Conditions are listed on the back side of this document.  
This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions.

Page 1 of 18

York Project No. 15E0072

YOUR Information		Report To:		Invoice To:		YOUR Project ID		Turn-Around Time		Report Type	
Company: <u>Langan Engineering</u>	Company: <u>Same</u>	Company: <u>same</u>						RUSH - Same Day <input type="checkbox"/>	Summary Report		
Address: <u>555 Long Wharf Dr.</u>	Address: <u>same</u>	Address: <u>same</u>						RUSH - Next Day <input type="checkbox"/>	Summary w/ QA Summary		
City: <u>New Haven, CT 06511</u>								RUSH - Two Day <input type="checkbox"/>	CT RCP Package <input checked="" type="checkbox"/>		
Phone No.: <u>203-562-5771</u>								RUSH - Three Day <input type="checkbox"/>	CT RCP DOA/DUE Pkg		
Contact Person: <u>Ryan Wohlstrom</u>								RUSH - Four Day <input type="checkbox"/>	NY ASP A Package		
E-Mail Address: <u>Wohlstrom@langan.com</u>									NY ASP B Package		
									NJDEP Red. Deliv.		
									Standard (5-7 Days) <input checked="" type="checkbox"/>		
										Electronic Data Deliverables (EDD)	
										Simple Excel	
										NYSDEC EQuIS	
										EQuIS (std)	
										EZ-EDD (EQuIS)	
										NJDEP SRP HazSite EDD	
										GIS/KEY (std)	
										Other <u>pdf</u>	
										York Regulatory Comparison	
										Excel Spreadsheet <input checked="" type="checkbox"/>	
										Compare to the following Regs. (please fill in):	
											CT DEEP RSR's

Sample Identification		Date/Time Sampled	Sample Matrix	Choose Analyses Needed from the Menu Above and Enter Below										Container Description(s)
FIELD BLANK - 5012015		5/1/15 11:30	AR	Arsenic										plastic
DUP - 1		4/30/15 00:00	SO											12 oz glass
DUP - 2		00:00												
DUP - 3		00:00												
HA-21-SZ (0-1)		09:20		* HOLD										
HA-21-SZ (1-2)		09:21		* HOLD										
HA-21-SZ (2-3)		09:22		* HOLD										
HA-21-SZ (3-4)		09:23		* HOLD										
HA-5-SZ (0-1)		09:24		* HOLD										
HA-5-SZ (1-2)		09:25		* HOLD										
Comments				4°C	Frozen	HCl	MeOH	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	NaOH	Temperature on Receipt			
											4.0 °C			
SPECIAL INSTRUCTIONS				Samples Relinquished By <u>Wohlstrom</u> Date/Time <u>5/1/15 17:10</u> Samples Received By <u>Langan</u> Date/Time <u>5-1-15 1710</u> Samples Relinquished By _____ Date/Time _____ Samples Received in LAB by _____ Date/Time _____										





YORK ANALYTICAL LABORATORIES  
120 RESEARCH DR.  
STRATFORD, CT 06615  
(203) 325-1371  
FAX (203) 357-0166

# Field Chain-of-Custody Record

Page 2 of 18

York Project No. 15E0012

NOTE: York's Std. Terms & Conditions are listed on the back side of this document.  
This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions.

YOUR Information		Report To:		Invoice To:		YOUR Project ID		Turn-Around Time		Report Type	
Company: <u>LANCASH</u>	Company: _____	Company: _____	Company: _____	Semi-Vols. <u>8082PCB</u>		Metals <u>RCRA8</u>		RUSH - Same Day <input type="checkbox"/>		Summary Report _____	
Address: _____	Address: _____	Address: _____	Address: _____	Volatiles <u>8260 full</u>		Metals <u>PP13 list</u>		RUSH - Next Day <input type="checkbox"/>		Summary w/ QA Summary _____	
Phone No. _____	Phone No. _____	Phone No. _____	Phone No. _____	Site Spec. <u>624</u>		Metals <u>TAL</u>		RUSH - Two Day <input type="checkbox"/>		CT RCP Package _____	
Contact Person: _____	Contact Person: _____	Contact Person: _____	Contact Person: _____	STARS list <u>BTX</u>		Metals <u>CT RCP</u>		RUSH - Three Day <input type="checkbox"/>		CTRCP DQA/DUE Pkg _____	
E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	BTEX <u>MTBE</u>		Metals <u>CT RCP</u>		RUSH - Four Day <input type="checkbox"/>		NY ASP A Package _____	
				Ketones <u>TCCL list</u>		Metals <u>CT RCP</u>		Standard(5-7 Days) <input checked="" type="checkbox"/>		NY ASP B Package _____	
				Oxygenates <u>TCCL list</u>		Metals <u>CT RCP</u>				NIDEP Red. Deliv. _____	
				TCCL list <u>TCCL list</u>		Metals <u>CT RCP</u>				Electronic Data Deliverables (EDD) _____	
				TCCL list <u>TCCL list</u>		Metals <u>CT RCP</u>				Simple Excel _____	
				TCCL list <u>TCCL list</u>		Metals <u>CT RCP</u>				NYSDEC EQuIS _____	
				TCCL list <u>TCCL list</u>		Metals <u>CT RCP</u>				EQuIS (std) _____	
				TCCL list <u>TCCL list</u>		Metals <u>CT RCP</u>				EZ-EDD (EQuIS) _____	
				TCCL list <u>TCCL list</u>		Metals <u>CT RCP</u>				NIDEP SRP HazSite EDD _____	
				TCCL list <u>TCCL list</u>		Metals <u>CT RCP</u>				GIS/KEY (std) _____	
				TCCL list <u>TCCL list</u>		Metals <u>CT RCP</u>				Other _____	
				TCCL list <u>TCCL list</u>		Metals <u>CT RCP</u>				York Regulatory Comparison _____	
				TCCL list <u>TCCL list</u>		Metals <u>CT RCP</u>				Excel Spreadsheet _____	
				TCCL list <u>TCCL list</u>		Metals <u>CT RCP</u>				Compare to the following Regs. (please fill in): _____	
				TCCL list <u>TCCL list</u>		Metals <u>CT RCP</u>				CTDEE P <u>RS25</u>	

Sample Identification		Date/Time Sampled	Sample Matrix	Choose Analyses Needed from the Menu Above and Enter Below										Container Description(s)
HA-5-S2 (2-3)	4/30/15	09:26	SO	Arsenic										2 oz glass
HA-5-S2 (3-4)		09:27		* HOLD										
HA-6-S2 (0-1)		1000		* HOLD										
HA-6-S2 (1-2)		1001		* HOLD										
HA-6-S2 (2-3)		1002		* HOLD										
HA-6-S2 (3-4)		1003		* HOLD										
HA-6-W1 (0-1)		1010		* HOLD										
HA-6-W1 (1-2)		1011		* HOLD										
HA-6-W2 (0-1)		1030		* HOLD										
HA-6-W2 (1-2)		1031		* HOLD										



## Field Chain-of-Custody Record

**NOTE:** York's Std. Terms & Conditions are listed on the back side of this document.

**NOTE:** York's Std. Terms & Conditions are listed on the back side of this document.  
This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions.

**York Project No.**

YOUR Information		Report To:		Invoice To:		YOUR Project ID		Turn-Around Time		Report Type	
Company: <u>LANGAN</u>		Company: _____		Company: _____		140109003		RUSH - Same Day <input type="checkbox"/>		Summary Report <input type="checkbox"/>	
Address: _____		Address: _____		Address: _____		Purchase Order No. _____		RUSH - Next Day <input type="checkbox"/>		Summary w/ QA Summary <input type="checkbox"/>	
Phone No. _____		Phone No. _____		Phone No. _____		_____		RUSH - Two Day <input type="checkbox"/>		CTRCP Package <input type="checkbox"/>	
Contact Person: _____		Attention: _____		Attention: _____		_____		RUSH - Three Day <input type="checkbox"/>		CTRCP DQADUE Pkg <input type="checkbox"/>	
E-Mail Address: _____		E-Mail Address: _____		E-Mail Address: _____		_____		RUSH - Four Day <input type="checkbox"/>		NY ASP A Package <input type="checkbox"/>	
								Standard (5-7 Days) <input checked="" type="checkbox"/>		NY ASP B Package <input type="checkbox"/>	
								Samples from: CT <input checked="" type="checkbox"/> NY <input type="checkbox"/> NJ <input type="checkbox"/>		NJDEP Red. Deliv. <input type="checkbox"/>	

Print Clearly and Legibly. All Information must be complete. Samples will NOT be logged in and the turn-around time clock will not begin until any questions by York are resolved.											
<div style="display: flex; justify-content: space-between;"> <div>                 Samples Collected/Authorized By (Signature)                  _____                  Name (printed)                  _____             </div> <div>                 Matrix Codes                  S - soil                  Other - specify (oil, etc.)                  WW - wastewater                  GW - groundwater                  DW - drinking water                  Air-A - ambient air                  Air-SV - soil vapor             </div> </div>											

Sample Identification	Date/Time Sampled	Sample Matrix	Choose Analyses Needed from the Menu Above and Enter Below	Container Description(s)
HA-6-W2 (2-3)	4/30/15 1032	S	Arsenic	2oz glass
HA-10-W2 (0-1)	1040		* HOLD	
HA-10-W2 (1-2)	1041		* HOLD	
HA-22-W2 (0-1)	1120		* HOLD	
HA-22-W2 (1-2)	1121		* HOLD	
HA-22-W2 (2-3)	1122		* HOLD	
HA-22-W1 (0-1)	1125			
HA-22-W1 (1-2)	1126		* HOLD	
HA-22-W1 (2-3)	1127		* HOLD	
-13-E2 (0-1)	1205		* HOLD	

Preservation Check those Applicable		Special Instructions	
4°C <input type="checkbox"/>	Frozen <input type="checkbox"/>	HCl <input type="checkbox"/>	MeOH <input type="checkbox"/>
ZnAc <input type="checkbox"/>	Ascorbic Acid <input type="checkbox"/>	HNO <sub>3</sub> <input type="checkbox"/>	H <sub>2</sub> SO <sub>4</sub> <input type="checkbox"/>
		NaOH <input type="checkbox"/>	

Samples Relinquished By		Date/Time	
5/1/15 17:10		5-1-15 1710	
Samples Received By		Date/Time	
LAB		5-1-15 1710	

Temperature on Receipt	
4.0 °C	





YORK ANALYTICAL LABORATORIES  
120 RESEARCH DR.  
STRATFORD, CT 06615  
(203) 325-1371  
FAX (203) 357-0166

**YORK**  
ANALYTICAL LABORATORIES INC.

# Field Chain-of-Custody Record

NOTE: York's Std. Terms & Conditions are listed on the back side of this document.  
This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions.

Page 4 of 18

York Project No. 15E008

YOUR Information		Report To:		Invoice To:		YOUR Project ID		Turn-Around Time		Report Type	
Company: <u>LANGAN</u>	Company: _____	Company: _____	Company: _____	Company: _____	Company: _____	Company: _____	Company: _____	Company: _____	Company: _____	Company: _____	Company: _____
Address: _____	Address: _____	Address: _____	Address: _____	Address: _____	Address: _____	Address: _____	Address: _____	Address: _____	Address: _____	Address: _____	Address: _____
Phone No. _____	Phone No. _____	Phone No. _____	Phone No. _____	Phone No. _____	Phone No. _____	Phone No. _____	Phone No. _____	Phone No. _____	Phone No. _____	Phone No. _____	Phone No. _____
Contact Person: _____	Contact Person: _____	Contact Person: _____	Contact Person: _____	Contact Person: _____	Contact Person: _____	Contact Person: _____	Contact Person: _____	Contact Person: _____	Contact Person: _____	Contact Person: _____	Contact Person: _____
E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____

**Print Clearly and Legibly. All Information must be complete. Samples will NOT be logged in and the turn-around time clock will not begin until all questions by York are resolved.**

Samples Collected/Authorized By (Signature) \_\_\_\_\_

Name (printed) \_\_\_\_\_

Sample Identification	Date/Time Sampled	Sample Matrix	Choose Analyses Needed from the Menu Above and Enter Below	Container Description(s)
HA-13-E2 (1-2)	1/30/15 12:06	S	Arsonic	2 oz glass
HA-13-W2 (0-1)	11:40		* HOLD	
HA-13-W2 (1-2)	11:41		* HOLD	
HA-13-W2 (2-3)	11:42		* HOLD	
HA-13-W2 (3-4)	11:43		* HOLD	
HA-10-E2 (0-1)	12:10		* HOLD	
HA-10-E2 (1-2)	12:11		* HOLD	
HA-13-N1 (0-1)	12:50		* HOLD	
HA-13-N1 (1-2)	12:51		* HOLD	
HA-13-N1 (2-3)	12:52		* HOLD	

Temperature on Receipt <u>4.0</u> °C	
Samples Received By <u>Trace</u>	Date/Time <u>5-15 1710</u>
Samples Relinquished By <u>Trace</u>	Date/Time <u>5-15 1710</u>



## Field Chain-of-Custody Record

**NOTE:** York's Std. Terms & Conditions are listed on the back side of this document.

**NOTE:** York's Std. Terms & Conditions are listed on the back side of this document. This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions.

**York Project No.**

<b>YOUR Information</b> Company: <u>LANGAN</u> Address: _____ Phone No. _____ Contact Person: _____ E-Mail Address: _____	<b>Report To:</b> Company: _____ Address: _____ Phone No. _____ Attention: _____ E-Mail Address: _____	<b>Invoice To:</b> Company: _____ Address: _____ Phone No. _____ Attention: _____ E-Mail Address: _____	<b>YOUR Project ID</b> <u>140109003</u> <b>Purchase Order No.</b> _____	<b>Turn-Around Time</b> RUSH - Same Day <input type="checkbox"/> RUSH - Next Day <input type="checkbox"/> RUSH - Two Day <input type="checkbox"/> RUSH - Three Day <input type="checkbox"/> RUSH - Four Day <input type="checkbox"/> <b>Standard (5-7 Days)</b> <input checked="" type="checkbox"/>	<b>Report Type</b> Summary Report <input type="checkbox"/> Summary w/ QA Summary <input type="checkbox"/> CT RCP Package <input type="checkbox"/> CTRCP DQADUE Pkg <input type="checkbox"/> NY ASP A Package <input type="checkbox"/> NY ASP B Package <input type="checkbox"/> NIDEP Red. Deliv. <input type="checkbox"/> Electronic Data Deliverables (EDD) <input type="checkbox"/>					
<b>Print Clearly and Legibly. All Information must be complete. Samples will NOT be logged in and the turn-around time clock will not begin until any questions by York are resolved.</b> Samples Collected/Authorized By (Signature) _____ Name (printed) _____			<b>Matrix Codes</b> S - soil Other - specify (oil, etc.) _____ WW - wastewater GW - groundwater DW - drinking water Air-A - ambient air Air-SV - soil vapor							
<b>Choose Analyses Needed from the Menu Above and Enter Below</b>			<b>Container Description(s)</b> <u>2<sup>nd</sup> glass</u>							
<b>Sample Identification</b> <u>HA-13-N1 (3-4)</u> <u>HA-13-N2 (0-1)</u> <u>HA-13-N2 (1-2)</u> <u>HA-13-N2 (2-3)</u> <u>HA-13-N2 (3-4)</u> <u>HA-13 (1-2)</u> <u>HA-13 (2-3)</u> <u>HA-13 (3-4)</u> <u>HA-13-W1 (0-1)</u> <u>HA-13-W2 (1-2)</u>	<b>Date/Time Sampled</b> <u>4/30/15</u> <u>1253</u> <u>1254</u> <u>1255</u> <u>1256</u> <u>1257</u> <u>1320</u> <u>1321</u> <u>1322</u> <u>1325</u> <u>1326</u>	<b>Sample Matrix</b> <u>S</u> <u>S</u> <u>S</u> <u>S</u> <u>S</u> <u>S</u> <u>S</u> <u>S</u> <u>S</u>	<b>4°C</b> <input type="checkbox"/> <b>Frozen</b> <input type="checkbox"/> <b>HCl</b> <input type="checkbox"/> <b>MeOH</b> <input type="checkbox"/> <b>Ascorbic Acid</b> <input type="checkbox"/> <b>Other</b> <input type="checkbox"/> <b>Preservation</b> Check those Applicable Special Instructions Field Filled <input type="checkbox"/> Lab to Filter <input type="checkbox"/>	<b>Volatiles</b> 8260 full TICs 624 Site Spec. STARS list Nassau Co. BTEX Suffolk Co. MTBE Ketones TCL list Oxygenates TAGM list TCLP list CT RCP list 524.2 Arom. only 502.2 Halog. only NIJEP list App. IX list SPT Per TCLP 8021B list	<b>Semi-Vols.</b> 8270 or 625 STARS list 8081Pest BN Only 8151Herb Acids Only App. IX PAH list Site Spec. TAGM list SPT Per TCLP CT RCP list TCL list NIJEP list App. IX SPT Per TCLP 608 Post	<b>Metals</b> RCRA8 PPL3 list TAL CT ETPH NY 310-13 Full TCLP TPH 1664 Full App. IX Air TO14A Air TO15 Air STARS Air VPH Air TICs Mediane Helium	<b>Misc. Org.</b> TPH GRO TPH DRK CT ETPH NY 310-13 Full TCLP TPH 1664 Full App. IX Air TO14A Air TO15 Air STARS Air VPH Air TICs Mediane Helium	<b>Full Lists</b> Pri. Poll. TCL Ogrates TAL MetCN Full TCLP Full App. IX Part 360-Retire Part 360-Retire TOX Part 360-Retire BTU/lb. Part 360-Retire Aquatic Tox. NYDEP Sewer TOC NYDEP Sewer Asbestos TAGM Silica	<b>Misc.</b> Corrosivity Reactivity Ignitability Flash Point Sieve Anal. Heterotrophs TOX BTU/lb. Aquatic Tox. TOC	<b>York Regulatory Comparison</b> Excel Spreadsheet Compare to the following Regs. (please fill in): <u>CTDEP RSES</u>
<b>Comments</b> <u>ED analysis until authorized by Langan</u>			<b>Temperature on Receipt</b> <u>4.0 °C</u>							





YORK ANALYTICAL LABORATORIES  
120 RESEARCH DR.  
STRATFORD, CT 06615  
(203) 325-1371  
FAX (203) 357-0166

# Field Chain-of-Custody Record

Page 6 of 18

NOTE: York's Std. Terms & Conditions are listed on the back side of this document.  
This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions.

York Project No. 15E0072

YOUR Information		Report To:		Invoice To:		YOUR Project ID		Turn-Around Time		Report Type			
Company: <u>LANGAN</u>	Company: _____	Company: _____	Company: _____	Purchase Order No. <u>140109003</u>		RUSH - Same Day <input type="checkbox"/>		Summary Report		Summary w/ QA Summary			
Address: _____	Address: _____	Address: _____	Address: _____	Phone No. _____		RUSH - Next Day <input type="checkbox"/>		CT RCP Package		CT RCP Package			
Phone No. _____	Phone No. _____	Phone No. _____	Phone No. _____	Attention: _____		RUSH - Two Day <input type="checkbox"/>		CTRCP DQA/DUE Pkg		CTRCP DQA/DUE Pkg			
Contact Person: _____	Contact Person: _____	Contact Person: _____	Contact Person: _____	E-Mail Address: _____		RUSH - Three Day <input type="checkbox"/>		NY ASP A Package		NY ASP A Package			
E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____		RUSH - Four Day <input type="checkbox"/>		NY ASP B Package		NY ASP B Package			
Samples from: <u>CT</u> <u>NY</u> <u>NJ</u>				Standard (5-7 Days) <input checked="" type="checkbox"/>				NIDEP Red. Deliv.				NIDEP Red. Deliv.	
Electronic Data Deliverables (EDD)				Simple Excel				Simple Excel				Simple Excel	
NYSEDEC EQuIS				EQuIS (std)				EQuIS (std)				EQuIS (std)	
EZ-EDD (EQuIS)				EZ-EDD (EQuIS)				EZ-EDD (EQuIS)				EZ-EDD (EQuIS)	
NIDEP SRP HazSite EDD				NIDEP SRP HazSite EDD				NIDEP SRP HazSite EDD				NIDEP SRP HazSite EDD	
GIS/KEY (std)				GIS/KEY (std)				GIS/KEY (std)				GIS/KEY (std)	
Other				Other				Other				Other	
York Regulatory Comparison				York Regulatory Comparison				York Regulatory Comparison				York Regulatory Comparison	
Excel Spreadsheet				Excel Spreadsheet				Excel Spreadsheet				Excel Spreadsheet	
Compare to the following Regs. (please fill in):				Compare to the following Regs. (please fill in):				Compare to the following Regs. (please fill in):				Compare to the following Regs. (please fill in):	
<u>CT DEEP RSR</u>				<u>CT DEEP RSR</u>				<u>CT DEEP RSR</u>				<u>CT DEEP RSR</u>	

Sample Identification	Date/Time Sampled	Sample Matrix	Choose Analyses Needed from the Menu Above and Enter Below	Container Description(s)
HA-B-S1 (0-1)	4/30/15 1330	S	Arsonic	202 g/LSS
HA-B-S1 (1-2)	1351		* HOLD	
HA-B-S1 (2-3)	1352		* HOLD	
HA-B-S1 (3-4)	1353		* HOLD	
HA-B-E1 (0-1)	1354		* HOLD	
HA-B-E1 (1-2)	1355		* HOLD	
HA-B-E1 (2-3)	1356		* HOLD	
HA-B-E1 (3-4)	1357		* HOLD	
HA-B-S2 (0-1)	1420		* HOLD	
HA-B-S2 (1-2)	1421		* HOLD	

Comments	Preservation	Check those Applicable	Special Instructions	Samples Relinquished By	Date/Time	Samples Received By	Date/Time	Temperature on Receipt
HA-B-S2 (1-2)	4°C	Frozen <input checked="" type="checkbox"/> HCl <input type="checkbox"/> MeOH <input type="checkbox"/> Ascorbic Acid <input type="checkbox"/> HNO <sub>3</sub> <input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> <input type="checkbox"/> NaOH <input type="checkbox"/> Other <input type="checkbox"/>	Field Filled <input type="checkbox"/> Lab to Filler <input type="checkbox"/>	<u>KLZ</u>	<u>5/15 1740</u>	<u>KLZ</u>	<u>5-1-15 1710</u>	<u>4.0</u> °C





YORK ANALYTICAL LABORATORIES  
120 RESEARCH DR.  
STRATFORD, CT 06615  
(203) 325-1371  
Fax (203) 357-0166

**YORK**  
ANALYTICAL LABORATORIES INC.

# Field Chain-of-Custody Record

Page 7 of 18

NOTE: York's Std. Terms & Conditions are listed on the back side of this document.

This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions.

York Project No. 150072

YOUR Information		Report To:		Invoice To:		YOUR Project ID		Turn-Around Time		Report Type	
Company: <u>LANGAN</u>	Company: _____	Company: _____	Company: _____	Company: _____	Company: _____	Company: _____	Company: _____	RUSH - Same Day <input type="checkbox"/>	Summary Report	Summary Report	Summary w/ QA Summary
Address: _____	Address: _____	Address: _____	Address: _____	Address: _____	Address: _____	Address: _____	Address: _____	RUSH - Next Day <input type="checkbox"/>	CT RCP Package	CT RCP Package	CT RCP Package
Phone No. _____	Phone No. _____	Phone No. _____	Phone No. _____	Phone No. _____	Phone No. _____	Phone No. _____	Phone No. _____	RUSH - Two Day <input type="checkbox"/>	CT RCP DQA/DUE Pkg	CT RCP DQA/DUE Pkg	CT RCP DQA/DUE Pkg
Contact Person: _____	Contact Person: _____	Contact Person: _____	Contact Person: _____	Contact Person: _____	Contact Person: _____	Contact Person: _____	Contact Person: _____	RUSH - Three Day <input type="checkbox"/>	NY ASP A Package	NY ASP A Package	NY ASP A Package
E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	RUSH - Four Day <input type="checkbox"/>	NY ASP B Package	NY ASP B Package	NY ASP B Package
				Samples from: <input checked="" type="checkbox"/> CT <input checked="" type="checkbox"/> NY <input type="checkbox"/> NJ				Standard (5-7 Days) <input checked="" type="checkbox"/>			
				Purchase Order No. <u>140109003</u>							
				Matrix Codes							
				S - soil							
				Other - specify (oil, etc.)							
				WW - wastewater							
				GW - groundwater							
				DW - drinking water							
				Air-A - ambient air							
				Air-SV - soil vapor							
Samples Collected/Authorized By (Signature)				Name (printed)							

**Print Clearly and Legibly. All Information must be complete. Samples will NOT be logged in and the turn-around time clock will not begin until any questions by York are resolved.**

Choose Analyses Needed from the Menu Above and Enter Below

Sample Identification	Date/Time Sampled	Sample Matrix	Choose Analyses Needed from the Menu Above and Enter Below	Container Description(s)
HA-13-SZ (2-3)	4/20/15 14:22	S	Arsemitc	2 <sup>oz</sup> glass
HA-13-SZ (3-4)	14:23			
HA-22-N1 (0-1)	14:40			
HA-22-N1 (1-2)	14:41			
HA-22-N1 (2-3)	14:42			
HA-22-N1 (3-4)	14:43			
HA-22 (2-3)	15:01			
HA-22 (3-4)	15:02			
HA-22-S1 (0-1)	15:05			
HA-22-S1 (1-2)	15:06			

Preservation		Check those Applicable		Special Instructions		Temperature on Receipt	
4°C	Frozen	HCl	MeOH	HNO <sub>3</sub>	H <sub>2</sub> O <sub>2</sub>	NaOH	
		ZnAc	Ascorbic Acid	Other			
Field Filtered <input type="checkbox"/>		Lab to Filter <input type="checkbox"/>		Samples Relinquished By <u>Place</u> Date/Time <u>5-1-15 17:10</u>		Samples Received By <u>Place</u> Date/Time <u>5-1-15 17:10</u>	
Field Filtered <input type="checkbox"/>		Lab to Filter <input type="checkbox"/>		Samples Relinquished By _____ Date/Time _____		Samples Received By _____ Date/Time _____	





YORK ANALYTICAL LABORATORIES  
120 RESEARCH DR.  
STRATFORD, CT 06615  
(203) 325-1371  
FAX (203) 357-0166

# Field Chain-of-Custody Record

Page 8 of 18

NOTE: York's Std. Terms & Conditions are listed on the back side of this document.

York Project No. 15E008

This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions.

YOUR INFORMATION		Report To:		Invoice To:		YOUR PROJECT ID		Turn-Around Time		Report Type	
Company: <u>LANGAN</u>	Company: _____	Company: _____	Company: _____	Company: _____	Company: _____	Company: _____	Company: _____	Company: _____	Company: _____	Company: _____	Company: _____
Address: _____	Address: _____	Address: _____	Address: _____	Address: _____	Address: _____	Address: _____	Address: _____	Address: _____	Address: _____	Address: _____	Address: _____
Phone No. _____	Phone No. _____	Phone No. _____	Phone No. _____	Phone No. _____	Phone No. _____	Phone No. _____	Phone No. _____	Phone No. _____	Phone No. _____	Phone No. _____	Phone No. _____
Contact Person: _____	Contact Person: _____	Contact Person: _____	Contact Person: _____	Contact Person: _____	Contact Person: _____	Contact Person: _____	Contact Person: _____	Contact Person: _____	Contact Person: _____	Contact Person: _____	Contact Person: _____
E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____
Print Clearly and Legibly. All Information must be complete. Samples will NOT be logged in and the turn-around time clock will not begin until any questions by York are resolved.		Purchase Order No. <u>140109003</u>		Samples from: CT <input checked="" type="checkbox"/> NY <input type="checkbox"/> NJ <input type="checkbox"/>		Standard (5-7 Days) <input checked="" type="checkbox"/>		RUSH - Same Day <input type="checkbox"/> RUSH - Next Day <input type="checkbox"/> RUSH - Two Day <input type="checkbox"/> RUSH - Three Day <input type="checkbox"/> RUSH - Four Day <input type="checkbox"/>		Summary Report <input type="checkbox"/> Summary w/ QA Summary <input type="checkbox"/> CT RCP Package <input type="checkbox"/> CT RCP DQA/DUE Pkg <input type="checkbox"/> NY ASP A Package <input type="checkbox"/> NY ASP B Package <input type="checkbox"/> NIDEF Red. Deliv. <input type="checkbox"/> Electronic Data Deliverables (EDD) <input type="checkbox"/>	
Matrix Codes		Volatiles		Semi-Vols.		Metals		Full Lists		Misc.	
S - soil		TIC's		8270 or 625		RCA8		TPH GRO		Simple Excel	
Other - specify (oil, etc.)		Site Spec.		STARS list		PP13 list		TPH DRO		NYSDEC EQuIS	
WW - wastewater		Nassau Co.		BN Only		TAL		CT ETPH		EQuIS (std)	
GW - groundwater		Suffolk Co.		Acids Only		CT RCP		NY 310-13		EZ-EDD (EQuIS)	
DW - drinking water		Ketones		PAH list		App. IX		Full App. IX		NIDEF SRP HazSite EDD	
Air-A - ambient air		Oxygates		TAGM list		Site Spec.		TPH 1664		GIS/KEY (std)	
Air-SV - soil vapor		TCL list		TAGM list		NIDEF list		Air TO14A		Other	
		TAGM list		CT RCP list		SPLP or TCLP		Air TO15		York Regulatory Comparison	
		CT RCP list		TCL list		Dissolved		Air STARS		Excel Spreadsheet	
		Arom. only		NIDEF list		SPLP or TCLP		Air VPH		Compare to the following Regs. (please fill in):	
		Halog. only		App. IX		Chlordane		Air TIC's			
		App. IX list		SPLP or TCLP		608 Pest		Methane			
		8021B list		SPLP or TCLP		608 PCB		Helium			
Name (printed) _____		Sample Matrix		Choose Analyses Needed from the Menu Above and Enter Below		Container Description(s)					
HA-10-N1 (0-1)	Date/Time Sampled <u>4/30/15 1605</u>	S		Argence		2oz glass					
HA-10-N1 (1-2)	<u>1606</u>			* HOLD							
HA-10-N1 (2-3)	<u>1607</u>			* HOLD							
HA-10-N1 (3-4)	<u>1608</u>			* HOLD							
HA-10-W1 (0-1)	<u>1625</u>										
HA-10 (1-2)	<u>1630</u>										
HA-10 (2-3)	<u>1631</u>										
HA-10 (3-4)	<u>1632</u>										
HA-10-E1 (0-1)	<u>1645</u>										
HA-10-E1 (1-2)	<u>1646</u>										
Comments		Preservation		4°C _____ Frozen _____ MeOH _____ HNO <sub>3</sub> _____ NaOH _____		Other _____		Temperature on Receipt <u>4.0°C</u>			
Special Instructions		Check those Applicable		HCl _____ ZnAc _____ Ascorbic Acid _____							
Field Filtered <input type="checkbox"/>		Lab to Filter <input type="checkbox"/>									
Samples Relinquished By <u>KL3/klud</u> Date/Time <u>5/1/15 17:10</u>		Samples Received By <u>KL3/klud</u> Date/Time <u>5-1-15 17:10</u>									
Samples Relinquished By _____ Date/Time _____		Samples Received in LAB by _____ Date/Time _____									





YORK ANALYTICAL LABORATORIES  
120 RESEARCH DR.  
STRATFORD, CT 06615  
(203) 325-1371  
FAX (203) 357-0166

# Field Chain-of-Custody Record

Page 9 of 18

**NOTE:** York's Std. Terms & Conditions are listed on the back side of this document.

This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions.

York Project No. 150018

<b>YOUR Information</b> Company: <u>LANGAN</u> Address: _____ Phone No. _____ Contact Person: _____ E-Mail Address: _____		<b>Report To:</b> Company: _____ Address: _____ Phone No. _____ Attention: _____ E-Mail Address: _____		<b>Invoice To:</b> Company: _____ Address: _____ Phone No. _____ Attention: _____ E-Mail Address: _____		<b>YOUR Project ID</b> <div style="border: 1px solid black; padding: 5px; text-align: center; font-size: 1.2em;">140109003</div> <b>Purchase Order No.</b> _____		<b>Turn-Around Time</b> RUSH - Same Day <input type="checkbox"/> RUSH - Next Day <input type="checkbox"/> RUSH - Two Day <input type="checkbox"/> RUSH - Three Day <input type="checkbox"/> RUSH - Four Day <input type="checkbox"/> <b>Standard (5-7 Days)</b> <input checked="" type="checkbox"/>		<b>Report Type</b> Summary Report _____ Summary w/ QA Summary _____ CT RCP Package _____ CTRCP DQA/DUE Pkg _____ NY ASP A Package _____ NY ASP B Package _____ NIDEP Red. Deliv. _____ <i>Electronic Data Deliverables (EDD)</i> Simple Excel _____ NYSEDEC EQuls _____ EQuls (std) _____ EZ-EDD (EQuls) _____ NIDEP SRP HazSite EDD _____ GIS/KEY (std) _____ Other _____ York Regulatory Comparison _____ Excel Spreadsheet _____ Compare to the following Regs. (please fill in): <div style="border: 1px solid black; padding: 2px; text-align: center;">CTDEEP RSRs</div>	
Choose Analyses Needed from the Menu Above and Enter Below											
<b>Sample Identification</b> Name (printed) _____		<b>Sample Matrix</b> <div style="border: 1px solid black; padding: 2px;">           S - soil            Other - specify (oil, etc.) _____            WW - wastewater            GW - groundwater            DW - drinking water            Air-A - ambient air            Air-SV - soil vapor         </div>		<b>Date/Time Sampled</b> 4/30/15 1647 1648 1700 1701 1702 1703 1705 1706 1707 1708		<b>Preservation</b> Check those Applicable Special Instructions Field Filtered <input type="checkbox"/> Lab to Filter <input type="checkbox"/>		<b>4°C</b> _____ <b>Frozen</b> _____ <b>HCl</b> _____ <b>MeOH</b> _____ <b>Ascorbic Acid</b> _____ <b>ZnAc</b> _____ <b>Other</b> _____		<b>Container Description(s)</b> 2oz glass	
Choose Analyses Needed from the Menu Above and Enter Below											
<b>Sample Identification</b> Name (printed) _____		<b>Sample Matrix</b> <div style="border: 1px solid black; padding: 2px;">           S - soil            Other - specify (oil, etc.) _____            WW - wastewater            GW - groundwater            DW - drinking water            Air-A - ambient air            Air-SV - soil vapor         </div>		<b>Date/Time Sampled</b> 4/30/15 1647 1648 1700 1701 1702 1703 1705 1706 1707 1708		<b>Preservation</b> Check those Applicable Special Instructions Field Filtered <input type="checkbox"/> Lab to Filter <input type="checkbox"/>		<b>4°C</b> _____ <b>Frozen</b> _____ <b>HCl</b> _____ <b>MeOH</b> _____ <b>Ascorbic Acid</b> _____ <b>ZnAc</b> _____ <b>Other</b> _____		<b>Container Description(s)</b> 2oz glass	





YORK ANALYTICAL LABORATORIES  
120 RESEARCH DR.  
STRATFORD, CT 06615  
(203) 325-1371  
FAX (203) 357-0166

# Field Chain-of-Custody Record

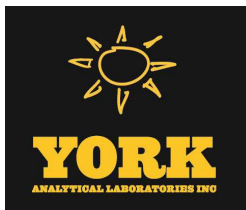
Page 10 of 18

NOTE: York's Std. Terms & Conditions are listed on the back side of this document. This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions.

York Project No. 150012

YOUR Information		Report To:		Invoice To:		YOUR Project ID		Turn-Around Time		Report Type																																																																																																																																					
Company: <u>WANGAN</u>	Company: _____	Company: _____	Company: _____	140109603		RUSH - Same Day <input type="checkbox"/>		Summary Report _____		Summary Report _____																																																																																																																																					
Address: _____	Address: _____	Address: _____	Address: _____	Purchase Order No. _____		RUSH - Next Day <input type="checkbox"/>		Summary w/ QA Summary _____		CT RCP Package _____																																																																																																																																					
Phone No. _____	Phone No. _____	Phone No. _____	Phone No. _____	_____		RUSH - Two Day <input type="checkbox"/>		CT RCP DQA/DUE Pkg _____		NY ASP A Package _____																																																																																																																																					
Contact Person: _____	Contact Person: _____	Contact Person: _____	Contact Person: _____	_____		RUSH - Three Day <input type="checkbox"/>		NY ASP B Package _____		NY ASP B Package _____																																																																																																																																					
E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	_____		RUSH - Four Day <input type="checkbox"/>		NIDEP Red. Deliv. _____		NIDEP Red. Deliv. _____																																																																																																																																					
Samples from: CT <input checked="" type="checkbox"/> NY <input type="checkbox"/> NJ <input type="checkbox"/>				Standard (5-7 Days) <input checked="" type="checkbox"/>				Electronic Data Deliverables (EDD) _____																																																																																																																																							
<b>Print Clearly and Legibly. All Information must be complete. Samples will NOT be logged in and the turn-around time clock will not begin until any questions by York are resolved.</b>				<table border="1"> <thead> <tr> <th>Matrix Codes</th> <th>Volatiles</th> <th>Semi-Vols.</th> <th>PCBs/Herb</th> <th>Metals</th> <th>Misc. Org.</th> <th>Full Lists</th> <th>Misc.</th> </tr> </thead> <tbody> <tr> <td>S - soil</td> <td>8260 full</td> <td>8270 or 625</td> <td>8082 PCB</td> <td>RCRA8</td> <td>TPH GRO</td> <td>Pri. Poll.</td> <td>Corrosivity</td> </tr> <tr> <td>Other - specify (oil, etc.)</td> <td>624</td> <td>STARS list</td> <td>8081 PCB</td> <td>PP13 list</td> <td>TPH DRO</td> <td>TCL Orgs</td> <td>Reactivity</td> </tr> <tr> <td>WW - wastewater</td> <td>STARS list</td> <td>IBN Only</td> <td>8151 Herb</td> <td>TAL</td> <td>CT ETPH</td> <td>TAL MatCN</td> <td>Ignitability</td> </tr> <tr> <td>GW - groundwater</td> <td>BTEX</td> <td>Acids Only</td> <td>CT RCP</td> <td>CT15 list</td> <td>NY 310-13</td> <td>Full TCLP</td> <td>Flash Point</td> </tr> <tr> <td>DW - drinking water</td> <td>MTBE</td> <td>PAH list</td> <td>App. IX</td> <td>TAGM list</td> <td>TPH 1664</td> <td>Full App. IX</td> <td>Sieve Anal.</td> </tr> <tr> <td>Air-A - ambient air</td> <td>TCL list</td> <td>Oxygenates</td> <td>TAGM list</td> <td>NIDEP list</td> <td>Air TO14A</td> <td>Part 360-Routine</td> <td>Heterocyclics</td> </tr> <tr> <td>Air-SV - soil vapor</td> <td>CT RCP list</td> <td>TCLP list</td> <td>CT RCP list</td> <td>SPLP or TCLP</td> <td>Air TO15</td> <td>Part 360-Routine</td> <td>TOX</td> </tr> <tr> <td></td> <td>Tagm list</td> <td>524.2</td> <td>TCLP list</td> <td>TCLP list</td> <td>Air STARS</td> <td>Part 360-Routine</td> <td>BTU/lb.</td> </tr> <tr> <td></td> <td>Arom. only</td> <td>502.2</td> <td>NIDEP list</td> <td>TCLP Herb</td> <td>Air VPH</td> <td>Part 360-Routine</td> <td>Aquatic Tox.</td> </tr> <tr> <td></td> <td>Halog. only</td> <td>NIDEP list</td> <td>App. IX</td> <td>Chloridine</td> <td>Air TICs</td> <td>NYCDEP-Sever</td> <td>TOC</td> </tr> <tr> <td></td> <td>App. IX list</td> <td>SPLP or TCLP</td> <td>TCLP BNA</td> <td>608 Pest</td> <td>Mediane</td> <td>NYCDEP-Sever</td> <td>Asbestos</td> </tr> <tr> <td></td> <td>8021B list</td> <td>SPLP or TCLP</td> <td>608 PCB</td> <td>Helium</td> <td>Silica</td> <td></td> <td></td> </tr> </tbody> </table>								Matrix Codes	Volatiles	Semi-Vols.	PCBs/Herb	Metals	Misc. Org.	Full Lists	Misc.	S - soil	8260 full	8270 or 625	8082 PCB	RCRA8	TPH GRO	Pri. Poll.	Corrosivity	Other - specify (oil, etc.)	624	STARS list	8081 PCB	PP13 list	TPH DRO	TCL Orgs	Reactivity	WW - wastewater	STARS list	IBN Only	8151 Herb	TAL	CT ETPH	TAL MatCN	Ignitability	GW - groundwater	BTEX	Acids Only	CT RCP	CT15 list	NY 310-13	Full TCLP	Flash Point	DW - drinking water	MTBE	PAH list	App. IX	TAGM list	TPH 1664	Full App. IX	Sieve Anal.	Air-A - ambient air	TCL list	Oxygenates	TAGM list	NIDEP list	Air TO14A	Part 360-Routine	Heterocyclics	Air-SV - soil vapor	CT RCP list	TCLP list	CT RCP list	SPLP or TCLP	Air TO15	Part 360-Routine	TOX		Tagm list	524.2	TCLP list	TCLP list	Air STARS	Part 360-Routine	BTU/lb.		Arom. only	502.2	NIDEP list	TCLP Herb	Air VPH	Part 360-Routine	Aquatic Tox.		Halog. only	NIDEP list	App. IX	Chloridine	Air TICs	NYCDEP-Sever	TOC		App. IX list	SPLP or TCLP	TCLP BNA	608 Pest	Mediane	NYCDEP-Sever	Asbestos		8021B list	SPLP or TCLP	608 PCB	Helium	Silica																														
Matrix Codes	Volatiles	Semi-Vols.	PCBs/Herb	Metals	Misc. Org.	Full Lists	Misc.																																																																																																																																								
S - soil	8260 full	8270 or 625	8082 PCB	RCRA8	TPH GRO	Pri. Poll.	Corrosivity																																																																																																																																								
Other - specify (oil, etc.)	624	STARS list	8081 PCB	PP13 list	TPH DRO	TCL Orgs	Reactivity																																																																																																																																								
WW - wastewater	STARS list	IBN Only	8151 Herb	TAL	CT ETPH	TAL MatCN	Ignitability																																																																																																																																								
GW - groundwater	BTEX	Acids Only	CT RCP	CT15 list	NY 310-13	Full TCLP	Flash Point																																																																																																																																								
DW - drinking water	MTBE	PAH list	App. IX	TAGM list	TPH 1664	Full App. IX	Sieve Anal.																																																																																																																																								
Air-A - ambient air	TCL list	Oxygenates	TAGM list	NIDEP list	Air TO14A	Part 360-Routine	Heterocyclics																																																																																																																																								
Air-SV - soil vapor	CT RCP list	TCLP list	CT RCP list	SPLP or TCLP	Air TO15	Part 360-Routine	TOX																																																																																																																																								
	Tagm list	524.2	TCLP list	TCLP list	Air STARS	Part 360-Routine	BTU/lb.																																																																																																																																								
	Arom. only	502.2	NIDEP list	TCLP Herb	Air VPH	Part 360-Routine	Aquatic Tox.																																																																																																																																								
	Halog. only	NIDEP list	App. IX	Chloridine	Air TICs	NYCDEP-Sever	TOC																																																																																																																																								
	App. IX list	SPLP or TCLP	TCLP BNA	608 Pest	Mediane	NYCDEP-Sever	Asbestos																																																																																																																																								
	8021B list	SPLP or TCLP	608 PCB	Helium	Silica																																																																																																																																										
Samples Collected/Authorized By (Signature) _____				Choose Analyses Needed from the Menu Above and Enter Below Container Description(s) <u>2oz glass</u>																																																																																																																																											
Name (printed) _____				<table border="1"> <thead> <tr> <th>Sample Identification</th> <th>Date/Time Sampled</th> <th>Sample Matrix</th> <th>Preservation</th> <th>4°C</th> <th>Frozen</th> <th>HCl</th> <th>MeOH</th> <th>HNO<sub>3</sub></th> <th>H<sub>2</sub>SO<sub>4</sub></th> <th>NaOH</th> <th>Temperature on Receipt</th> </tr> </thead> <tbody> <tr> <td>HA-6 (1-2)</td> <td>4/30/15 1735</td> <td>S</td> <td>Check those Applicable</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>4.0 °C</td> </tr> <tr> <td>HA-6 (2-3)</td> <td>1736</td> <td></td> <td>Special Instructions</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>HA-6 (3-4)</td> <td>1737</td> <td></td> <td>Field Filtered <input type="checkbox"/></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>HA-6-N1 (0-1)</td> <td>1746</td> <td></td> <td>Lab to Filter <input type="checkbox"/></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>HA-6-N1 (1-2)</td> <td>1741</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>HA-6-N1 (2-3)</td> <td>1742</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>HA-6-N1 (3-4)</td> <td>1743</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>HA-6-S1 (0-1)</td> <td>1800</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>HA-6-S1 (1-2)</td> <td>1801</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>HA-6-S1 (2-3)</td> <td>1802</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>								Sample Identification	Date/Time Sampled	Sample Matrix	Preservation	4°C	Frozen	HCl	MeOH	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	NaOH	Temperature on Receipt	HA-6 (1-2)	4/30/15 1735	S	Check those Applicable								4.0 °C	HA-6 (2-3)	1736		Special Instructions									HA-6 (3-4)	1737		Field Filtered <input type="checkbox"/>									HA-6-N1 (0-1)	1746		Lab to Filter <input type="checkbox"/>									HA-6-N1 (1-2)	1741											HA-6-N1 (2-3)	1742											HA-6-N1 (3-4)	1743											HA-6-S1 (0-1)	1800											HA-6-S1 (1-2)	1801											HA-6-S1 (2-3)	1802										
Sample Identification	Date/Time Sampled	Sample Matrix	Preservation	4°C	Frozen	HCl	MeOH	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	NaOH	Temperature on Receipt																																																																																																																																				
HA-6 (1-2)	4/30/15 1735	S	Check those Applicable								4.0 °C																																																																																																																																				
HA-6 (2-3)	1736		Special Instructions																																																																																																																																												
HA-6 (3-4)	1737		Field Filtered <input type="checkbox"/>																																																																																																																																												
HA-6-N1 (0-1)	1746		Lab to Filter <input type="checkbox"/>																																																																																																																																												
HA-6-N1 (1-2)	1741																																																																																																																																														
HA-6-N1 (2-3)	1742																																																																																																																																														
HA-6-N1 (3-4)	1743																																																																																																																																														
HA-6-S1 (0-1)	1800																																																																																																																																														
HA-6-S1 (1-2)	1801																																																																																																																																														
HA-6-S1 (2-3)	1802																																																																																																																																														
Comments				Samples Relinquished By <u>Pha</u> Date/Time <u>5-1-15 1710</u> Samples Received By <u>Pha</u> Date/Time <u>5-1-15 1710</u> Samples Relinquished By _____ Date/Time _____ Samples Received in LAB by _____ Date/Time _____																																																																																																																																											





# Technical Report

prepared for:

**Langan Engineering & Environmental Services (CT)**

Long Wharf Maritime Center, 555 Long Wharf Drive

New Haven CT, 06511

**Attention: Ryan Wohlstrom**

Report Date: 07/09/2015

**Client Project ID: 140109003**

York Project (SDG) No.: 15E0078

Revision No. 4.0

CT Cert. No. PH-0723

New Jersey Cert. No. CT-005



New York Cert. No. 10854

PA Cert. No. 68-04440

Report Date: 07/09/2015  
Client Project ID: 140109003  
York Project (SDG) No.: 15E0078

**Langan Engineering & Environmental Services (CT)**  
Long Wharf Maritime Center, 555 Long Wharf Drive  
New Haven CT, 06511  
Attention: Ryan Wohlstrom

---

## Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on May 01, 2015 and listed below. The project was identified as your project: **140109003**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Notes section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the attachment to this report, and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
15E0078-02	HA-21 (2-3)	Soil	04/30/2015	05/01/2015
15E0078-04	HA-21-S1 (0-1)	Soil	04/30/2015	05/01/2015
15E0078-08	HA-21-N1 (0-1)	Soil	04/30/2015	05/01/2015
15E0078-09	HA-21-N1 (1-2)	Soil	04/30/2015	05/01/2015
15E0078-10	HA-21-N1 (2-3)	Soil	04/30/2015	05/01/2015
15E0078-12	HA-5(1-2)	Soil	04/30/2015	05/01/2015
15E0078-14	HA-21-N2 (0-1)	Soil	04/30/2015	05/01/2015
15E0078-15	HA-21-N2 (1-2)	Soil	04/30/2015	05/01/2015
15E0078-18	HA-5-N2 (0-1)	Soil	04/30/2015	05/01/2015
15E0078-19	HA-5-N2 (1-2)	Soil	04/30/2015	05/01/2015
15E0078-20	HA-5-N2 (2-3)	Soil	04/30/2015	05/01/2015
15E0078-22	HA-5-N1 (0-1)	Soil	04/30/2015	05/01/2015
15E0078-23	HA-5-N1 (1-2)	Soil	04/30/2015	05/01/2015
15E0078-24	HA-5-N1 (2-3)	Soil	04/30/2015	05/01/2015
15E0078-26	HA-5-E2 (0-1)	Soil	04/30/2015	05/01/2015
15E0078-27	HA-5-E2 (1-2)	Soil	04/30/2015	05/01/2015
15E0078-28	HA-5-E2 (2-3)	Soil	04/30/2015	05/01/2015
15E0078-30	HA-5-E1 (0-1)	Soil	04/30/2015	05/01/2015
15E0078-31	HA-5-E1 (1-2)	Soil	04/30/2015	05/01/2015
15E0078-34	HA-5-S1 (0-1)	Soil	04/30/2015	05/01/2015
15E0078-35	HA-5-S1 (1-2)	Soil	04/30/2015	05/01/2015
15E0078-36	HA-5-S1 (2-3)	Soil	04/30/2015	05/01/2015
15E0078-42	HA-8-S1 (0-1)	Soil	05/01/2015	05/01/2015

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
15E0078-46	HA-8-N1 (0-1)	Soil	05/01/2015	05/01/2015
15E0078-54	HA-8-E1 (0-1)	Soil	05/01/2015	05/01/2015
15E0078-62	HA-8-W1 (0-1)	Soil	05/01/2015	05/01/2015
15E0078-70	HA-8 (1-2)	Soil	05/01/2015	05/01/2015

### **General Notes for York Project (SDG) No.: 15E0078**

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All samples were received in proper condition for analysis with proper documentation, unless otherwise noted.
6. All analyses conducted met method or Laboratory SOP requirements. See the Qualifiers and/or Narrative sections for further information.
7. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
8. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.

**Approved By:**



Benjamin Gulizia  
Laboratory Director

**Date:** 07/09/2015





### Sample Information

**Client Sample ID:** HA-21 (2-3)

**York Sample ID:** 15E0078-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

15E0078

140109003

Soil

April 30, 2015 6:11 pm

05/01/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	1.81		mg/kg dry	1.18	1	EPA 6010C	05/06/2015 09:23	05/06/2015 12:22	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	84.6		%	0.100	1	SM 2540G	05/06/2015 17:14	05/07/2015 13:29	KK

### Sample Information

**Client Sample ID:** HA-21-S1 (0-1)

**York Sample ID:** 15E0078-04

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

15E0078

140109003

Soil

April 30, 2015 6:25 pm

05/01/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	4.45		mg/kg dry	1.20	1	EPA 6010C	05/06/2015 09:23	05/06/2015 12:26	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	83.4		%	0.100	1	SM 2540G	05/06/2015 17:14	05/07/2015 13:29	KK

### Sample Information

**Client Sample ID:** HA-21-N1 (0-1)

**York Sample ID:** 15E0078-08

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

15E0078

140109003

Soil

April 30, 2015 6:40 pm

05/01/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:



### Sample Information

**Client Sample ID:** HA-21-N1 (0-1)

**York Sample ID:** 15E0078-08

York Project (SDG) No.  
15E0078

Client Project ID  
140109003

Matrix  
Soil

Collection Date/Time  
April 30, 2015 6:40 pm

Date Received  
05/01/2015

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	84.0		mg/kg dry	1.12	1	EPA 6010C	05/06/2015 09:23	05/06/2015 12:44	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	89.5		%	0.100	1	SM 2540G	05/06/2015 17:14	05/07/2015 13:29	KK

### Sample Information

**Client Sample ID:** HA-21-N1 (1-2)

**York Sample ID:** 15E0078-09

York Project (SDG) No.  
15E0078

Client Project ID  
140109003

Matrix  
Soil

Collection Date/Time  
April 30, 2015 6:41 pm

Date Received  
05/01/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	16.4		mg/kg dry	1.14	1	EPA 6010C	05/15/2015 09:11	05/15/2015 10:57	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	87.9		%	0.100	1	SM 2540G	05/15/2015 11:29	05/15/2015 16:23	SCA

### Sample Information

**Client Sample ID:** HA-21-N1 (2-3)

**York Sample ID:** 15E0078-10

York Project (SDG) No.  
15E0078

Client Project ID  
140109003

Matrix  
Soil

Collection Date/Time  
April 30, 2015 6:42 pm

Date Received  
05/01/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	3.31		mg/kg dry	1.21	1	EPA 6010C	05/27/2015 15:04	05/27/2015 19:12	MW



### Sample Information

**Client Sample ID:** HA-21-N1 (2-3)

**York Sample ID:** 15E0078-10

York Project (SDG) No.  
15E0078

Client Project ID  
140109003

Matrix  
Soil

Collection Date/Time  
April 30, 2015 6:42 pm

Date Received  
05/01/2015

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	82.6		%	0.100	1	SM 2540G	05/27/2015 09:12	05/27/2015 16:38	KK

### Sample Information

**Client Sample ID:** HA-5(1-2)

**York Sample ID:** 15E0078-12

York Project (SDG) No.  
15E0078

Client Project ID  
140109003

Matrix  
Soil

Collection Date/Time  
April 30, 2015 6:55 pm

Date Received  
05/01/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	9.15		mg/kg dry	1.17	1	EPA 6010C	05/06/2015 09:23	05/06/2015 12:49	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	85.1		%	0.100	1	SM 2540G	05/04/2015 20:44	05/05/2015 15:58	SCA

### Sample Information

**Client Sample ID:** HA-21-N2 (0-1)

**York Sample ID:** 15E0078-14

York Project (SDG) No.  
15E0078

Client Project ID  
140109003

Matrix  
Soil

Collection Date/Time  
April 30, 2015 7:00 pm

Date Received  
05/01/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

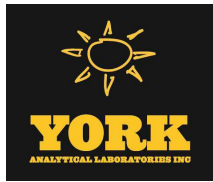
Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	132		mg/kg dry	1.15	1	EPA 6010C	05/15/2015 09:11	05/15/2015 11:02	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:



### Sample Information

**Client Sample ID:** HA-21-N2 (0-1)

**York Sample ID:** 15E0078-14

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

15E0078

140109003

Soil

April 30, 2015 7:00 pm

05/01/2015

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	87.3		%	0.100	1	SM 2540G	05/15/2015 11:29	05/15/2015 16:23	SCA

### Sample Information

**Client Sample ID:** HA-21-N2 (1-2)

**York Sample ID:** 15E0078-15

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

15E0078

140109003

Soil

April 30, 2015 7:01 pm

05/01/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	3.95		mg/kg dry	1.19	1	EPA 6010C	05/27/2015 15:04	05/27/2015 19:16	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	83.9		%	0.100	1	SM 2540G	05/27/2015 09:12	05/27/2015 16:38	KK

### Sample Information

**Client Sample ID:** HA-5-N2 (0-1)

**York Sample ID:** 15E0078-18

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

15E0078

140109003

Soil

April 30, 2015 7:20 pm

05/01/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	72.3		mg/kg dry	1.20	1	EPA 6010C	05/15/2015 09:11	05/15/2015 11:06	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	83.2		%	0.100	1	SM 2540G	05/15/2015 11:29	05/15/2015 16:23	SCA





### Sample Information

**Client Sample ID:** HA-5-N2 (0-1)

**York Sample ID:** 15E0078-18

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
15E0078	140109003	Soil	April 30, 2015 7:20 pm	05/01/2015

### Sample Information

**Client Sample ID:** HA-5-N2 (1-2)

**York Sample ID:** 15E0078-19

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
15E0078	140109003	Soil	April 30, 2015 7:21 pm	05/01/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	17.8		mg/kg dry	1.22	1	EPA 6010C	05/27/2015 15:04	05/27/2015 19:34	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	82.0		%	0.100	1	SM 2540G	05/27/2015 09:12	05/27/2015 16:38	KK

### Sample Information

**Client Sample ID:** HA-5-N2 (2-3)

**York Sample ID:** 15E0078-20

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
15E0078	140109003	Soil	April 30, 2015 7:22 pm	05/01/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	3.07		mg/kg dry	1.19	1	EPA 6010C	07/08/2015 08:55	07/08/2015 11:33	AMC

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	83.8		%	0.100	1	SM 2540G	07/08/2015 11:00	07/08/2015 15:22	SCA



### Sample Information

**Client Sample ID:** HA-5-N1 (0-1)

**York Sample ID:** 15E0078-22

York Project (SDG) No.  
15E0078

Client Project ID  
140109003

Matrix  
Soil

Collection Date/Time  
April 30, 2015 7:25 pm

Date Received  
05/01/2015

#### Arsenic by EPA 6010

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	174		mg/kg dry	1.19	1	EPA 6010C	05/06/2015 09:23	05/06/2015 12:53	MW

#### Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	84.3		%	0.100	1	SM 2540G	05/04/2015 20:44	05/05/2015 15:58	SCA

### Sample Information

**Client Sample ID:** HA-5-N1 (1-2)

**York Sample ID:** 15E0078-23

York Project (SDG) No.  
15E0078

Client Project ID  
140109003

Matrix  
Soil

Collection Date/Time  
April 30, 2015 7:26 pm

Date Received  
05/01/2015

#### Arsenic by EPA 6010

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	13.7		mg/kg dry	1.35	1	EPA 6010C	05/15/2015 09:11	05/15/2015 11:11	MW

#### Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	74.1		%	0.100	1	SM 2540G	05/15/2015 11:29	05/15/2015 16:23	SCA

### Sample Information

**Client Sample ID:** HA-5-N1 (2-3)

**York Sample ID:** 15E0078-24

York Project (SDG) No.  
15E0078

Client Project ID  
140109003

Matrix  
Soil

Collection Date/Time  
April 30, 2015 7:27 pm

Date Received  
05/01/2015

#### Arsenic by EPA 6010

Log-in Notes:

Sample Notes:



### Sample Information

**Client Sample ID:** HA-5-N1 (2-3)

**York Sample ID:** 15E0078-24

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
15E0078	140109003	Soil	April 30, 2015 7:27 pm	05/01/2015

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	5.13		mg/kg dry	1.24	1	EPA 6010C	05/27/2015 15:04	05/27/2015 19:42	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	80.5		%	0.100	1	SM 2540G	05/27/2015 09:12	05/27/2015 16:38	KK

### Sample Information

**Client Sample ID:** HA-5-E2 (0-1)

**York Sample ID:** 15E0078-26

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
15E0078	140109003	Soil	April 30, 2015 7:40 pm	05/01/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	22.4		mg/kg dry	1.24	1	EPA 6010C	05/15/2015 09:11	05/15/2015 11:19	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	80.8		%	0.100	1	SM 2540G	05/15/2015 11:29	05/15/2015 16:23	SCA

### Sample Information

**Client Sample ID:** HA-5-E2 (1-2)

**York Sample ID:** 15E0078-27

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
15E0078	140109003	Soil	April 30, 2015 7:41 pm	05/01/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	11.2		mg/kg dry	1.26	1	EPA 6010C	05/27/2015 15:04	05/27/2015 19:46	MW



### Sample Information

**Client Sample ID:** HA-5-E2 (1-2)

**York Sample ID:** 15E0078-27

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

15E0078

140109003

Soil

April 30, 2015 7:41 pm

05/01/2015

### Total Solids

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	79.5		%	0.100	1	SM 2540G	05/27/2015 09:12	05/27/2015 16:38	KK

### Sample Information

**Client Sample ID:** HA-5-E2 (2-3)

**York Sample ID:** 15E0078-28

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

15E0078

140109003

Soil

April 30, 2015 7:42 pm

05/01/2015

### Arsenic by EPA 6010

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	4.00		mg/kg dry	1.21	1	EPA 6010C	06/01/2015 15:44	06/01/2015 21:07	AMC

### Total Solids

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	82.9		%	0.100	1	SM 2540G	06/01/2015 19:09	06/02/2015 14:36	KK

### Sample Information

**Client Sample ID:** HA-5-E1 (0-1)

**York Sample ID:** 15E0078-30

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

15E0078

140109003

Soil

April 30, 2015 7:44 pm

05/01/2015

### Arsenic by EPA 6010

### Log-in Notes:

### Sample Notes:

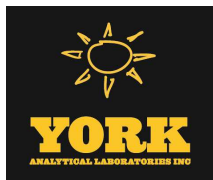
Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	37.1		mg/kg dry	1.21	1	EPA 6010C	05/06/2015 09:23	05/06/2015 12:58	MW

### Total Solids

### Log-in Notes:

### Sample Notes:



### Sample Information

**Client Sample ID:** HA-5-E1 (0-1)

**York Sample ID:** 15E0078-30

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

15E0078

140109003

Soil

April 30, 2015 7:44 pm

05/01/2015

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	82.9		%	0.100	1	SM 2540G	05/04/2015 20:44	05/05/2015 15:58	SCA

### Sample Information

**Client Sample ID:** HA-5-E1 (1-2)

**York Sample ID:** 15E0078-31

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

15E0078

140109003

Soil

April 30, 2015 7:45 pm

05/01/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	5.21		mg/kg dry	1.21	1	EPA 6010C	05/15/2015 09:11	05/15/2015 11:24	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	82.6		%	0.100	1	SM 2540G	05/15/2015 11:29	05/15/2015 16:23	SCA

### Sample Information

**Client Sample ID:** HA-5-S1 (0-1)

**York Sample ID:** 15E0078-34

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

15E0078

140109003

Soil

April 30, 2015 8:00 pm

05/01/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	12.8		mg/kg dry	1.18	1	EPA 6010C	05/06/2015 09:23	05/06/2015 13:03	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	84.4		%	0.100	1	SM 2540G	05/04/2015 20:44	05/05/2015 15:58	SCA



### Sample Information

**Client Sample ID:** HA-5-S1 (0-1)

**York Sample ID:** 15E0078-34

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
15E0078	140109003	Soil	April 30, 2015 8:00 pm	05/01/2015

### Sample Information

**Client Sample ID:** HA-5-S1 (1-2)

**York Sample ID:** 15E0078-35

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
15E0078	140109003	Soil	April 30, 2015 8:01 pm	05/01/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	10.3		mg/kg dry	1.22	1	EPA 6010C	05/15/2015 09:11	05/15/2015 11:29	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	81.7		%	0.100	1	SM 2540G	05/15/2015 11:29	05/15/2015 16:23	SCA

### Sample Information

**Client Sample ID:** HA-5-S1 (2-3)

**York Sample ID:** 15E0078-36

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
15E0078	140109003	Soil	April 30, 2015 8:02 pm	05/01/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	3.23		mg/kg dry	1.20	1	EPA 6010C	05/27/2015 15:04	05/27/2015 19:51	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	83.4		%	0.100	1	SM 2540G	05/27/2015 09:12	05/27/2015 16:38	KK



### Sample Information

**Client Sample ID:** HA-8-S1 (0-1)

**York Sample ID:** 15E0078-42

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

15E0078

140109003

Soil

May 1, 2015 12:50 pm

05/01/2015

#### Arsenic by EPA 6010

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	2.94		mg/kg dry	1.16	1	EPA 6010C	05/06/2015 09:23	05/06/2015 13:08	MW

#### Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	86.3		%	0.100	1	SM 2540G	05/04/2015 20:44	05/05/2015 15:58	SCA

### Sample Information

**Client Sample ID:** HA-8-N1 (0-1)

**York Sample ID:** 15E0078-46

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

15E0078

140109003

Soil

May 1, 2015 12:55 pm

05/01/2015

#### Arsenic by EPA 6010

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	5.37		mg/kg dry	1.07	1	EPA 6010C	05/06/2015 09:23	05/06/2015 13:28	MW

#### Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	93.4		%	0.100	1	SM 2540G	05/04/2015 20:44	05/05/2015 15:58	SCA

### Sample Information

**Client Sample ID:** HA-8-E1 (0-1)

**York Sample ID:** 15E0078-54

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

15E0078

140109003

Soil

May 1, 2015 1:05 pm

05/01/2015

#### Arsenic by EPA 6010

Log-in Notes:

Sample Notes:





### Sample Information

**Client Sample ID:** HA-8-E1 (0-1)

**York Sample ID:** 15E0078-54

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
15E0078	140109003	Soil	May 1, 2015 1:05 pm	05/01/2015

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	7.88		mg/kg dry	1.14	1	EPA 6010C	05/06/2015 09:23	05/06/2015 13:33	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	87.5		%	0.100	1	SM 2540G	05/04/2015 20:44	05/05/2015 15:58	SCA

### Sample Information

**Client Sample ID:** HA-8-W1 (0-1)

**York Sample ID:** 15E0078-62

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
15E0078	140109003	Soil	May 1, 2015 1:15 pm	05/01/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	9.29		mg/kg dry	1.26	1	EPA 6010C	05/06/2015 09:23	05/06/2015 13:38	MW

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	79.5		%	0.100	1	SM 2540G	05/04/2015 20:44	05/05/2015 15:58	SCA

### Sample Information

**Client Sample ID:** HA-8 (1-2)

**York Sample ID:** 15E0078-70

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
15E0078	140109003	Soil	May 1, 2015 1:25 pm	05/01/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	9.32		mg/kg dry	1.07	1	EPA 6010C	05/06/2015 09:23	05/06/2015 13:42	MW



## Sample Information

**Client Sample ID:** HA-8 (1-2)

**York Sample ID:** 15E0078-70

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

15E0078

140109003

Soil

May 1, 2015 1:25 pm

05/01/2015

### Total Solids

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	93.8		%	0.100	1	SM 2540G	05/04/2015 20:44	05/05/2015 15:58	SCA



## REASONABLE CONFIDENCE PROTOCOL

### LABORATORY ANALYSIS QA/QC CERTIFICATION FORM

Laboratory Name: York Analytical Laboratories, Inc.

Client: Langan Engineering & Environmental Serv

Project Location: 140109003

Lab Project No.: 15E0078

Laboratory Sample ID(s): 15E0078-02 - 15E0078-70

Sampling Date(s): 04/30/2015 - 05/01/2015

RCP Methods Used: See Narrative and Method Reference Section of this Technical Report

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed (including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP RCPs)?	YES
1A	Were the method specified preservation and holding time requirements met?	YES
1B	VPH and EPH Methods only: Was the VPH or EPH method conducted without significant modifications (see Section 11.3 of respective RCP methods)?	NR
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	YES
3	Were samples received at an appropriate temperature (<6°C )?	YES
4	Were all QA/QC performance criteria specified in the CTDEP Reasonable Confidence Protocol documents achieved?	NO
5A	Were reporting limits specified or referenced on the chain-of-custody?	YES
5B	Were these reporting limits met?	YES
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	NO
7	Are project-specific matrix spikes and laboratory duplicates included in this data set?	YES

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to questions #1, #1A, or #1B is "No", the data package does not meet the requirements for "Reasonable Confidence".

This form may not be altered and all questions must be answered.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.

Authorized  
Signature:

Position: Laboratory Director

Printed Name: Benjamin Gulizia

Date: 07/09/2015

# YORK



## **Case Narrative**

Client: Langan Engineering & Environmental Services (CT)

Client Project ID: 140109003

Prepared for: Ryan Wohlstrom

### **Introduction**

This Case Narrative applies to the following samples submitted to our laboratory on **05/01/2015 17:10**:

<b><u>Sample Name</u></b>	<b><u>Matrix</u></b>
HA-21 (2-3)	Soil
HA-21 (3-4)	Soil
HA-21-N1 (0-1)	Soil
HA-21-N1 (1-2)	Soil
HA-21-N1 (2-3)	Soil
HA-21-N1 (3-4)	Soil
HA-21-N2 (0-1)	Soil
HA-21-N2 (1-2)	Soil
HA-21-N2 (2-3)	Soil
HA-21-N2 (3-4)	Soil
HA-21-S1 (0-1)	Soil
HA-21-S1 (1-2)	Soil
HA-21-S1 (2-3)	Soil
HA-21-S1 (3-4)	Soil
HA-5 (2-3)	Soil
HA-5(1-2)	Soil
HA-5-E1 (0-1)	Soil
HA-5-E1 (1-2)	Soil
HA-5-E1 (2-3)	Soil
HA-5-E1 (3-4)	Soil
HA-5-E2 (0-1)	Soil
HA-5-E2 (1-2)	Soil
HA-5-E2 (2-3)	Soil
HA-5-E2 (3-4)	Soil
HA-5-N1 (0-1)	Soil
HA-5-N1 (1-2)	Soil
HA-5-N1 (2-3)	Soil
HA-5-N1 (3-4)	Soil
HA-5-N2 (0-1)	Soil
HA-5-N2 (1-2)	Soil
HA-5-N2 (2-3)	Soil
HA-5-N2 (3-4)	Soil
HA-5-S1 (0-1)	Soil
HA-5-S1 (1-2)	Soil
HA-5-S1 (2-3)	Soil



HA-5-S1 (3-4)	Soil
HA-6-S1 (2-3)	Soil
HA-6-S1 (3-4)	Soil
HA-8 (1-2)	Soil
HA-8 (2-3)	Soil
HA-8 (3-4)	Soil
HA-8-E1 (0-1)	Soil
HA-8-E1 (1-2)	Soil
HA-8-E1 (2-3)	Soil
HA-8-E1 (3-4)	Soil
HA-8-E2 (0-1)	Soil
HA-8-E2 (1-2)	Soil
HA-8-E2 (2-3)	Soil
HA-8-E2 (3-4)	Soil
HA-8-N1 (0-1)	Soil
HA-8-N1 (1-2)	Soil
HA-8-N1 (2-3)	Soil
HA-8-N1 (3-4)	Soil
HA-8-N2 (0-1)	Soil
HA-8-N2 (1-2)	Soil
HA-8-N2 (2-3)	Soil
HA-8-N2 (3-4)	Soil
HA-8-S1 (0-1)	Soil
HA-8-S1 (1-2)	Soil
HA-8-S1 (2-3)	Soil
HA-8-S1 (3-4)	Soil
HA-8-S2 (0-1)	Soil
HA-8-S2 (1-2)	Soil
HA-8-S2 (2-3)	Soil
HA-8-S2 (3-4)	Soil
HA-8-W1 (0-1)	Soil
HA-8-W1 (1-2)	Soil
HA-8-W1 (2-3)	Soil
HA-8-W1 (3-4)	Soil
HA-8-W2 (0-1)	Soil
HA-8-W2 (1-2)	Soil
HA-8-W2 (2-3)	Soil
HA-8-W2 (3-4)	Soil

The 73 sample(s) were received intact in a custody-sealed cooler unless otherwise noted. Upon receipt, cooler temperature(s) was determined using a NIST traceable digital infrared thermometer. The cooler temperature was acceptable (2-6oC) and documented as:

#### **Cooler**

#### **Default Cooler**



<u>Cooler</u>	<u>Temp C°</u>
Default Cooler	4.0

Chain-of-custody was maintained from receipt through analysis in the laboratory.

### **Methodology**

Preparation and analysis were conducted according to the SW-846 methods, as detailed in the sample information table, and the requirements of the State of Connecticut Reasonable Confidence Protocols (RCP).

For initial calibrations (ICAL), initial calibration verifications (ICV) and continuing calibration verifications (CCV) for organics determined by GC/MS methods (TO15 volatiles, 8260 volatiles and 8270 semi-volatiles) all method criteria and laboratory SOP criteria were met unless otherwise noted below. Any compounds in the ICAL, ICV or CCV exceeding RCP specified limits are available upon request. This data is not used for Data Quality Assessment or Data Usability Evaluation (assignment of compound bias) which are determined from other lines of evidence. Therefore the data is not detailed in this narrative.

These terms may be used interchangeably. Both are measures of the accuracy of an analysis by measurement of a known material from a source other than that used for calibration. By definition, a **Standard Reference Material (SRM)** is a material containing known levels of analytes used to evaluate the performance of the analytical system with respect to a defined set of acceptance criteria. It is processed exactly as a sample. An **LCS (Laboratory Control Sample)** is second-source standard containing known levels of analyte(s), treated exactly as a sample, run with each analytical batch. Both are metrics used to establish accuracy of the preparation/analysis methods.

### **Metals – Total (Arsenic)**

No problems were encountered during analysis of the samples, other than detailed below.

#### *Method Blank*

No target analyte was detected at or above the RL in the method blanks.

#### *Batch QC*

Five Standard Reference Materials and MS/Dup analysis on sample “HA-21-S1 (0-1)” were run as batch QC for this project. Please refer to the Quality Control Data attached to this report for bias information.

#### *Dilutions*

No sample dilutions were required.





## Analytical Batch Summary

**Batch ID:** BE50164      **Preparation Method:** % Solids Prep      **Prepared By:** SCA

YORK Sample ID	Client Sample ID	Preparation Date
15E0078-12	HA-5(1-2)	05/04/15
15E0078-22	HA-5-N1 (0-1)	05/04/15
15E0078-30	HA-5-E1 (0-1)	05/04/15
15E0078-34	HA-5-S1 (0-1)	05/04/15
15E0078-42	HA-8-S1 (0-1)	05/04/15
15E0078-46	HA-8-N1 (0-1)	05/04/15
15E0078-54	HA-8-E1 (0-1)	05/04/15
15E0078-62	HA-8-W1 (0-1)	05/04/15
15E0078-70	HA-8 (1-2)	05/04/15

**Batch ID:** BE50262      **Preparation Method:** EPA 3050B      **Prepared By:** MW

YORK Sample ID	Client Sample ID	Preparation Date
15E0078-02	HA-21 (2-3)	05/06/15
15E0078-04	HA-21-S1 (0-1)	05/06/15
15E0078-08	HA-21-N1 (0-1)	05/06/15
15E0078-12	HA-5(1-2)	05/06/15
15E0078-22	HA-5-N1 (0-1)	05/06/15
15E0078-30	HA-5-E1 (0-1)	05/06/15
15E0078-34	HA-5-S1 (0-1)	05/06/15
15E0078-42	HA-8-S1 (0-1)	05/06/15
15E0078-46	HA-8-N1 (0-1)	05/06/15
15E0078-54	HA-8-E1 (0-1)	05/06/15
15E0078-62	HA-8-W1 (0-1)	05/06/15
15E0078-70	HA-8 (1-2)	05/06/15
BE50262-BLK1	Blank	05/06/15
BE50262-DUP1	Duplicate	05/06/15
BE50262-MS1	Matrix Spike	05/06/15
BE50262-SRM1	Reference	05/06/15

**Batch ID:** BE50314      **Preparation Method:** % Solids Prep      **Prepared By:** KK

YORK Sample ID	Client Sample ID	Preparation Date
15E0078-02	HA-21 (2-3)	05/06/15
15E0078-04	HA-21-S1 (0-1)	05/06/15
15E0078-08	HA-21-N1 (0-1)	05/06/15

**Batch ID:** BE50798      **Preparation Method:** EPA 3050B      **Prepared By:** MW

YORK Sample ID	Client Sample ID	Preparation Date
15E0078-09	HA-21-N1 (1-2)	05/15/15
15E0078-14	HA-21-N2 (0-1)	05/15/15
15E0078-18	HA-5-N2 (0-1)	05/15/15
15E0078-23	HA-5-N1 (1-2)	05/15/15



15E0078-26	HA-5-E2 (0-1)	05/15/15
15E0078-31	HA-5-E1 (1-2)	05/15/15
15E0078-35	HA-5-S1 (1-2)	05/15/15
BE50798-BLK1	Blank	05/15/15
BE50798-SRM1	Reference	05/15/15

**Batch ID:** BE50813      **Preparation Method:** % Solids Prep      **Prepared By:** SCA

YORK Sample ID	Client Sample ID	Preparation Date
15E0078-09	HA-21-N1 (1-2)	05/15/15
15E0078-14	HA-21-N2 (0-1)	05/15/15
15E0078-18	HA-5-N2 (0-1)	05/15/15
15E0078-23	HA-5-N1 (1-2)	05/15/15
15E0078-26	HA-5-E2 (0-1)	05/15/15
15E0078-31	HA-5-E1 (1-2)	05/15/15
15E0078-35	HA-5-S1 (1-2)	05/15/15

**Batch ID:** BE51304      **Preparation Method:** % Solids Prep      **Prepared By:** KK

YORK Sample ID	Client Sample ID	Preparation Date
15E0078-10	HA-21-N1 (2-3)	05/27/15
15E0078-15	HA-21-N2 (1-2)	05/27/15
15E0078-19	HA-5-N2 (1-2)	05/27/15
15E0078-24	HA-5-N1 (2-3)	05/27/15
15E0078-27	HA-5-E2 (1-2)	05/27/15
15E0078-36	HA-5-S1 (2-3)	05/27/15

**Batch ID:** BE51341      **Preparation Method:** EPA 3050B      **Prepared By:** MW

YORK Sample ID	Client Sample ID	Preparation Date
15E0078-10	HA-21-N1 (2-3)	05/27/15
15E0078-15	HA-21-N2 (1-2)	05/27/15
15E0078-19	HA-5-N2 (1-2)	05/27/15
15E0078-24	HA-5-N1 (2-3)	05/27/15
15E0078-27	HA-5-E2 (1-2)	05/27/15
15E0078-36	HA-5-S1 (2-3)	05/27/15
BE51341-BLK1	Blank	05/27/15
BE51341-SRM1	Reference	05/27/15

**Batch ID:** BF50060      **Preparation Method:** EPA 3050B      **Prepared By:** ALD

YORK Sample ID	Client Sample ID	Preparation Date
15E0078-28	HA-5-E2 (2-3)	06/01/15
BF50060-BLK1	Blank	06/01/15
BF50060-SRM1	Reference	06/01/15

**Batch ID:** BF50073      **Preparation Method:** % Solids Prep      **Prepared By:** KK



YORK Sample ID	Client Sample ID	Preparation Date
15E0078-28	HA-5-E2 (2-3)	06/01/15

**Batch ID:** BG50345      **Preparation Method:** EPA 3050B      **Prepared By:** AMC

YORK Sample ID	Client Sample ID	Preparation Date
15E0078-20	HA-5-N2 (2-3)	07/08/15
BG50345-BLK1	Blank	07/08/15
BG50345-SRM1	Reference	07/08/15

**Batch ID:** BG50373      **Preparation Method:** % Solids Prep      **Prepared By:** SCA

YORK Sample ID	Client Sample ID	Preparation Date
15E0078-20	HA-5-N2 (2-3)	07/08/15



**Metals by ICP - Quality Control Data**  
**York Analytical Laboratories, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BE50262 - EPA 3050B</b>											
<b>Blank (BE50262-BLK1)</b>								Prepared & Analyzed: 05/06/2015			
Arsenic	ND	1.00	mg/kg wet								
<b>Duplicate (BE50262-DUP1)</b>								Prepared & Analyzed: 05/06/2015			
Arsenic	4.21	1.20	mg/kg dry		4.45				5.39	35	
<b>Matrix Spike (BE50262-MS1)</b>								Prepared & Analyzed: 05/06/2015			
Arsenic	238	1.20	mg/kg dry	240	4.45	97.5	75-125				
<b>Reference (BE50262-SRM1)</b>								Prepared & Analyzed: 05/06/2015			
Arsenic	149	1.00	mg/kg wet	151		98.4	70.9-130				
<b>Batch BE50798 - EPA 3050B</b>											
<b>Blank (BE50798-BLK1)</b>								Prepared & Analyzed: 05/15/2015			
Arsenic	ND	1.00	mg/kg wet								
<b>Reference (BE50798-SRM1)</b>								Prepared & Analyzed: 05/15/2015			
Arsenic	141	1.00	mg/kg wet	151		93.1	70.9-130				
<b>Batch BE51341 - EPA 3050B</b>											
<b>Blank (BE51341-BLK1)</b>								Prepared & Analyzed: 05/27/2015			
Arsenic	ND	1.00	mg/kg wet								
<b>Reference (BE51341-SRM1)</b>								Prepared & Analyzed: 05/27/2015			
Arsenic	154	1.00	mg/kg wet	151		102	70.9-130				



**Metals by ICP - Quality Control Data**  
**York Analytical Laboratories, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
---------	--------	--------------------	-------	----------------	-------------------	------	----------------	------	-----	--------------	------

**Batch BF50060 - EPA 3050B**

**Blank (BF50060-BLK1)**

Prepared & Analyzed: 06/01/2015

Arsenic	ND	1.00	mg/kg wet
---------	----	------	-----------

**Reference (BF50060-SRM1)**

Prepared & Analyzed: 06/01/2015

Arsenic	153	1.00	mg/kg wet	151	101	70.9-130
---------	-----	------	-----------	-----	-----	----------

**Batch BG50345 - EPA 3050B**

**Blank (BG50345-BLK1)**

Prepared & Analyzed: 07/08/2015

Arsenic	ND	1.00	mg/kg wet
---------	----	------	-----------

**Reference (BG50345-SRM1)**

Prepared & Analyzed: 07/08/2015

Arsenic	119	1.00	mg/kg wet	122	97.9	70-145.1
---------	-----	------	-----------	-----	------	----------



## Notes and Definitions

---

*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
Non-Dir.	Non-dir. flag (Non-Directional Bias ) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.

For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic performance.

---

Revision Description: Client took 1 more sample off hold









YORK ANALYTICAL LABORATORIES  
120 RESEARCH DR.,  
STRATFORD, CT 06615  
(203) 325-1371  
FAX (203) 357-0166

# Field Chain-of-Custody Record

Page 11 of 18

NOTE: York's Std. Terms & Conditions are listed on the back side of this document.  
This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions.

York Project No. 150078

YOUR INFORMATION		Report To:		Invoice To:		YOUR PROJECT ID		Turn-Around Time		Report Type	
Company: <u>LANGAN</u>	Company: _____	Company: _____	Company: _____	Company: _____	Company: _____	Company: _____	Company: _____	RUSH - Same Day <input type="checkbox"/>	Summary Report	Summary w/ QA Summary <input type="checkbox"/>	CT RCP Package <input type="checkbox"/>
Address: _____	Address: _____	Address: _____	Address: _____	Address: _____	Address: _____	Address: _____	Address: _____	RUSH - Next Day <input type="checkbox"/>	CT RCP Package	CT RCP Package	CT RCP Package
Phone No. _____	Phone No. _____	Phone No. _____	Phone No. _____	Phone No. _____	Phone No. _____	Phone No. _____	Phone No. _____	RUSH - Two Day <input type="checkbox"/>	CT RCP DQA/DUE Pkg <input type="checkbox"/>	NY ASP A Package <input type="checkbox"/>	NY ASP B Package <input type="checkbox"/>
Contact Person: _____	Contact Person: _____	Contact Person: _____	Contact Person: _____	Contact Person: _____	Contact Person: _____	Contact Person: _____	Contact Person: _____	RUSH - Three Day <input type="checkbox"/>	NY ASP A Package	NY ASP B Package	NY ASP B Package
E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	RUSH - Four Day <input type="checkbox"/>	NY ASP B Package	NY ASP B Package	NY ASP B Package
				Samples from: CT <input checked="" type="checkbox"/> NY <input type="checkbox"/> NJ <input type="checkbox"/>				Standard (5-7 Days) <input checked="" type="checkbox"/>			
				Purchase Order No. <u>16109003</u>							

**Print Clearly and Legibly. All Information must be complete. Samples will NOT be logged in and the turn-around time clock will not begin until any questions by York are resolved.**

Samples Collected/Authorized By (Signature) \_\_\_\_\_

Name (printed) \_\_\_\_\_

Sample Identification	Date/Time Sampled	Sample Matrix	Choose Analyses Needed from the Menu Above and Enter Below										Container Description(s)
HA-6-S1 (3-4)	4/30/15 1803	S	Arsenic										202 glass
HA-21 (2-3)	1811												
HA-21 (3-4)	1812												
HA-21-S1 (6-1)	1825												
HA-21-S1 (1-2)	1826												
HA-21-S1 (2-3)	1827												
HA-21-S1 (3-4)	1828												
HA-21-N1 (6-1)	1840												
HA-21-N1 (1-2)	1841												
-21-N1 (2-3)	1842												

Temperature on Receipt 4.0 °C

Samples Received By Trace Date/Time 5-1-15 1710

Samples Relinquished By Trace Date/Time 5-1-15 1710





YORK ANALYTICAL LABORATORIES  
120 RESEARCH DR.  
STRATFORD, CT 06615  
(203) 325-1371  
FAX (203) 357-0166

**YORK**  
ANALYTICAL LABORATORIES INC.

# Field Chain-of-Custody Record

Page 12 of 18

NOTE: York's Std. Terms & Conditions are listed on the back side of this document.  
This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions.

York Project No. 15ED078

YOUR Information		Report To:		Invoice To:		YOUR Project ID		Turn-Around Time		Report Type	
Company: <u>LANGAN</u>	Company: _____	Company: _____		Company: _____		140109603		RUSH - Same Day <input type="checkbox"/>		Summary Report _____	
Address: _____	Address: _____	Address: _____		Address: _____		Purchase Order No. _____		RUSH - Next Day <input type="checkbox"/>		Summary w/ QA Summary _____	
Phone No. _____	Phone No. _____	Phone No. _____		Phone No. _____				RUSH - Two Day <input type="checkbox"/>		CT RCP Package _____	
Contact Person: _____	Attention: _____	Attention: _____		Attention: _____				RUSH - Three Day <input type="checkbox"/>		CTRCP DQA/DUE Pkg _____	
E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____		E-Mail Address: _____				RUSH - Four Day <input type="checkbox"/>		NY ASP A Package _____	
								Standard(5-7 Days) <input checked="" type="checkbox"/>		NY ASP B Package _____	
										NIDEP Red. Deliv. _____	
										<u>Electronic Data Deliverables (EDD)</u>	
										Simple Excel _____	
										NY SDEC EQuIS _____	
										EQuIS (std) _____	
										EZ-EDD (EQuIS) _____	
										NIDEP SRP HazSite EDD _____	
										GIS/KEY (std) _____	
										Other _____	
										York Regulatory Comparison _____	
										Excel Spreadsheet _____	
										Compare to the following Regs. (please fill in):	
										<u>CTDEEP RSP-5</u>	

Sample Identification		Date/Time Sampled	Sample Matrix	Choose Analyses Needed from the Menu Above and Enter Below										Container Description(s)	
HA-21-N1 (3-4)		4/30/15 1843	S	Arsenic	* HOLD										20% glass
HA-5 (1-2)		1855			* HOLD										
HA-5 (2-3)		1856			* HOLD										
HA-21-N2 (0-1)		1900			* HOLD										
HA-21-N2 (1-2)		1901			* HOLD										
HA-21-N2 (2-3)		1902			* HOLD										
HA-21-N2 (3-4)		1903			* HOLD										
HA-5-N2 (0-1)		1920			* HOLD										
HA-5-N2 (1-2)		1921			* HOLD										
HA-5-N2 (2-3)		1922			* HOLD										
Comments: <u>ANALYSIS</u>				4°C	Frozen	HCl	ZnAc	MeOH	Ascorbic Acid	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	NaOH	Temperature on Receipt		
													4.0 °C		
Samples Relinquished By <u>LANGAN</u>		Date/Time	5/15 1710	Samples Received By <u>Shale</u>										Date/Time	
				Samples Relinquished By										Date/Time	
				Samples Relinquished By										Date/Time	





YORK ANALYTICAL LABORATORIES  
120 RESEARCH DR.  
STRATFORD, CT 06615  
(203) 325-1371  
FAX (203) 357-0166

**YORK**  
ANALYTICAL LABORATORIES INC

# Field Chain-of-Custody Record

NOTE: York's Std. Terms & Conditions are listed on the back side of this document.

This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions.

Page 13 of 18

York Project No. 15E0070

YOUR Information		Report To:		Invoice To:		YOUR Project ID		Turn-Around Time		Report Type	
Company: <u>LANGLAND</u>	Company: _____	Company: _____	Company: _____	140109003		140109003		<input type="checkbox"/> RUSH - Same Day	<input type="checkbox"/> RUSH - Next Day	<input type="checkbox"/> RUSH - Two Day	Summary Report
Address: _____	Address: _____	Address: _____	Address: _____	Purchase Order No.		Purchase Order No.		<input type="checkbox"/> RUSH - Three Day	<input type="checkbox"/> RUSH - Four Day	<input type="checkbox"/> RUSH - Five Day	Summary w/ QA Summary
Phone No. _____	Phone No. _____	Phone No. _____	Phone No. _____	Samples from: CT <input checked="" type="checkbox"/> NY <input type="checkbox"/> NJ <input type="checkbox"/>		Samples from: CT <input checked="" type="checkbox"/> NY <input type="checkbox"/> NJ <input type="checkbox"/>		<input type="checkbox"/> RUSH - Six Day	<input type="checkbox"/> RUSH - Seven Day	<input type="checkbox"/> RUSH - Eight Day	CT RCP Package
Contact Person: _____	Contact Person: _____	Contact Person: _____	Contact Person: _____	E-Mail Address: _____		E-Mail Address: _____		<input type="checkbox"/> RUSH - Nine Day	<input type="checkbox"/> RUSH - Ten Day	<input type="checkbox"/> RUSH - Eleven Day	CTRCP DQA/DUE Pkg
E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____		E-Mail Address: _____		<input type="checkbox"/> RUSH - Twelve Day	<input type="checkbox"/> RUSH - Thirteen Day	<input type="checkbox"/> RUSH - Fourteen Day	NY ASP A Package
				Standard(5-7 Days) <input checked="" type="checkbox"/>				Electronic Data Deliverables (EDD)			
				Simple Excel				Simple Excel			
				NYSEDEC EQuIS				NYSEDEC EQuIS			
				EQuIS (std)				EQuIS (std)			
				EZ-EDD (EQuIS)				EZ-EDD (EQuIS)			
				NJDEP SRP HazSite EDD				NJDEP SRP HazSite EDD			
				GIS/KEY (std)				GIS/KEY (std)			
				Other				Other			
				York Regulatory Comparison				York Regulatory Comparison			
				Excel Spreadsheet				Excel Spreadsheet			
				Compare to the following Regs. (please fill in):				Compare to the following Regs. (please fill in):			
				OTDEEP ASRS				OTDEEP ASRS			

**Print Clearly and Legibly. All Information must be complete. Samples will NOT be logged in and the turn-around time clock will not begin until any questions by York are resolved.**

Samples Collected/Authorized By (Signature) \_\_\_\_\_

Name (printed) \_\_\_\_\_

Sample Identification	Date/Time Sampled	Sample Matrix	Choose Analyses Needed from the Menu Above and Enter Below	Container Description(s)
HA-5-NZ (3-A)	4/30/15 1923	S	Arsonic	2oz glass
HA-5-N1 (0-1)	1925		* HOLD	
HA-5-N1 (1-2)	1926		* HOLD	
HA-5-N1 (2-3)	1927		* HOLD	
HA-5-N1 (3-4)	1928		* HOLD	
HA-5-EZ (0-1)	1940		* HOLD	
HA-5-EZ (1-2)	1941		* HOLD	
HA-5-EZ (2-3)	1942		* HOLD	
HA-5-EZ (3-4)	1943		* HOLD	
HA-5-E1 (0-1)	1944		* HOLD	

4°C	Frozen	HCl	MeOH	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	NaOH	Temperature on Receipt
							4.0°C

Check those Applicable

Special Instructions

Field Filtered ☐ Lab to Filter ☐

Comments

OLD ANALYSIS UNTIL AUTHORIZED BY CANNAN

Samples Relinquished By \_\_\_\_\_ Date/Time \_\_\_\_\_

Samples Relinquished By \_\_\_\_\_ Date/Time \_\_\_\_\_

Samples Received By \_\_\_\_\_ Date/Time \_\_\_\_\_

Samples Received By \_\_\_\_\_ Date/Time \_\_\_\_\_





YORK ANALYTICAL LABORATORIES  
120 RESEARCH DR.  
STRATFORD, CT 06615  
(203) 325-1371  
FAX (203) 357-0166

**YORK**  
ANALYTICAL LABORATORIES INC

# Field Chain-of-Custody Record

NOTE: York's Std. Terms & Conditions are listed on the back side of this document.  
This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions.

Page 1A of 18

York Project No. 15E0008

YOUR Information		Report To:		Invoice To:		YOUR Project ID		Turn-Around Time		Report Type			
Company: <u>LANGAN</u>	Company: _____	Company: _____	Company: _____	YOUR Project ID: <u>140109003</u>		RUSH - Same Day <input type="checkbox"/>		Summary Report _____		Summary w/ QA Summary _____			
Address: _____	Address: _____	Address: _____	Address: _____	Purchase Order No. _____		RUSH - Next Day <input type="checkbox"/>		CT RCP Package _____		CT RCP Package _____			
Phone No. _____	Phone No. _____	Phone No. _____	Phone No. _____	E-Mail Address: _____		RUSH - Two Day <input type="checkbox"/>		CTRCP DQA/DUE Pkg _____		CTRCP DQA/DUE Pkg _____			
Contact Person: _____	Contact Person: _____	Contact Person: _____	Contact Person: _____	E-Mail Address: _____		RUSH - Three Day <input type="checkbox"/>		NY ASP A Package _____		NY ASP A Package _____			
E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____		RUSH - Four Day <input type="checkbox"/>		NY ASP B Package _____		NY ASP B Package _____			
Samples from: CT <input checked="" type="checkbox"/> NY <input type="checkbox"/> NJ <input type="checkbox"/>				Standard(5-7 Days) <input checked="" type="checkbox"/>				NJDEP Red. Deliv. _____				NJDEP Red. Deliv. _____	
Electronic Data Deliverables (EDD)				Simple Excel _____				Simple Excel _____				Simple Excel _____	
NYSDEC EQuIS _____				NYSDEC EQuIS _____				NYSDEC EQuIS _____				NYSDEC EQuIS _____	
EZ-EDD (EQuIS) _____				EZ-EDD (EQuIS) _____				EZ-EDD (EQuIS) _____				EZ-EDD (EQuIS) _____	
NJDEP SRP HazSite EDD _____				NJDEP SRP HazSite EDD _____				NJDEP SRP HazSite EDD _____				NJDEP SRP HazSite EDD _____	
GIS/KEY (std) _____				GIS/KEY (std) _____				GIS/KEY (std) _____				GIS/KEY (std) _____	
Other _____				Other _____				Other _____				Other _____	
York Regulatory Comparison _____				York Regulatory Comparison _____				York Regulatory Comparison _____				York Regulatory Comparison _____	
Excel Spreadsheet _____				Excel Spreadsheet _____				Excel Spreadsheet _____				Excel Spreadsheet _____	
Compare to the following Regs. (please fill in):				Compare to the following Regs. (please fill in):				Compare to the following Regs. (please fill in):				Compare to the following Regs. (please fill in):	
CTDEP RSRs				CTDEP RSRs				CTDEP RSRs				CTDEP RSRs	

Sample Identification	Date/Time Sampled	Sample Matrix	Choose Analyses Needed from the Menu Above and Enter Below	Container Description(s)
HA-5-E1 (1-2)	4/30/15 1945	S	Arsonic * HOLD	2oz glass
HA-5-E1 (2-3)	1946		* HOLD	
HA-5-E1 (3-4)	1947		* HOLD	
HA-5-S1 (0-1)	2000			
HA-5-S1 (1-2)	2001		* HOLD	
HA-5-S1 (2-3)	2002		* HOLD	
HA-5-S1 (3-4)	2003		* HOLD	
HA-8-S2 (0-1)	5/1/15 1245		* HOLD	
HA-8-S2 (1-2)	1246		* HOLD	
HA-8-S2 (2-3)	1247		* HOLD	

Comments	Preservation	4°C	Frozen	HCl	MeOH	Ascorbic Acid	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	NaOH	Temperature on Receipt
HA-5-E1 (1-2)	Check those Applicable									4.0 °C
HA-5-E1 (2-3)	Special Instructions									
HA-5-E1 (3-4)	Field Filtered <input type="checkbox"/>									
HA-5-E1 (3-4)	Lab to Filter <input type="checkbox"/>									

Signature	Date/Time	Signature	Date/Time
<u>KloZolaka</u>	5/1/15 1710	_____	_____
Samples Relinquished By	Date/Time	Samples Received By	Date/Time
_____	_____	_____	5-1-15 1710
Samples Relinquished By	Date/Time	Samples Received in LAB by	Date/Time
_____	_____	_____	_____





York Project No. 15E00797

***Print Clearly and Legibly. All Information must be complete. Samples will NOT be logged in and the turn-around time clock will not begin until any questions by York are resolved.***





YORK ANALYTICAL LABORATORIES  
120 RESEARCH DR.  
STRATFORD, CT 06615  
(203) 325-1371  
FAX (203) 357-0166

# Field Chain-of-Custody Record

NOTE: York's Std. Terms & Conditions are listed on the back side of this document.  
This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions.

Page 16 of 18

York Project No. 150078

YOUR Information		Report To:		Invoice To:		YOUR Project ID		Turn-Around Time		Report Type	
Company: <u>LANKFAR</u>	Company: _____	Company: _____	Company: _____	Company: _____	Company: _____	Company: _____	Company: _____	RUSH - Same Day <input type="checkbox"/>	Summary Report _____	Summary w/ QA Summary _____	CT RCP Package _____
Address: _____	Address: _____	Address: _____	Address: _____	Address: _____	Address: _____	Address: _____	Address: _____	RUSH - Next Day <input type="checkbox"/>	CT RCP Package _____	CT RCP Package _____	CT RCP Package _____
Phone No. _____	Phone No. _____	Phone No. _____	Phone No. _____	Phone No. _____	Phone No. _____	Phone No. _____	Phone No. _____	RUSH - Two Day <input type="checkbox"/>	CT RCP Package _____	CT RCP Package _____	CT RCP Package _____
Contact Person: _____	Contact Person: _____	Contact Person: _____	Contact Person: _____	Contact Person: _____	Contact Person: _____	Contact Person: _____	Contact Person: _____	RUSH - Three Day <input type="checkbox"/>	CT RCP Package _____	CT RCP Package _____	CT RCP Package _____
E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	RUSH - Four Day <input type="checkbox"/>	CT RCP Package _____	CT RCP Package _____	CT RCP Package _____
<b>Print Clearly and Legibly. All Information must be complete. Samples will NOT be logged in and the turn-around time clock will not begin until any questions by York are resolved.</b>				<b>Print Clearly and Legibly. All Information must be complete. Samples will NOT be logged in and the turn-around time clock will not begin until any questions by York are resolved.</b>				<b>Print Clearly and Legibly. All Information must be complete. Samples will NOT be logged in and the turn-around time clock will not begin until any questions by York are resolved.</b>			
Samples Collected/Authorized By (Signature) _____ Name (printed) _____				Samples from: CT <input checked="" type="checkbox"/> NY <input type="checkbox"/> NJ <input type="checkbox"/> Standard(5-7 Days) <input checked="" type="checkbox"/>				Simple Excel _____ NYSEDEC EQuIS _____ EQuIS (std) _____ EZ-EDD (EQuIS) _____ NJDEP SRP HazSite EDD _____ GIS/KEY (std) _____ Other _____ York Regulatory Comparison _____ Excel Spreadsheet _____ Compare to the following Regs. (please fill in): <u>CTDEEP ASDS</u>			

Sample Identification		Date/Time Sampled	Sample Matrix	Choose Analyses Needed from the Menu Above and Enter Below										Container Description(s)	
HA-8-N2 (1-2)	5/1/15	1301	S	Asenimic	* HOLD										207 gases
HA-8-N2 (2-3)		1302		* HOLD											
HA-8-N2 (3-4)		1303		* HOLD											
HA-8-E1 (0-1)		1305		* HOLD											
HA-8-E1 (1-2)		1306		* HOLD											
HA-8-E1 (2-3)		1307		* HOLD											
HA-8-E1 (3-4)		1308		* HOLD											
HA-8-E2 (0-1)		1310		* HOLD											
HA-8-E2 (1-2)		1311		* HOLD											
HA-8-E2 (2-3)		1312		* HOLD											
Comments		4000 ANALYSIS UNTIL AUTHORIZED BY CANGHAN 5/1/15 1710 Samples Relinquished By _____ Date/Time _____ Samples Relinquished By _____ Date/Time _____ Samples Received By _____ Date/Time _____ Samples Received in LAB by _____ Date/Time _____													
Temperature on Receipt		4.0 °C													





YORK ANALYTICAL LABORATORIES  
120 RESEARCH DR.  
STRATFORD, CT 06615  
(203) 325-1371  
FAX (203) 357-0166

# Field Chain-of-Custody Record

Page 17 of 18

NOTE: York's Std. Terms & Conditions are listed on the back side of this document.

This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions.

York Project No. 15E0019

YOUR INFORMATION		Report To:		Invoice To:		YOUR PROJECT ID		Turn-Around Time		Report Type	
Company: Langan		Company:		Company:		140109003		RUSH - Same Day <input type="checkbox"/>		Summary Report	
Address:		Address:		Address:		Purchase Order No.		RUSH - Next Day <input type="checkbox"/>		Summary w/ QA Summary	
Phone No.:		Phone No.:		Phone No.:				RUSH - Two Day <input type="checkbox"/>		CT RCP Package	
Contact Person:		Attention:		Attention:				RUSH - Three Day <input type="checkbox"/>		CT RCP DQA/DUE Pkg	
E-Mail Address:		E-Mail Address:		E-Mail Address:				RUSH - Four Day <input type="checkbox"/>		NY ASP A Package	
								Standard (5-7 Days) <input checked="" type="checkbox"/>		NY ASP B Package	
										NJDEP Red. Deliv.	
										Electronic Data Deliverables (EDD)	
										Simple Excel	
										NY/SDC EQUIS	
										EQUIS (std)	
										EZ-EDD (EQUIS)	
										NJDEP SRP HazSite EDD	
										GIS/KEY (std)	
										Other	
										York Regulatory Comparison	
										Excel Spreadsheet	
										Compute to the following Regs. (please fill in):	
										CT DEEP RSRS	

**Print Clearly and Legibly. All Information must be complete. Samples will NOT be logged in and the turn-around time clock will not begin until any questions by York are resolved.**

Samples Collected/Authorized By (Signature)

Name (printed)

Sample Identification	Date/Time Sampled	Sample Matrix	Choose Analyses Needed from the Menu Above and Enter Below										Container Description(s)	
HA-B-E2 (3-A)	5/1/15 1313	S	Arsenic	* HOLD										20% glass
HA-B-W1 (0-1)	1315			* HOLD										
HA-B-W1 (1-2)	1316			* HOLD										
HA-B-W1 (2-3)	1317			* HOLD										
HA-B-W1 (3-4)	1318			* HOLD										
HA-B-W2 (0-1)	1320			* HOLD										
HA-B-W2 (1-2)	1321			* HOLD										
HA-B-W2 (2-3)	1322			* HOLD										
HA-B-W2 (3-4)	1323			* HOLD										
HA-B (1-2)	1325													

DO NOT ANALYZE UNTIL AUTHORIZED BY LANGAN

Temperature on Receipt 4.0°C

Samples Received By Date/Time 5-1-15 1710

Samples Relinquished By Date/Time



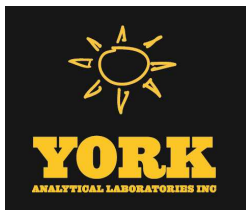
# Field Chain-of-Custody Record

**NOTE:** York's Std. Terms & Conditions are listed on the back side of this document.

This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions.

**York Project No.**

<b>YOUR Information</b> Company: <u>LANGAN</u> Address: _____ Phone No. _____ Contact Person: _____ E-Mail Address: _____		<b>Report To:</b> Company: _____ Address: _____ Phone No. _____ Attention: _____ E-Mail Address: _____		<b>Invoice To:</b> Company: _____ Address: _____ Phone No. _____ Attention: _____ E-Mail Address: _____		<b>YOUR Project ID</b> <u>140109003</u> <b>Purchase Order No.</b> _____		<b>Turn-Around Time</b> RUSH - Same Day <input type="checkbox"/> RUSH - Next Day <input type="checkbox"/> RUSH - Two Day <input type="checkbox"/> RUSH - Three Day <input type="checkbox"/> RUSH - Four Day <input type="checkbox"/> <b>Standard(5-7 Days)</b> <input checked="" type="checkbox"/>		<b>Report Type</b> Summary Report _____ Summary w/ QA Summary _____ CT RCP Package _____ CTRCP DQA/DUE Pkg _____ NY ASP A Package _____ NY ASP B Package _____ NIDEP Red. Deliv. _____ <i>Electronic Data Deliverables (EDD)</i> Simple Excel: _____ NYSDEC EQulS _____ EQulS (std) _____ EZ-EDD (EQulS) _____ NIDEP SRP HazSite EDD _____ GIS/KEY (std) _____ Other _____ York Regulatory Comparison _____ Excel Spreadsheet _____ Compare to the following Regs. (please fill in): <u>CTDEEP RSL-s</u>							
<b>Choose Analyses Needed from the Menu Above and Enter Below</b>																	
<b>Sample Identification</b> HA-8 (2-3) HA-8 (3-A)		<b>Date/Time Sampled</b> 5/1/15 1326 ↓ 1327		<b>Sample Matrix</b> S S		<b>Volatiles</b> 8260 full TICS 624 Site Spec. STARS list Nassau Co. BTEX Suffolk Co. MTBE Ketones TCL list Oxygenates TAGM list TCLP list CT RCP list 524.2 Arom. only 502.2 Halog-only NIDEP list App.IX list SPLP or TCLP 8021B list		<b>Semi-Vols, Pest/PCB/Herb</b> 8270 or 625 STARS list BN Only Acids Only PAH list TAGM list CT RCP list TCL list NIDEP list App. IX SPLP or TCLP 608 Pest		<b>Metals</b> RCRA8 PP13 list TAL CT15 list TAGM list NIDEP list Total Dissolved SPLP or TCLP Herb Chlordane 608 Pest SPLP or TCLP 608 PCB		<b>Misc. Org.</b> TPH GRO TPH DRO CT ETPH NY 310-13 TPH 1664 Air TO14A Air TO15 Air STARS Air VPH Air TICs Methane Helium		<b>Full Lists</b> Pri.Poll. TCL Organics TAL Mat'N Full TCLP Full App. IX Part 360-Routine Part 360-Baseline Part 360-lead Part 360-pesticide Part 360-Hazardous NYDEP Sewer TOC NYDEP Sewer Asbestos Silica		<b>Misc.</b> Corrosivity Reactivity Ignitability Flash Point Sieve Anal. Heteronophs TOX BTU/lb. Aquatic Tox. TOC	
<b>Choose Analyses Needed from the Menu Above and Enter Below</b>																	
<b>Sample Identification</b> HA-8 (2-3) HA-8 (3-A)		<b>Date/Time Sampled</b> 5/1/15 1326 ↓ 1327		<b>Sample Matrix</b> S S		<b>Volatiles</b> 8260 full TICS 624 Site Spec. STARS list Nassau Co. BTEX Suffolk Co. MTBE Ketones TCL list Oxygenates TAGM list TCLP list CT RCP list 524.2 Arom. only 502.2 Halog-only NIDEP list App.IX list SPLP or TCLP 8021B list		<b>Semi-Vols, Pest/PCB/Herb</b> 8270 or 625 STARS list BN Only Acids Only PAH list TAGM list CT RCP list TCL list NIDEP list App. IX SPLP or TCLP 608 Pest		<b>Metals</b> RCRA8 PP13 list TAL CT15 list TAGM list NIDEP list Total Dissolved SPLP or TCLP Herb Chlordane 608 Pest SPLP or TCLP 608 PCB		<b>Misc. Org.</b> TPH GRO TPH DRO CT ETPH NY 310-13 TPH 1664 Air TO14A Air TO15 Air STARS Air VPH Air TICs Methane Helium		<b>Full Lists</b> Pri.Poll. TCL Organics TAL Mat'N Full TCLP Full App. IX Part 360-Routine Part 360-Baseline Part 360-lead Part 360-pesticide Part 360-Hazardous NYDEP Sewer TOC NYDEP Sewer Asbestos Silica		<b>Misc.</b> Corrosivity Reactivity Ignitability Flash Point Sieve Anal. Heteronophs TOX BTU/lb. Aquatic Tox. TOC	
<b>Comments</b>																	
HOLD ANALYSIS UNTIL AUTHORIZED BY LANGAN																	
<b>Sample Identification</b> HA-8 (2-3) HA-8 (3-A)		<b>Date/Time Sampled</b> 5/1/15 1326 ↓ 1327		<b>Sample Matrix</b> S S		<b>Volatiles</b> 8260 full TICS 624 Site Spec. STARS list Nassau Co. BTEX Suffolk Co. MTBE Ketones TCL list Oxygenates TAGM list TCLP list CT RCP list 524.2 Arom. only 502.2 Halog-only NIDEP list App.IX list SPLP or TCLP 8021B list		<b>Semi-Vols, Pest/PCB/Herb</b> 8270 or 625 STARS list BN Only Acids Only PAH list TAGM list CT RCP list TCL list NIDEP list App. IX SPLP or TCLP 608 Pest		<b>Metals</b> RCRA8 PP13 list TAL CT15 list TAGM list NIDEP list Total Dissolved SPLP or TCLP Herb Chlordane 608 Pest SPLP or TCLP 608 PCB		<b>Misc. Org.</b> TPH GRO TPH DRO CT ETPH NY 310-13 TPH 1664 Air TO14A Air TO15 Air STARS Air VPH Air TICs Methane Helium		<b>Full Lists</b> Pri.Poll. TCL Organics TAL Mat'N Full TCLP Full App. IX Part 360-Routine Part 360-Baseline Part 360-lead Part 360-pesticide Part 360-Hazardous NYDEP Sewer TOC NYDEP Sewer Asbestos Silica		<b>Misc.</b> Corrosivity Reactivity Ignitability Flash Point Sieve Anal. Heteronophs TOX BTU/lb. Aquatic Tox. TOC	
<b>Comments</b>																	
HOLD ANALYSIS UNTIL AUTHORIZED BY LANGAN																	



# Technical Report

prepared for:

**Langan Engineering & Environmental Services (CT)**

Long Wharf Maritime Center, 555 Long Wharf Drive

New Haven CT, 06511

**Attention: Justin Hall**

Report Date: 07/06/2015

**Client Project ID: 140109002**

York Project (SDG) No.: 15F0769

Revision No. 2.0

CT Cert. No. PH-0723

New Jersey Cert. No. CT-005



New York Cert. No. 10854

PA Cert. No. 68-04440

**Langan Engineering & Environmental Services (CT)**  
Long Wharf Maritime Center, 555 Long Wharf Drive  
New Haven CT, 06511  
Attention: Justin Hall

---

## Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on June 19, 2015 and listed below. The project was identified as your project: **140109002**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Notes section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the attachment to this report, and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
15F0769-01	HA-13-N4 (0-1)	Soil	06/18/2015	06/19/2015
15F0769-02	HA-13-N4 (1-2)	Soil	06/18/2015	06/19/2015
15F0769-05	HA-13-N6 (0-1)	Soil	06/18/2015	06/19/2015
15F0769-06	HA-13-N6 (1-2)	Soil	06/18/2015	06/19/2015
15F0769-09	HA-13-N3 (0-1)	Soil	06/18/2015	06/19/2015
15F0769-13	HA-13-N5 (0-1)	Soil	06/18/2015	06/19/2015
15F0769-14	HA-13-N5 (1-2)	Soil	06/18/2015	06/19/2015
15F0769-17	HA-10-W1 (1-2)	Soil	06/18/2015	06/19/2015
15F0769-20	HA-10-W2 (2-3)	Soil	06/18/2015	06/19/2015
15F0769-22	HA-22-S1 (2-3)	Soil	06/18/2015	06/19/2015
15F0769-24	HA-13-W1 (2-3)	Soil	06/18/2015	06/19/2015
15F0769-26	HA-13-W3 (0-1)	Soil	06/18/2015	06/19/2015
15F0769-27	HA-13-W3 (1-2)	Soil	06/18/2015	06/19/2015
15F0769-30	HA-13-W4 (0-1)	Soil	06/18/2015	06/19/2015
15F0769-34	HA-13-SW1 (0-1)	Soil	06/18/2015	06/19/2015
15F0769-35	HA-13-SW1 (1-2)	Soil	06/18/2015	06/19/2015
15F0769-38	HA-13-SW2 (0-1)	Soil	06/18/2015	06/19/2015
15F0769-42	HA-10-W3 (0-1)	Soil	06/18/2015	06/19/2015
15F0769-43	HA-10-W3 (1-2)	Soil	06/18/2015	06/19/2015
15F0769-44	HA-10-W3 (2-3)	Soil	06/18/2015	06/19/2015
15F0769-45	HA-10-W4 (0-1)	Soil	06/18/2015	06/19/2015
15F0769-48	HA-10-SW1 (0-1)	Soil	06/18/2015	06/19/2015
15F0769-52	HA-10-SW2 (0-1)	Soil	06/18/2015	06/19/2015

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
15F0769-56	HA-10-SW3 (0-1)	Soil	06/18/2015	06/19/2015
15F0769-59	HA-5-E4 (0-1)	Soil	06/18/2015	06/19/2015
15F0769-63	HA-5-E6 (0-1)	Soil	06/18/2015	06/19/2015
15F0769-64	HA-5-E6 (1-2)	Soil	06/18/2015	06/19/2015
15F0769-67	HA-5-E3 (0-1)	Soil	06/18/2015	06/19/2015
15F0769-68	HA-5-E3 (1-2)	Soil	06/18/2015	06/19/2015
15F0769-71	HA-5-E5 (0-1)	Soil	06/18/2015	06/19/2015
15F0769-75	HA-5-N4 (0-1)	Soil	06/18/2015	06/19/2015
15F0769-76	HA-5-N4 (1-2)	Soil	06/18/2015	06/19/2015
15F0769-77	HA-5-N4 (2-3)	Soil	06/18/2015	06/19/2015
15F0769-79	HA-5-N6 (0-1)	Soil	06/18/2015	06/19/2015
15F0769-83	HA-5-N3 (0-1)	Soil	06/18/2015	06/19/2015
15F0769-84	HA-5-N3 (1-2)	Soil	06/18/2015	06/19/2015
15F0769-87	HA-5-N5 (0-1)	Soil	06/18/2015	06/19/2015
15F0769-88	HA-5-N5 (1-2)	Soil	06/18/2015	06/19/2015
15F0769-91	HA-21-NE1 (0-1)	Soil	06/18/2015	06/19/2015
15F0769-92	HA-21-NE1 (1-2)	Soil	06/18/2015	06/19/2015
15F0769-95	HA-21-NE2 (0-1)	Soil	06/18/2015	06/19/2015
15F0769-99	HA-10-NE1 (0-1)	Soil	06/18/2015	06/19/2015

### **General Notes for York Project (SDG) No.: 15F0769**

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All samples were received in proper condition for analysis with proper documentation, unless otherwise noted.
6. All analyses conducted met method or Laboratory SOP requirements. See the Qualifiers and/or Narrative sections for further information.
7. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
8. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.

**Approved By:**



Benjamin Gulizia  
Laboratory Director

**Date:** 07/06/2015







### Sample Information

**Client Sample ID:** HA-13-N4 (0-1)

**York Sample ID:** 15F0769-01

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

15F0769

140109002

Soil

June 18, 2015 9:01 am

06/19/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	11.2		mg/kg dry	1.10	1	EPA 6010C	06/24/2015 13:33	06/24/2015 16:43	ALD

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	90.8		%	0.100	1	SM 2540G	06/22/2015 10:43	06/22/2015 15:51	KK

### Sample Information

**Client Sample ID:** HA-13-N4 (1-2)

**York Sample ID:** 15F0769-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

15F0769

140109002

Soil

June 18, 2015 9:02 am

06/19/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	5.26		mg/kg dry	1.15	1	EPA 6010C	06/30/2015 11:09	06/30/2015 15:36	ALD

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	87.3		%	0.100	1	SM 2540G	06/27/2015 11:06	06/29/2015 15:16	SCA

### Sample Information

**Client Sample ID:** HA-13-N6 (0-1)

**York Sample ID:** 15F0769-05

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

15F0769

140109002

Soil

June 18, 2015 9:06 am

06/19/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:



### Sample Information

**Client Sample ID:** HA-13-N6 (0-1)

**York Sample ID:** 15F0769-05

York Project (SDG) No.  
15F0769

Client Project ID  
140109002

Matrix  
Soil

Collection Date/Time  
June 18, 2015 9:06 am

Date Received  
06/19/2015

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	17.0		mg/kg dry	1.19	1	EPA 6010C	06/24/2015 13:33	06/24/2015 17:00	ALD

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	84.2		%	0.100	1	SM 2540G	06/22/2015 10:47	06/22/2015 15:54	KK

### Sample Information

**Client Sample ID:** HA-13-N6 (1-2)

**York Sample ID:** 15F0769-06

York Project (SDG) No.  
15F0769

Client Project ID  
140109002

Matrix  
Soil

Collection Date/Time  
June 18, 2015 9:07 am

Date Received  
06/19/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	4.81		mg/kg dry	1.18	1	EPA 6010C	06/30/2015 11:09	06/30/2015 15:40	ALD

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	84.7		%	0.100	1	SM 2540G	06/27/2015 11:06	06/29/2015 15:16	SCA

### Sample Information

**Client Sample ID:** HA-13-N3 (0-1)

**York Sample ID:** 15F0769-09

York Project (SDG) No.  
15F0769

Client Project ID  
140109002

Matrix  
Soil

Collection Date/Time  
June 18, 2015 9:11 am

Date Received  
06/19/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	7.16		mg/kg dry	1.20	1	EPA 6010C	06/24/2015 13:33	06/24/2015 17:05	ALD



### Sample Information

**Client Sample ID:** HA-13-N3 (0-1)

**York Sample ID:** 15F0769-09

York Project (SDG) No.  
15F0769

Client Project ID  
140109002

Matrix  
Soil

Collection Date/Time  
June 18, 2015 9:11 am

Date Received  
06/19/2015

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	83.0		%	0.100	1	SM 2540G	06/22/2015 10:47	06/22/2015 15:54	KK

### Sample Information

**Client Sample ID:** HA-13-N5 (0-1)

**York Sample ID:** 15F0769-13

York Project (SDG) No.  
15F0769

Client Project ID  
140109002

Matrix  
Soil

Collection Date/Time  
June 18, 2015 9:16 am

Date Received  
06/19/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	31.8		mg/kg dry	1.15	1	EPA 6010C	06/24/2015 13:33	06/24/2015 17:10	ALD

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	86.7		%	0.100	1	SM 2540G	06/22/2015 10:47	06/22/2015 15:54	KK

### Sample Information

**Client Sample ID:** HA-13-N5 (1-2)

**York Sample ID:** 15F0769-14

York Project (SDG) No.  
15F0769

Client Project ID  
140109002

Matrix  
Soil

Collection Date/Time  
June 18, 2015 9:17 am

Date Received  
06/19/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

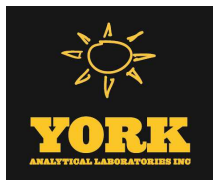
Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	7.45		mg/kg dry	1.15	1	EPA 6010C	06/30/2015 11:09	06/30/2015 15:45	ALD

#### Total Solids

#### Log-in Notes:

#### Sample Notes:



### Sample Information

**Client Sample ID:** HA-13-N5 (1-2)

**York Sample ID:** 15F0769-14

York Project (SDG) No.  
15F0769

Client Project ID  
140109002

Matrix  
Soil

Collection Date/Time  
June 18, 2015 9:17 am

Date Received  
06/19/2015

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	86.6		%	0.100	1	SM 2540G	06/27/2015 11:06	06/29/2015 15:16	SCA

### Sample Information

**Client Sample ID:** HA-10-W1 (1-2)

**York Sample ID:** 15F0769-17

York Project (SDG) No.  
15F0769

Client Project ID  
140109002

Matrix  
Soil

Collection Date/Time  
June 18, 2015 9:21 am

Date Received  
06/19/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	4.93		mg/kg dry	1.13	1	EPA 6010C	06/24/2015 13:33	06/24/2015 17:14	ALD

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	88.4		%	0.100	1	SM 2540G	06/22/2015 10:47	06/22/2015 15:54	KK

### Sample Information

**Client Sample ID:** HA-10-W2 (2-3)

**York Sample ID:** 15F0769-20

York Project (SDG) No.  
15F0769

Client Project ID  
140109002

Matrix  
Soil

Collection Date/Time  
June 18, 2015 9:26 am

Date Received  
06/19/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	9.54		mg/kg dry	1.15	1	EPA 6010C	06/24/2015 13:33	06/24/2015 17:19	ALD

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	86.9		%	0.100	1	SM 2540G	06/22/2015 10:47	06/22/2015 15:54	KK



### Sample Information

**Client Sample ID:** HA-10-W2 (2-3)

**York Sample ID:** 15F0769-20

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
15F0769	140109002	Soil	June 18, 2015 9:26 am	06/19/2015

### Sample Information

**Client Sample ID:** HA-22-S1 (2-3)

**York Sample ID:** 15F0769-22

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
15F0769	140109002	Soil	June 18, 2015 9:31 am	06/19/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	ND		mg/kg dry	1.19	1	EPA 6010C	06/24/2015 13:33	06/24/2015 17:36	ALD

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	83.7		%	0.100	1	SM 2540G	06/22/2015 10:47	06/22/2015 15:54	KK

### Sample Information

**Client Sample ID:** HA-13-W1 (2-3)

**York Sample ID:** 15F0769-24

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
15F0769	140109002	Soil	June 18, 2015 9:36 am	06/19/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	3.54		mg/kg dry	1.29	1	EPA 6010C	06/30/2015 11:09	06/30/2015 15:50	ALD

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	77.7		%	0.100	1	SM 2540G	06/27/2015 11:06	06/29/2015 15:16	SCA



### Sample Information

**Client Sample ID:** HA-13-W3 (0-1)

**York Sample ID:** 15F0769-26

York Project (SDG) No.  
15F0769

Client Project ID  
140109002

Matrix  
Soil

Collection Date/Time  
June 18, 2015 9:41 am

Date Received  
06/19/2015

#### Arsenic by EPA 6010

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	13.6		mg/kg dry	1.28	1	EPA 6010C	06/24/2015 13:33	06/24/2015 17:44	ALD

#### Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	78.1		%	0.100	1	SM 2540G	06/22/2015 10:47	06/22/2015 15:54	KK

### Sample Information

**Client Sample ID:** HA-13-W3 (1-2)

**York Sample ID:** 15F0769-27

York Project (SDG) No.  
15F0769

Client Project ID  
140109002

Matrix  
Soil

Collection Date/Time  
June 18, 2015 9:42 am

Date Received  
06/19/2015

#### Arsenic by EPA 6010

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	6.78		mg/kg dry	1.20	1	EPA 6010C	06/30/2015 11:09	06/30/2015 15:55	ALD

#### Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	83.1		%	0.100	1	SM 2540G	06/27/2015 11:06	06/29/2015 15:16	SCA

### Sample Information

**Client Sample ID:** HA-13-W4 (0-1)

**York Sample ID:** 15F0769-30

York Project (SDG) No.  
15F0769

Client Project ID  
140109002

Matrix  
Soil

Collection Date/Time  
June 18, 2015 9:46 am

Date Received  
06/19/2015

#### Arsenic by EPA 6010

Log-in Notes:

Sample Notes:





### Sample Information

**Client Sample ID:** HA-13-W4 (0-1)

**York Sample ID:** 15F0769-30

York Project (SDG) No.  
15F0769

Client Project ID  
140109002

Matrix  
Soil

Collection Date/Time  
June 18, 2015 9:46 am

Date Received  
06/19/2015

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	5.83		mg/kg dry	1.18	1	EPA 6010C	06/24/2015 13:33	06/24/2015 17:49	ALD

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	84.9		%	0.100	1	SM 2540G	06/22/2015 10:47	06/22/2015 15:54	KK

### Sample Information

**Client Sample ID:** HA-13-SW1 (0-1)

**York Sample ID:** 15F0769-34

York Project (SDG) No.  
15F0769

Client Project ID  
140109002

Matrix  
Soil

Collection Date/Time  
June 18, 2015 9:51 am

Date Received  
06/19/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	11.7		mg/kg dry	1.19	1	EPA 6010C	06/24/2015 13:33	06/24/2015 17:53	ALD

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	84.0		%	0.100	1	SM 2540G	06/22/2015 10:47	06/22/2015 15:54	KK

### Sample Information

**Client Sample ID:** HA-13-SW1 (1-2)

**York Sample ID:** 15F0769-35

York Project (SDG) No.  
15F0769

Client Project ID  
140109002

Matrix  
Soil

Collection Date/Time  
June 18, 2015 9:52 am

Date Received  
06/19/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	4.89		mg/kg dry	1.16	1	EPA 6010C	06/30/2015 11:09	06/30/2015 16:00	ALD



### Sample Information

**Client Sample ID:** HA-13-SW1 (1-2)

**York Sample ID:** 15F0769-35

York Project (SDG) No.  
15F0769

Client Project ID  
140109002

Matrix  
Soil

Collection Date/Time  
June 18, 2015 9:52 am

Date Received  
06/19/2015

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	86.2		%	0.100	1	SM 2540G	06/27/2015 11:06	06/29/2015 15:16	SCA

### Sample Information

**Client Sample ID:** HA-13-SW2 (0-1)

**York Sample ID:** 15F0769-38

York Project (SDG) No.  
15F0769

Client Project ID  
140109002

Matrix  
Soil

Collection Date/Time  
June 18, 2015 9:56 am

Date Received  
06/19/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	5.84		mg/kg dry	1.19	1	EPA 6010C	06/24/2015 13:33	06/24/2015 17:58	ALD

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	84.3		%	0.100	1	SM 2540G	06/22/2015 10:47	06/22/2015 15:54	KK

### Sample Information

**Client Sample ID:** HA-10-W3 (0-1)

**York Sample ID:** 15F0769-42

York Project (SDG) No.  
15F0769

Client Project ID  
140109002

Matrix  
Soil

Collection Date/Time  
June 18, 2015 10:01 am

Date Received  
06/19/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	15.5		mg/kg dry	1.21	1	EPA 6010C	06/24/2015 13:33	06/24/2015 18:03	ALD

#### Total Solids

#### Log-in Notes:

#### Sample Notes:



### Sample Information

**Client Sample ID:** HA-10-W3 (0-1)

**York Sample ID:** 15F0769-42

York Project (SDG) No.  
15F0769

Client Project ID  
140109002

Matrix  
Soil

Collection Date/Time  
June 18, 2015 10:01 am

Date Received  
06/19/2015

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	82.5		%	0.100	1	SM 2540G	06/22/2015 10:47	06/22/2015 15:54	KK

### Sample Information

**Client Sample ID:** HA-10-W3 (1-2)

**York Sample ID:** 15F0769-43

York Project (SDG) No.  
15F0769

Client Project ID  
140109002

Matrix  
Soil

Collection Date/Time  
June 18, 2015 10:02 am

Date Received  
06/19/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	11.4		mg/kg dry	1.09	1	EPA 6010C	06/30/2015 11:09	06/30/2015 16:04	ALD

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	91.9		%	0.100	1	SM 2540G	06/27/2015 11:06	06/29/2015 15:16	SCA

### Sample Information

**Client Sample ID:** HA-10-W3 (2-3)

**York Sample ID:** 15F0769-44

York Project (SDG) No.  
15F0769

Client Project ID  
140109002

Matrix  
Soil

Collection Date/Time  
June 18, 2015 10:03 am

Date Received  
06/19/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	3.43		mg/kg dry	1.10	1	EPA 6010C	07/02/2015 06:59	07/02/2015 09:48	ALD

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	91.2		%	0.100	1	SM 2540G	07/02/2015 09:15	07/02/2015 11:13	KK



### Sample Information

**Client Sample ID:** HA-10-W3 (2-3)

**York Sample ID:** 15F0769-44

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
15F0769	140109002	Soil	June 18, 2015 10:03 am	06/19/2015

### Sample Information

**Client Sample ID:** HA-10-W4 (0-1)

**York Sample ID:** 15F0769-45

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
15F0769	140109002	Soil	June 18, 2015 10:06 am	06/19/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	7.14		mg/kg dry	1.19	1	EPA 6010C	06/24/2015 13:33	06/24/2015 18:08	ALD

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	83.8		%	0.100	1	SM 2540G	06/22/2015 10:47	06/22/2015 15:54	KK

### Sample Information

**Client Sample ID:** HA-10-SW1 (0-1)

**York Sample ID:** 15F0769-48

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
15F0769	140109002	Soil	June 18, 2015 10:11 am	06/19/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	9.09		mg/kg dry	1.13	1	EPA 6010C	06/24/2015 13:33	06/24/2015 18:13	ALD

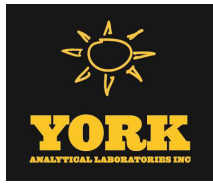
#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	88.7		%	0.100	1	SM 2540G	06/22/2015 10:47	06/22/2015 15:54	KK



### Sample Information

**Client Sample ID:** HA-10-SW2 (0-1)

**York Sample ID:** 15F0769-52

York Project (SDG) No.

15F0769

Client Project ID

140109002

Matrix

Soil

Collection Date/Time

June 18, 2015 10:16 am

Date Received

06/19/2015

#### Arsenic by EPA 6010

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	4.15		mg/kg dry	1.21	1	EPA 6010C	06/24/2015 13:33	06/24/2015 18:17	ALD

#### Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	82.6		%	0.100	1	SM 2540G	06/22/2015 10:47	06/22/2015 15:54	KK

### Sample Information

**Client Sample ID:** HA-10-SW3 (0-1)

**York Sample ID:** 15F0769-56

York Project (SDG) No.

15F0769

Client Project ID

140109002

Matrix

Soil

Collection Date/Time

June 18, 2015 10:21 am

Date Received

06/19/2015

#### Arsenic by EPA 6010

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	6.56		mg/kg dry	1.17	1	EPA 6010C	06/24/2015 13:33	06/24/2015 18:22	ALD

#### Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	85.3		%	0.100	1	SM 2540G	06/22/2015 10:47	06/22/2015 15:54	KK

### Sample Information

**Client Sample ID:** HA-5-E4 (0-1)

**York Sample ID:** 15F0769-59

York Project (SDG) No.

15F0769

Client Project ID

140109002

Matrix

Soil

Collection Date/Time

June 18, 2015 11:01 am

Date Received

06/19/2015

#### Arsenic by EPA 6010

Log-in Notes:

Sample Notes:



### Sample Information

**Client Sample ID:** HA-5-E4 (0-1)

**York Sample ID:** 15F0769-59

York Project (SDG) No.  
15F0769

Client Project ID  
140109002

Matrix  
Soil

Collection Date/Time  
June 18, 2015 11:01 am

Date Received  
06/19/2015

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	7.15		mg/kg dry	1.30	1	EPA 6010C	06/24/2015 13:33	06/24/2015 18:40	ALD

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	77.1		%	0.100	1	SM 2540G	06/22/2015 10:47	06/22/2015 15:54	KK

### Sample Information

**Client Sample ID:** HA-5-E6 (0-1)

**York Sample ID:** 15F0769-63

York Project (SDG) No.  
15F0769

Client Project ID  
140109002

Matrix  
Soil

Collection Date/Time  
June 18, 2015 11:06 am

Date Received  
06/19/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	31.7		mg/kg dry	1.27	1	EPA 6010C	06/24/2015 13:33	06/24/2015 18:44	ALD

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	78.6		%	0.100	1	SM 2540G	06/22/2015 10:47	06/22/2015 15:54	KK

### Sample Information

**Client Sample ID:** HA-5-E6 (1-2)

**York Sample ID:** 15F0769-64

York Project (SDG) No.  
15F0769

Client Project ID  
140109002

Matrix  
Soil

Collection Date/Time  
June 18, 2015 11:07 am

Date Received  
06/19/2015

#### Arsenic by EPA 6010

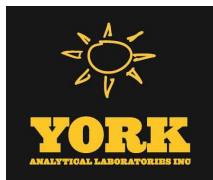
#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	4.44		mg/kg dry	1.19	1	EPA 6010C	06/30/2015 11:09	06/30/2015 16:09	ALD





### Sample Information

**Client Sample ID:** HA-5-E6 (1-2)

**York Sample ID:** 15F0769-64

York Project (SDG) No.  
15F0769

Client Project ID  
140109002

Matrix  
Soil

Collection Date/Time  
June 18, 2015 11:07 am

Date Received  
06/19/2015

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	83.8		%	0.100	1	SM 2540G	06/27/2015 11:06	06/29/2015 15:16	SCA

### Sample Information

**Client Sample ID:** HA-5-E3 (0-1)

**York Sample ID:** 15F0769-67

York Project (SDG) No.  
15F0769

Client Project ID  
140109002

Matrix  
Soil

Collection Date/Time  
June 18, 2015 11:11 am

Date Received  
06/19/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	11.1		mg/kg dry	1.26	1	EPA 6010C	06/24/2015 13:33	06/24/2015 18:49	ALD

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	79.6		%	0.100	1	SM 2540G	06/22/2015 10:47	06/22/2015 15:54	KK

### Sample Information

**Client Sample ID:** HA-5-E3 (1-2)

**York Sample ID:** 15F0769-68

York Project (SDG) No.  
15F0769

Client Project ID  
140109002

Matrix  
Soil

Collection Date/Time  
June 18, 2015 11:12 am

Date Received  
06/19/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

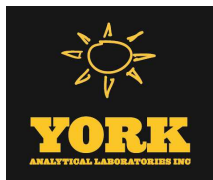
Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	4.90		mg/kg dry	1.17	1	EPA 6010C	06/30/2015 11:09	06/30/2015 16:26	ALD

#### Total Solids

#### Log-in Notes:

#### Sample Notes:



### Sample Information

**Client Sample ID:** HA-5-E3 (1-2)

**York Sample ID:** 15F0769-68

York Project (SDG) No.  
15F0769

Client Project ID  
140109002

Matrix  
Soil

Collection Date/Time  
June 18, 2015 11:12 am

Date Received  
06/19/2015

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	85.6		%	0.100	1	SM 2540G	06/27/2015 11:08	06/29/2015 15:20	SCA

### Sample Information

**Client Sample ID:** HA-5-E5 (0-1)

**York Sample ID:** 15F0769-71

York Project (SDG) No.  
15F0769

Client Project ID  
140109002

Matrix  
Soil

Collection Date/Time  
June 18, 2015 11:16 am

Date Received  
06/19/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	6.60		mg/kg dry	1.31	1	EPA 6010C	06/24/2015 13:33	06/24/2015 18:54	ALD

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	76.4		%	0.100	1	SM 2540G	06/22/2015 10:47	06/22/2015 15:54	KK

### Sample Information

**Client Sample ID:** HA-5-N4 (0-1)

**York Sample ID:** 15F0769-75

York Project (SDG) No.  
15F0769

Client Project ID  
140109002

Matrix  
Soil

Collection Date/Time  
June 18, 2015 11:21 am

Date Received  
06/19/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	62.1		mg/kg dry	1.12	1	EPA 6010C	06/24/2015 13:35	06/24/2015 20:08	ALD

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	89.1		%	0.100	1	SM 2540G	06/22/2015 10:47	06/22/2015 15:54	KK



### Sample Information

**Client Sample ID:** HA-5-N4 (0-1)

**York Sample ID:** 15F0769-75

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
15F0769	140109002	Soil	June 18, 2015 11:21 am	06/19/2015

### Sample Information

**Client Sample ID:** HA-5-N4 (1-2)

**York Sample ID:** 15F0769-76

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
15F0769	140109002	Soil	June 18, 2015 11:22 am	06/19/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	14.5		mg/kg dry	1.15	1	EPA 6010C	06/30/2015 11:09	06/30/2015 16:31	ALD

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	87.2		%	0.100	1	SM 2540G	06/27/2015 11:08	06/29/2015 15:20	SCA

### Sample Information

**Client Sample ID:** HA-5-N4 (2-3)

**York Sample ID:** 15F0769-77

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
15F0769	140109002	Soil	June 18, 2015 11:23 am	06/19/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	4.88		mg/kg dry	1.23	1	EPA 6010C	07/02/2015 06:59	07/02/2015 10:04	ALD

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	81.2		%	0.100	1	SM 2540G	07/02/2015 09:15	07/02/2015 11:13	KK



### Sample Information

**Client Sample ID:** HA-5-N6 (0-1)

**York Sample ID:** 15F0769-79

York Project (SDG) No.  
15F0769

Client Project ID  
140109002

Matrix  
Soil

Collection Date/Time  
June 18, 2015 11:26 am

Date Received  
06/19/2015

#### Arsenic by EPA 6010

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	7.41		mg/kg dry	1.07	1	EPA 6010C	06/24/2015 13:35	06/24/2015 20:12	ALD

#### Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	93.7		%	0.100	1	SM 2540G	06/22/2015 10:48	06/22/2015 15:57	KK

### Sample Information

**Client Sample ID:** HA-5-N3 (0-1)

**York Sample ID:** 15F0769-83

York Project (SDG) No.  
15F0769

Client Project ID  
140109002

Matrix  
Soil

Collection Date/Time  
June 18, 2015 11:31 am

Date Received  
06/19/2015

#### Arsenic by EPA 6010

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	55.8		mg/kg dry	1.18	1	EPA 6010C	06/24/2015 13:35	06/24/2015 20:17	ALD

#### Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	84.5		%	0.100	1	SM 2540G	06/22/2015 10:48	06/22/2015 15:57	KK

### Sample Information

**Client Sample ID:** HA-5-N3 (1-2)

**York Sample ID:** 15F0769-84

York Project (SDG) No.  
15F0769

Client Project ID  
140109002

Matrix  
Soil

Collection Date/Time  
June 18, 2015 11:32 am

Date Received  
06/19/2015

#### Arsenic by EPA 6010

Log-in Notes:

Sample Notes:



### Sample Information

**Client Sample ID:** HA-5-N3 (1-2)

**York Sample ID:** 15F0769-84

York Project (SDG) No.  
15F0769

Client Project ID  
140109002

Matrix  
Soil

Collection Date/Time  
June 18, 2015 11:32 am

Date Received  
06/19/2015

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	9.77		mg/kg dry	1.22	1	EPA 6010C	06/30/2015 11:09	06/30/2015 16:35	ALD

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	82.3		%	0.100	1	SM 2540G	06/27/2015 11:08	06/29/2015 15:20	SCA

### Sample Information

**Client Sample ID:** HA-5-N5 (0-1)

**York Sample ID:** 15F0769-87

York Project (SDG) No.  
15F0769

Client Project ID  
140109002

Matrix  
Soil

Collection Date/Time  
June 18, 2015 11:36 am

Date Received  
06/19/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	13.3		mg/kg dry	1.06	1	EPA 6010C	06/24/2015 13:35	06/24/2015 20:22	ALD

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	94.3		%	0.100	1	SM 2540G	06/22/2015 10:48	06/22/2015 15:57	KK

### Sample Information

**Client Sample ID:** HA-5-N5 (1-2)

**York Sample ID:** 15F0769-88

York Project (SDG) No.  
15F0769

Client Project ID  
140109002

Matrix  
Soil

Collection Date/Time  
June 18, 2015 11:37 am

Date Received  
06/19/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	9.84		mg/kg dry	1.13	1	EPA 6010C	06/30/2015 11:09	06/30/2015 16:40	ALD



### Sample Information

**Client Sample ID:** HA-5-N5 (1-2)

**York Sample ID:** 15F0769-88

York Project (SDG) No.  
15F0769

Client Project ID  
140109002

Matrix  
Soil

Collection Date/Time  
June 18, 2015 11:37 am

Date Received  
06/19/2015

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	88.2		%	0.100	1	SM 2540G	06/27/2015 11:08	06/29/2015 15:20	SCA

### Sample Information

**Client Sample ID:** HA-21-NE1 (0-1)

**York Sample ID:** 15F0769-91

York Project (SDG) No.  
15F0769

Client Project ID  
140109002

Matrix  
Soil

Collection Date/Time  
June 18, 2015 11:41 am

Date Received  
06/19/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	25.5		mg/kg dry	1.17	1	EPA 6010C	06/24/2015 13:35	06/24/2015 20:27	ALD

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	85.8		%	0.100	1	SM 2540G	06/22/2015 10:48	06/22/2015 15:57	KK

### Sample Information

**Client Sample ID:** HA-21-NE1 (1-2)

**York Sample ID:** 15F0769-92

York Project (SDG) No.  
15F0769

Client Project ID  
140109002

Matrix  
Soil

Collection Date/Time  
June 18, 2015 11:42 am

Date Received  
06/19/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	9.86		mg/kg dry	1.24	1	EPA 6010C	06/30/2015 11:09	06/30/2015 16:45	ALD

#### Total Solids

#### Log-in Notes:

#### Sample Notes:





### Sample Information

**Client Sample ID:** HA-21-NE1 (1-2)

**York Sample ID:** 15F0769-92

York Project (SDG) No.  
15F0769

Client Project ID  
140109002

Matrix  
Soil

Collection Date/Time  
June 18, 2015 11:42 am

Date Received  
06/19/2015

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	81.0		%	0.100	1	SM 2540G	06/27/2015 11:08	06/29/2015 15:20	SCA

### Sample Information

**Client Sample ID:** HA-21-NE2 (0-1)

**York Sample ID:** 15F0769-95

York Project (SDG) No.  
15F0769

Client Project ID  
140109002

Matrix  
Soil

Collection Date/Time  
June 18, 2015 11:46 am

Date Received  
06/19/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	2.05		mg/kg dry	1.18	1	EPA 6010C	06/24/2015 13:35	06/24/2015 20:44	ALD

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	84.4		%	0.100	1	SM 2540G	06/22/2015 10:48	06/22/2015 15:57	KK

### Sample Information

**Client Sample ID:** HA-10-NE1 (0-1)

**York Sample ID:** 15F0769-99

York Project (SDG) No.  
15F0769

Client Project ID  
140109002

Matrix  
Soil

Collection Date/Time  
June 18, 2015 11:51 am

Date Received  
06/19/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	41.7		mg/kg dry	1.10	1	EPA 6010C	06/24/2015 13:35	06/24/2015 20:49	ALD

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	91.3		%	0.100	1	SM 2540G	06/22/2015 10:48	06/22/2015 15:57	KK



---

### Sample Information

**Client Sample ID:** HA-10-NE1 (0-1)

**York Sample ID:** 15F0769-99

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

15F0769

140109002

Soil

June 18, 2015 11:51 am

06/19/2015

---



## REASONABLE CONFIDENCE PROTOCOL

### LABORATORY ANALYSIS QA/QC CERTIFICATION FORM

Laboratory Name: York Analytical Laboratories, Inc.

Client: Langan Engineering & Environmental Serv

Project Location: 140109002

Lab Project No.: 15F0769

Laboratory Sample ID(s): 15F0769-01 - 15F0769-99

Sampling Date(s): 06/18/2015 - 06/18/2015

RCP Methods Used: See Narrative and Method Reference Section of this Technical Report

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed (including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP RCPs)?	YES
1A	Were the method specified preservation and holding time requirements met?	YES
1B	VPH and EPH Methods only: Was the VPH or EPH method conducted without significant modifications (see Section 11.3 of respective RCP methods)?	NR
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	YES
3	Were samples received at an appropriate temperature (<6°C )?	YES
4	Were all QA/QC performance criteria specified in the CTDEP Reasonable Confidence Protocol documents achieved?	NO
5A	Were reporting limits specified or referenced on the chain-of-custody?	YES
5B	Were these reporting limits met?	YES
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	NO
7	Are project-specific matrix spikes and laboratory duplicates included in this data set?	YES

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to questions #1, #1A, or #1B is "No", the data package does not meet the requirements for "Reasonable Confidence".

This form may not be altered and all questions must be answered.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.

Authorized  
Signature:

Position: Laboratory Director

Printed Name: Benjamin Gulizia

Date: 07/06/2015

# YORK



## **Case Narrative**

Client: Langan Engineering & Environmental Services (CT)

Client Project ID: 140109002

Prepared for: Justin Hall

### **Introduction**

This Case Narrative applies to the following samples submitted to our laboratory on **6/19/2015 1:50:00 PM** :

HA-10-NE1 (0-1)	Soil
HA-10-SW1 (0-1)	Soil
HA-10-SW2 (0-1)	Soil
HA-10-SW3 (0-1)	Soil
HA-10-W1 (1-2)	Soil
HA-10-W2 (2-3)	Soil
HA-10-W3 (0-1)	Soil
HA-10-W3 (1-2)	Soil
HA-10-W4 (0-1)	Soil
HA-13-N3 (0-1)	Soil
HA-13-N4 (0-1)	Soil
HA-13-N4 (1-2)	Soil
HA-13-N5 (0-1)	Soil
HA-13-N5 (1-2)	Soil
HA-13-N6 (0-1)	Soil
HA-13-N6 (1-2)	Soil
HA-13-SW1 (0-1)	Soil
HA-13-SW1 (1-2)	Soil
HA-13-SW2 (0-1)	Soil
HA-13-W1 (2-3)	Soil
HA-13-W3 (0-1)	Soil
HA-13-W3 (1-2)	Soil
HA-13-W4 (0-1)	Soil
HA-21-NE1 (0-1)	Soil
HA-21-NE1 (1-2)	Soil
HA-21-NE2 (0-1)	Soil
HA-22-S1 (2-3)	Soil
HA-5-E3 (0-1)	Soil
HA-5-E3 (1-2)	Soil
HA-5-E4 (0-1)	Soil
HA-5-E5 (0-1)	Soil
HA-5-E6 (0-1)	Soil
HA-5-E6 (1-2)	Soil
HA-5-N3 (0-1)	Soil
HA-5-N3 (1-2)	Soil
HA-5-N4 (0-1)	Soil



HA-5-N4 (1-2)	Soil
HA-5-N5 (0-1)	Soil
HA-5-N5 (1-2)	Soil
HA-5-N6 (0-1)	Soil

The 99 sample(s) were received intact in a custody-sealed cooler unless otherwise noted. Upon receipt, cooler temperature(s) was determined using a NIST traceable digital infrared thermometer. The cooler temperature was acceptable (2-6oC) and documented as:

**Cooler 4.9 C**

Chain-of-custody was maintained from receipt through analysis in the laboratory.

### **Methodology**

Preparation and analysis were conducted according to the SW-846 methods, as detailed in the sample information table, and the requirements of the State of Connecticut Reasonable Confidence Protocols (RCP).

For initial calibrations (ICAL), initial calibration verifications (ICV) and continuing calibration verifications (CCV) for organics determined by GC/MS methods (TO15 volatiles, 8260 volatiles and 8270 semi-volatiles) all method criteria and laboratory SOP criteria were met unless otherwise noted below. Any compounds in the ICAL, ICV or CCV exceeding RCP specified limits are available upon request. This data is not used for Data Quality Assessment or Data Usability Evaluation (assignment of compound bias) which are determined from other lines of evidence. Therefore the data is not detailed in this narrative.

These terms may be used interchangeably. Both are measures of the accuracy of an analysis by measurement of a known material from a source other than that used for calibration. By definition, a **Standard Reference Material (SRM)** is a material containing known levels of analytes used to evaluate the performance of the analytical system with respect to a defined set of acceptance criteria. It is processed exactly as a sample. An **LCS (Laboratory Control Sample)** is second-source standard containing known levels of analyte(s), treated exactly as a sample, run with each analytical batch. Both are metrics used to establish accuracy of the preparation/analysis methods.

### **Metals – Total (Arsenic)**

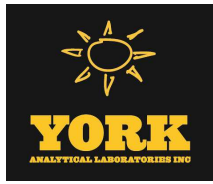
No problems were encountered during analysis of the samples, other than detailed below.

#### *Method Blank*

No target analyte was detected at or above the RL in the method blanks.

#### *Batch QC*

Four Standard Reference Materials and MS/Dup analysis on samples “HA-13-N4 (0-1)” and “HA-10-W3 (2-3)” were run as batch QC for this project. Please refer to the Quality Control Data attached to this report for bias



information.

*Dilutions*

No sample dilutions were required.





## Analytical Batch Summary

**Batch ID:** BF51049      **Preparation Method:** % Solids Prep      **Prepared By:** KK

YORK Sample ID	Client Sample ID	Preparation Date
15F0769-01	HA-13-N4 (0-1)	06/22/15
BF51049-DUP1	Duplicate	06/22/15

**Batch ID:** BF51051      **Preparation Method:** % Solids Prep      **Prepared By:** KK

YORK Sample ID	Client Sample ID	Preparation Date
15F0769-05	HA-13-N6 (0-1)	06/22/15
15F0769-09	HA-13-N3 (0-1)	06/22/15
15F0769-13	HA-13-N5 (0-1)	06/22/15
15F0769-17	HA-10-W1 (1-2)	06/22/15
15F0769-20	HA-10-W2 (2-3)	06/22/15
15F0769-22	HA-22-S1 (2-3)	06/22/15
15F0769-26	HA-13-W3 (0-1)	06/22/15
15F0769-30	HA-13-W4 (0-1)	06/22/15
15F0769-34	HA-13-SW1 (0-1)	06/22/15
15F0769-38	HA-13-SW2 (0-1)	06/22/15
15F0769-42	HA-10-W3 (0-1)	06/22/15
15F0769-45	HA-10-W4 (0-1)	06/22/15
15F0769-48	HA-10-SW1 (0-1)	06/22/15
15F0769-52	HA-10-SW2 (0-1)	06/22/15
15F0769-56	HA-10-SW3 (0-1)	06/22/15
15F0769-59	HA-5-E4 (0-1)	06/22/15
15F0769-63	HA-5-E6 (0-1)	06/22/15
15F0769-67	HA-5-E3 (0-1)	06/22/15
15F0769-71	HA-5-E5 (0-1)	06/22/15
15F0769-75	HA-5-N4 (0-1)	06/22/15
BF51051-DUP1	Duplicate	06/22/15

**Batch ID:** BF51052      **Preparation Method:** % Solids Prep      **Prepared By:** KK

YORK Sample ID	Client Sample ID	Preparation Date
15F0769-79	HA-5-N6 (0-1)	06/22/15
15F0769-83	HA-5-N3 (0-1)	06/22/15
15F0769-87	HA-5-N5 (0-1)	06/22/15
15F0769-91	HA-21-NE1 (0-1)	06/22/15
15F0769-95	HA-21-NE2 (0-1)	06/22/15
15F0769-99	HA-10-NE1 (0-1)	06/22/15

**Batch ID:** BF51211      **Preparation Method:** EPA 3050B      **Prepared By:** ALD

YORK Sample ID	Client Sample ID	Preparation Date
15F0769-01	HA-13-N4 (0-1)	06/24/15
15F0769-05	HA-13-N6 (0-1)	06/24/15
15F0769-09	HA-13-N3 (0-1)	06/24/15



15F0769-13	HA-13-N5 (0-1)	06/24/15
15F0769-17	HA-10-W1 (1-2)	06/24/15
15F0769-20	HA-10-W2 (2-3)	06/24/15
15F0769-22	HA-22-S1 (2-3)	06/24/15
15F0769-26	HA-13-W3 (0-1)	06/24/15
15F0769-30	HA-13-W4 (0-1)	06/24/15
15F0769-34	HA-13-SW1 (0-1)	06/24/15
15F0769-38	HA-13-SW2 (0-1)	06/24/15
15F0769-42	HA-10-W3 (0-1)	06/24/15
15F0769-45	HA-10-W4 (0-1)	06/24/15
15F0769-48	HA-10-SW1 (0-1)	06/24/15
15F0769-52	HA-10-SW2 (0-1)	06/24/15
15F0769-56	HA-10-SW3 (0-1)	06/24/15
15F0769-59	HA-5-E4 (0-1)	06/24/15
15F0769-63	HA-5-E6 (0-1)	06/24/15
15F0769-67	HA-5-E3 (0-1)	06/24/15
15F0769-71	HA-5-E5 (0-1)	06/24/15
BF51211-BLK1	Blank	06/24/15
BF51211-DUP1	Duplicate	06/24/15
BF51211-MS1	Matrix Spike	06/24/15
BF51211-SRM1	Reference	06/24/15

**Batch ID:** BF51212      **Preparation Method:** EPA 3050B      **Prepared By:** ALD

YORK Sample ID	Client Sample ID	Preparation Date
15F0769-75	HA-5-N4 (0-1)	06/24/15
15F0769-79	HA-5-N6 (0-1)	06/24/15
15F0769-83	HA-5-N3 (0-1)	06/24/15
15F0769-87	HA-5-N5 (0-1)	06/24/15
15F0769-91	HA-21-NE1 (0-1)	06/24/15
15F0769-95	HA-21-NE2 (0-1)	06/24/15
15F0769-99	HA-10-NE1 (0-1)	06/24/15
BF51212-BLK1	Blank	06/24/15
BF51212-SRM1	Reference	06/24/15

**Batch ID:** BF51394      **Preparation Method:** % Solids Prep      **Prepared By:** KK

YORK Sample ID	Client Sample ID	Preparation Date
15F0769-02	HA-13-N4 (1-2)	06/27/15
15F0769-06	HA-13-N6 (1-2)	06/27/15
15F0769-14	HA-13-N5 (1-2)	06/27/15
15F0769-24	HA-13-W1 (2-3)	06/27/15
15F0769-27	HA-13-W3 (1-2)	06/27/15
15F0769-35	HA-13-SW1 (1-2)	06/27/15
15F0769-43	HA-10-W3 (1-2)	06/27/15
15F0769-64	HA-5-E6 (1-2)	06/27/15

**Batch ID:** BF51395      **Preparation Method:** % Solids Prep      **Prepared By:** KK

YORK Sample ID	Client Sample ID	Preparation Date
15F0769-68	HA-5-E3 (1-2)	06/27/15



15F0769-76	HA-5-N4 (1-2)	06/27/15
15F0769-84	HA-5-N3 (1-2)	06/27/15
15F0769-88	HA-5-N5 (1-2)	06/27/15
15F0769-92	HA-21-NE1 (1-2)	06/27/15

**Batch ID:** BF51516      **Preparation Method:** EPA 3050B      **Prepared By:** ALD

YORK Sample ID	Client Sample ID	Preparation Date
15F0769-02	HA-13-N4 (1-2)	06/30/15
15F0769-06	HA-13-N6 (1-2)	06/30/15
15F0769-14	HA-13-N5 (1-2)	06/30/15
15F0769-24	HA-13-W1 (2-3)	06/30/15
15F0769-27	HA-13-W3 (1-2)	06/30/15
15F0769-35	HA-13-SW1 (1-2)	06/30/15
15F0769-43	HA-10-W3 (1-2)	06/30/15
15F0769-64	HA-5-E6 (1-2)	06/30/15
15F0769-68	HA-5-E3 (1-2)	06/30/15
15F0769-76	HA-5-N4 (1-2)	06/30/15
15F0769-84	HA-5-N3 (1-2)	06/30/15
15F0769-88	HA-5-N5 (1-2)	06/30/15
15F0769-92	HA-21-NE1 (1-2)	06/30/15
BF51516-BLK1	Blank	06/30/15
BF51516-SRM1	Reference	06/30/15

**Batch ID:** BG50096      **Preparation Method:** EPA 3050B      **Prepared By:** ALD

YORK Sample ID	Client Sample ID	Preparation Date
15F0769-44	HA-10-W3 (2-3)	07/02/15
15F0769-77	HA-5-N4 (2-3)	07/02/15
BG50096-BLK1	Blank	07/02/15
BG50096-DUP1	Duplicate	07/02/15
BG50096-MS1	Matrix Spike	07/02/15
BG50096-SRM1	Reference	07/02/15

**Batch ID:** BG50113      **Preparation Method:** % Solids Prep      **Prepared By:** KK

YORK Sample ID	Client Sample ID	Preparation Date
15F0769-44	HA-10-W3 (2-3)	07/02/15
15F0769-77	HA-5-N4 (2-3)	07/02/15



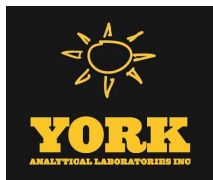
**Metals by ICP - Quality Control Data**  
**York Analytical Laboratories, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BF51211 - EPA 3050B</b>											
<b>Blank (BF51211-BLK1)</b>						Prepared & Analyzed: 06/24/2015					
Arsenic	ND	1.00	mg/kg wet								
<b>Duplicate (BF51211-DUP1)</b>						*Source sample: 15F0769-01 (HA-13-N4 (0-1)) Prepared & Analyzed: 06/24/2015					
Arsenic	10.1	1.10	mg/kg dry		11.2				10.2	35	
<b>Matrix Spike (BF51211-MS1)</b>						*Source sample: 15F0769-01 (HA-13-N4 (0-1)) Prepared & Analyzed: 06/24/2015					
Arsenic	220	1.10	mg/kg dry	220	11.2	94.6	75-125				
<b>Reference (BF51211-SRM1)</b>						Prepared & Analyzed: 06/24/2015					
Arsenic	110	1.00	mg/kg wet	122		90.2	70-145.1				
<b>Batch BF51212 - EPA 3050B</b>											
<b>Blank (BF51212-BLK1)</b>						Prepared & Analyzed: 06/24/2015					
Arsenic	ND	1.00	mg/kg wet								
<b>Reference (BF51212-SRM1)</b>						Prepared & Analyzed: 06/24/2015					
Arsenic	114	1.00	mg/kg wet	122		93.8	70-145.1				
<b>Batch BF51516 - EPA 3050B</b>											
<b>Blank (BF51516-BLK1)</b>						Prepared & Analyzed: 06/30/2015					
Arsenic	ND	1.00	mg/kg wet								
<b>Reference (BF51516-SRM1)</b>						Prepared & Analyzed: 06/30/2015					
Arsenic	113	1.00	mg/kg wet	122		92.6	70-145.1				



**Metals by ICP - Quality Control Data**  
**York Analytical Laboratories, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BG50096 - EPA 3050B</b>											
<b>Blank (BG50096-BLK1)</b>								Prepared & Analyzed: 07/02/2015			
Arsenic	ND	1.00	mg/kg wet								
<b>Duplicate (BG50096-DUP1)</b>								*Source sample: 15F0769-44 (HA-10-W3 (2-3))			
								Prepared & Analyzed: 07/02/2015			
Arsenic	3.24	1.10	mg/kg dry		3.43				5.93	35	
<b>Matrix Spike (BG50096-MS1)</b>								*Source sample: 15F0769-44 (HA-10-W3 (2-3))			
								Prepared & Analyzed: 07/02/2015			
Arsenic	225	1.10	mg/kg dry	219	3.43	101	75-125				
<b>Reference (BG50096-SRM1)</b>								Prepared & Analyzed: 07/02/2015			
Arsenic	114	1.00	mg/kg wet	122		93.6	70-145.1				



## Miscellaneous Physical Parameters - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC Limits	Flag	RPD Limit	Flag
---------	--------	--------------------	-------	----------------	-------------------	----------------	------	--------------	------

#### Batch BF51049 - % Solids Prep

<b>Duplicate (BF51049-DUP1)</b>		*Source sample: 15F0769-01 (HA-13-N4 (0-1))					Prepared & Analyzed: 06/22/2015				
% Solids	ND	0.100	%		90.8					20	

#### Batch BF51051 - % Solids Prep

<b>Duplicate (BF51051-DUP1)</b>		*Source sample: 15F0769-75 (HA-5-N4 (0-1))					Prepared & Analyzed: 06/22/2015				
% Solids	ND	0.100	%		89.1					20	





## Notes and Definitions

M-CCVO CCV Out. Samples bracketed by acceptable CCVs.

---

*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
Non-Dir.	Non-dir. flag (Non-Directional Bias ) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.

For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic performance.

---

Revision Description: Client took more samples off hold



YORK ANALYTICAL LABORATORIES  
120 RESEARCH DR.  
STRAITFORD, CT 06615  
(203) 325-1371  
FAX (203) 357-0166

**YORK**  
ANALYTICAL LABORATORIES INC

# Field Chain-of-Custody Record

NOTE: York's Std. Terms & Conditions are listed on the back side of this document.  
This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions.

Page 1 of 13

York Project No. **BSF0709**

<b>YOUR Information</b> Company: <u>Langan Engineering</u> Address: <u>555 Long Wharf Dr.</u> <u>New Haven CT</u> Phone No. <u>203-562-5771</u> Contact Person: <u>Justin Hall</u> E-Mail Address: <u>JHall@Langan</u>		<b>Report To:</b> Company: _____ Address: _____ Phone No. <u>SAME</u> Attention: _____ E-Mail Address: _____		<b>Invoice To:</b> Company: _____ Address: _____ Phone No. _____ Attention: _____ E-Mail Address: _____		<b>YOUR Project ID</b> <u>140109002</u> <b>Purchase Order No.</b> _____		<b>Turn-Around Time</b> <input type="checkbox"/> RUSH - Same Day <input type="checkbox"/> RUSH - Next Day <input type="checkbox"/> RUSH - Two Day <input type="checkbox"/> RUSH - Three Day <input type="checkbox"/> RUSH - Four Day <b>Standard (5-7 Days)</b> <input checked="" type="checkbox"/>		<b>Report Type</b> <input type="checkbox"/> Summary Report <input type="checkbox"/> Summary w/ QA Summary <input checked="" type="checkbox"/> CT RCP Package <input type="checkbox"/> CTRCP DQA/DUE Pkg <input type="checkbox"/> NY ASP A Package <input type="checkbox"/> NY ASP B Package <input type="checkbox"/> NJDEP Red. Deliv. <u>Electronic Data Deliverables (EDD)</u> <input type="checkbox"/> Simple Excel <input type="checkbox"/> NY/DEC EQuIS <input type="checkbox"/> EQuIS (std) <input type="checkbox"/> EZ-EDD (EQuIS) <input type="checkbox"/> NJDEP SRP HazSite EDD <input type="checkbox"/> GIS/KEY (std) <input type="checkbox"/> Other <u>pdf</u> <input checked="" type="checkbox"/> York Regulatory Comparison <input checked="" type="checkbox"/> Excel Spreadsheet Compare to the following Regs. (please fill in): <u>CTDEEP 7-512.5</u>	
<b>Print Clearly and Legibly. All Information must be complete. Samples will NOT be logged in and the turn-around time clock will not begin until any questions by York are resolved.</b>		<b>Volatiles</b> 8260 full TICS 624 Site Spec. STARS list Nassau Co. BTX Suffolk Co. MTBE Ketones TCL list Oxygenates TAGM list TCLP list CT RCP list 524.2 Arom. only 502.2 Halog. only NJDEP list App. IX list SPLP or TCLP 8021B list		<b>Semi-Vols. Per PCB/PCB</b> 8270 or 625 STARS list BN Only 8151 Herb PAH list CT RCP TAGM list App. IX Site Spec. SPLP or TCLP TCLP list 524.2 NJDEP list 502.2 SPLP or TCLP App. IX 8021B list		<b>Metals</b> RCKA8 PPI3 list TAL TAL CT115 list TAGM list NJDEP list Air TO14A Air TO15 Air STARS Air VPH Air TICs Methane Helium		<b>Misc. Org.</b> TPH GRO TPH DRO CT ETPH NY 310-13 TPH 1664 Air TO14A Air TO15 Air STARS Air VPH Air TICs Methane Helium		<b>Misc.</b> Corrosivity Reactivity Ignitability Flash Point Sieve Anal. Heterotrophs TOX BTU/lb. Aquatic Tox. TOC NY/DEC Sewer NY/DEC Sewer Asbestos Silica	

Sample Identification	Date/Time Sampled	Sample Matrix	Choose Analyses Needed from the Menu Above and Enter Below	Container Description(s)
HA-13-N4 (0-1)	6-18-15 9:01	S	Arsenic	1-402 Jar
HA-13-N4 (1-2)	9:02		HOLD	
HA-13-N4 (2-3)	9:03		HOLD	
HA-13-N4 (3-4)	9:04		HOLD	
HA-13-N6 (0-1)	9:06		HOLD	
HA-13-N6 (1-2)	9:07		HOLD	
HA-13-N6 (2-3)	9:08		HOLD	
HA-13-N6 (3-4)	9:09		HOLD	
HA-13-N3 (0-1)	9:11		HOLD	
HA-13-N3 (1-2)	9:12		HOLD	
<b>Comments</b> use hold samples until authorized by Langan				
<b>Preservation</b> Check those Applicable Special Instructions Field Filtered <input type="checkbox"/> Lab to Filter <input type="checkbox"/>		<b>Temperature</b> Date/Time Received By <u>6/19/15 12:45</u> Date/Time Received in LAB by <u>6/19/15 1330</u> Temperature on Receipt <u>4.9 °C</u>		





YORK ANALYTICAL LABORATORIES  
120 RESEARCH DR.  
STRATFORD, CT 06615  
(203) 325-1371  
FAX (203) 357-0166

# Field Chain-of-Custody Record

Page 2 of 13

NOTE: York's Std. Terms & Conditions are listed on the back side of this document.

This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions.

York Project No. 15F0769

<b>YOUR Information</b> Company: <u>Langan Engineering</u> Address: <u>555 Long Wharf Dr</u> <u>New Haven CT</u> Phone No. <u>203-562-5771</u> Contact Person: <u>Justin Hall</u> E-Mail Address: <u>JHall@Langan</u>		<b>Report To:</b> Company: _____ Address: <u>SANE</u> Phone No. _____ Attention: _____ E-Mail Address: _____		<b>Invoice To:</b> Company: _____ Address: <u>SANE</u> Phone No. _____ Attention: _____ E-Mail Address: _____		<b>YOUR Project ID</b> <u>140109002</u> <b>Purchase Order No.</b> _____		<b>Turn-Around Time</b> <input type="checkbox"/> RUSH - Same Day <input type="checkbox"/> RUSH - Next Day <input type="checkbox"/> RUSH - Two Day <input type="checkbox"/> RUSH - Three Day <input type="checkbox"/> RUSH - Four Day <b>Standard(5-7 Days)</b> <input checked="" type="checkbox"/>		<b>Report Type</b> <input type="checkbox"/> Summary Report <input type="checkbox"/> Summary w/ QA Summary <input checked="" type="checkbox"/> CT RCP Package <input type="checkbox"/> CTRCP DQA/DUE Pkg <input type="checkbox"/> NY ASP A Package <input type="checkbox"/> NY ASP B Package <input type="checkbox"/> NJDEP Red. Deliv. <b>Electronic Data Deliverables (EDD)</b> <input type="checkbox"/> Simple Excel <input type="checkbox"/> NYSDEC EQULS <input type="checkbox"/> EQULS (std) <input type="checkbox"/> EZ-EDD (EQULS) <input type="checkbox"/> NJDEP SRP HazSite EDD <input type="checkbox"/> GIS/KEY (std) <input type="checkbox"/> Other <u>pdf</u> <input checked="" type="checkbox"/> York Regulatory Comparison <input checked="" type="checkbox"/> Excel Spreadsheet Compare to the following Regs. (please fill in): <u>CTDEEP RSRs</u>	
---	--	---	--	--	--	--	--	--	--	---	--

**Print Clearly and Legibly. All Information must be complete. Samples will NOT be logged in and the turn-around time clock will not begin until any questions by York are resolved.**

Matrix Codes  
☒ S - soil  
☐ Other - specify (oil, etc.)  
 WW - wastewater  
 GW - groundwater  
 DW - drinking water  
 Air-A - ambient air  
 Air-SV - soil vapor  
 Sample Collected/Authorized By (Signature)  
Justin Hall  
 Name (printed)  
Justin Hall

Sample Identification		Date/Time Sampled	Sample Matrix	Choose Analyses Needed from the Menu Above and Enter Below										Container Description(s)	
HA-13-N3 (2-3)		6-18-15 9:13	S	Arsenic											1-402 Jar
HA-13-N3 (3-4)		9:14													
HA-13-N5 (0-1)		9:16													
HA-13-N5 (1-2)		9:17													
HA-13-N5 (2-3)		9:18													
HA-13-N5 (3-4)		9:19													
HA-10-W1 (1-2)		9:21													
HA-10-W1 (2-3)		9:22													
HA-10-W1 (3-4)		9:23													
HA-10-W2 (2-3)		9:26													





YORK ANALYTICAL LABORATORIES  
120 RESEARCH DR.  
STRATFORD, CT 06615  
(203) 325-1371  
FAX (203) 357-0166

# Field Chain-of-Custody Record

Page 3 of 13

NOTE: York's Std. Terms & Conditions are listed on the back side of this document.  
This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions.

York Project No. **15F0769**

YOUR INFORMATION		Report To:		Invoice To:		YOUR Project ID		Turn-Around Time		Report Type	
Company: <u>Lanqun Engineering</u>	Company: _____	Company: _____	Company: _____	Company: _____	Company: _____	Company: _____	Company: _____	Company: _____	Company: _____	Company: _____	Company: _____
Address: <u>555 Long Wharf Dr.</u>	Address: _____	Address: _____	Address: _____	Address: _____	Address: _____	Address: _____	Address: _____	Address: _____	Address: _____	Address: _____	Address: _____
Phone No. <u>203-562-5771</u>	Phone No. _____	Phone No. _____	Phone No. _____	Phone No. _____	Phone No. _____	Phone No. _____	Phone No. _____	Phone No. _____	Phone No. _____	Phone No. _____	Phone No. _____
Contact Person: <u>Justin Hall</u>	Contact Person: _____	Contact Person: _____	Contact Person: _____	Contact Person: _____	Contact Person: _____	Contact Person: _____	Contact Person: _____	Contact Person: _____	Contact Person: _____	Contact Person: _____	Contact Person: _____
E-Mail Address: <u>JHall@Lanqun</u>	E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____

**Print Clearly and Legibly. All Information must be complete. Samples will NOT be logged in and the turn-around time clock will not begin until any questions by York are resolved.**

Matrix Codes  
☒ S - soil  
☐ Other - specify (oil, etc.)  
 WW - wastewater  
 GW - groundwater  
 DW - drinking water  
 Air-A - ambient air  
 Air-SV - soil vapor

Samples Collected/Authorized By (Signature)  
Justin Hall  
 Name (printed)

Sample Identification		Date/Time Sampled	Sample Matrix	Choose Analyses Needed from the Menu Above and Enter Below										Container Description(s)
HA-10-W2 (3-4)		6-18-15 9:27	S	Arsenic										1-4oz Jar
HA-22-S1 (2-3)		9:31		HOLD										
HA-22-S1 (3-4)		9:32		HOLD										
HA-13-W1 (2-3)		9:36		HOLD										
HA-13-W1 (3-4)		9:37		HOLD										
HA-13-W3 (0-1)		9:41		HOLD										
HA-13-W3 (1-2)		9:42		HOLD										
HA-13-W3 (2-3)		9:43		HOLD										
HA-13-W3 (3-4)		9:44		HOLD										
HA-13-W4 (0-1)		9:46		HOLD										

Preservation: ☒ 4°C ☐ Frozen ☐ HCl ☐ MeOH ☐ HNO<sub>3</sub> ☐ H<sub>2</sub>O<sub>2</sub> ☐ NaOH

Check those Applicable:  
 Special Instructions: \_\_\_\_\_  
 Field Filtered ☐  
 Lab to Filter ☐

Comments: Please hold until authorized by Lanqun

Samples Relinquished By: Justin Hall Date/Time: 6-19-15 12:45  
 Samples Received By: Justin Hall Date/Time: 6/19/15 1:35D  
 Samples Relinquished By: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Samples Received in LAB by: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Temperature on Receipt: 4.9 °C





YORK ANALYTICAL LABORATORIES  
120 RESEARCH DR.  
STRATFORD, CT 06615  
(203) 325-1371  
FAX (203) 357-0166

# Field Chain-of-Custody Record

Page 4 of 13

NOTE: York's Std. Terms & Conditions are listed on the back side of this document.  
This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions.

York Project No. 140769

YOUR Information		Report To:		Invoice To:		YOUR Project ID		Turn-Around Time		Report Type	
Company: <u>Longan Engineering</u>	Company: _____	Company: <u>SAFARI</u>	Company: _____	YOUR Project ID: <u>140109002</u>	YOUR Project ID: _____	Turn-Around Time: <u>RUSH - Same Day</u>	Turn-Around Time: _____	Report Type: <u>Summary Report</u>	Report Type: _____	Summary Report: _____	Summary Report: _____
Address: <u>555 Long Wharf Dr</u>	Address: _____	Address: <u>SAFARI</u>	Address: _____	Purchase Order No. _____	Purchase Order No. _____	RUSH - Next Day	RUSH - Next Day	Summary w/ QA Summary	Summary w/ QA Summary	CT RCP Package	CT RCP Package
Phone No. <u>203-562-5771</u>	Phone No. _____	Phone No. <u>SAFARI</u>	Phone No. _____			RUSH - Two Day	RUSH - Two Day	CT RCP DQA/DUE Pkg	CT RCP DQA/DUE Pkg	NY ASP A Package	NY ASP A Package
Contact Person: <u>Justin Hall</u>	Contact Person: _____	Contact Person: <u>SAFARI</u>	Contact Person: _____			RUSH - Three Day	RUSH - Three Day	NY ASP B Package	NY ASP B Package	NY DEP Red. Deliv.	NY DEP Red. Deliv.
E-Mail Address: <u>JHall@Longan</u>	E-Mail Address: _____	E-Mail Address: <u>SAFARI</u>	E-Mail Address: _____			RUSH - Four Day	RUSH - Four Day	Electronic Data Deliverables (EDD)	Electronic Data Deliverables (EDD)	Simple Excel	Simple Excel
<p><b>Print Clearly and Legibly. All Information must be complete. Samples will NOT be logged in and the turn-around time clock will not begin until any questions by York are resolved.</b></p> <p>Matrix Codes: <u>S - soil</u>            Other - specify (oil, etc.)            WW - wastewater            GW - groundwater            DW - drinking water            Air-A - ambient air            Air-SV - soil vapor</p> <p>Samples Collected/Authorized By (Signature): <u>Justin Hall</u>            Name (printed): <u>Justin Hall</u></p>											
Sample Identification		Date/Time Sampled		Sample Matrix		Choose Analyses Needed from the Menu Above and Enter Below					
HA-13-W4 (1-2)	6-18-15 9:47	S	Aspic	Aspic	Aspic	Aspic	Aspic	Aspic	Aspic	Aspic	Aspic
HA-13-W4 (2-3)	9:48										
HA-13-W4 (3-4)	9:49										
HA-13-SW1 (0-1)	9:51										
HA-13-SW1 (1-2)	9:52										
HA-13-SW1 (2-3)	9:53										
HA-13-SW1 (3-4)	9:54										
HA-13-SW2 (0-1)	9:56										
HA-13-SW2 (1-2)	9:57										
HA-13-SW2 (2-3)	9:58										
Comments: <u>Please hold until authorized by Longan</u>		<p>Preservation: <u>Check those Applicable</u>            Special Instructions: <u>Field Filtered</u> <input type="checkbox"/> <u>Lab to Filter</u> <input type="checkbox"/></p>									
Container Description(s): <u>1-4oz Jar</u>		<p>Temperature on Receipt: <u>4.9 °C</u></p>									





YORK ANALYTICAL LABORATORIES  
120 RESEARCH DR.  
STRATFORD, CT 06615  
(203) 325-1371  
FAX (203) 357-0166

# Field Chain-of-Custody Record

Page 5 of 13

NOTE: York's Std. Terms & Conditions are listed on the back side of this document.  
This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions.

York Project No. 15F0769

<b>YOUR Information</b> Company: <u>Langan Engineering</u> Address: <u>555 Long Wharf Dr.</u> <u>New Haven CT</u> Phone No. <u>203-562-5771</u> Contact Person: <u>Justin Hall</u> E-Mail Address: <u>JHall@Langan</u>		<b>Report To:</b> Company: _____ Address: _____ Phone No. _____ Attention: _____ E-Mail Address: _____		<b>Invoice To:</b> Company: _____ Address: _____ Phone No. _____ Attention: _____ E-Mail Address: _____		<b>YOUR Project ID</b> <u>140109002</u> <b>Purchase Order No.</b> _____		<b>Turn-Around Time</b> RUSH - Same Day <input type="checkbox"/> RUSH - Next Day <input type="checkbox"/> RUSH - Two Day <input type="checkbox"/> RUSH - Three Day <input type="checkbox"/> RUSH - Four Day <input type="checkbox"/> Standard (5-7 Days) <input checked="" type="checkbox"/>		<b>Report Type</b> Summary Report _____ Summary w/ QA Summary _____ CT RCP Package <input checked="" type="checkbox"/> CTRCP DQA/DUE Pkg _____ NY ASP A Package _____ NY ASP B Package _____ NJDEP Rad. Deliv. _____ Electronic Data Deliverables (EDD) _____							
<b>Print Clearly and Legibly. All Information must be complete. Samples will NOT be logged in and the turn-around time clock will not begin until any questions by York are resolved.</b>		<b>Matrix Codes</b> S - soil Other - specify (oil, etc.) _____ WW - wastewater GW - groundwater DW - drinking water Air-A - ambient air Air-SV - soil vapor		<b>Semi-Vols.</b> 8270 or 625 STARS list BN Only Acids Only PAH list TAGM list CT RCP list TCL list Arom. only Halog. only App. IX list 8021B list		<b>Volatiles</b> 8260 full TICs 624 STARS list BTEX MTBE TCL list TAGM list CT RCP list 524.2 502.2 NIDEP list SPL or TCLP		<b>Metals</b> RCRA8 PP13 list TAL CT15 list TAGM list NIDEP list Total Dissolved SPL or TCLP TCLP Herb Chloridane TCLP BNA SPL or TCLP		<b>Misc. Org.</b> TPH GRO TPH DRO CT ETPH NY 310-13 TPH 1664 Air TO 14A Air TO 15 Air STARS Air VPH Air TICs Methane Helium		<b>Full Lists</b> Pri. Poll. TCL Ognats TAL MetCN Full TCLP Full App. IX Part 360-Radire Part 360-Radire Part 360-Equils Full TCLP NYDEP Sewer NYDEP Sewer TAGM Silica		<b>Misc.</b> Corrosivity Reactivity Ignitability Flash Point Sieve Anal. Heterotrophs TOX BTU/lb Aquatic Tox. TOC Asbestos		<b>Simple Excel</b> NY/DEC EQUIS EQUIS (std) EZ-EDD (EQUIS) NJDEP SRP HazSite EDD GIS/KEY (std) Other <u>pdf</u> York Regulatory Comparison Excel Spreadsheet <input checked="" type="checkbox"/> Compare to the following flags. (please fill in): <u>CTDEEP 2525</u>	

Sample Identification		Date/Time Sampled	Sample Matrix	Choose Analyses Needed from the Menu Above and Enter Below					Container Description(s)
HA-13-SW2 (3-4)		6-18-15 9:59	S	Arsenic					1-4oz Jar
HA-10-W3 (0-1)		10:01		HOLD					
HA-10-W3 (1-2)		10:02		HOLD					
HA-10-W3 (2-3)		10:03		HOLD					
HA-10-W4 (0-1)		10:06		HOLD					
HA-10-W4 (1-2)		10:07		HOLD					
HA-10-W4 (2-3)		10:08		HOLD					
HA-10-SW1 (0-1)		10:11		HOLD					
HA-10-SW1 (1-2)		10:12		HOLD					
HA-10-SW1 (2-3)		10:13		HOLD					
<b>Preservation</b> Check those Applicable Special Instructions Field Filtered <input type="checkbox"/> Lab to Filter <input type="checkbox"/>		4°C _____ Frozen _____ HCl _____ MeOH _____ ZnAc _____ Ascorbic Acid _____ HNO <sub>3</sub> _____ Other _____		H <sub>2</sub> SO <sub>4</sub> _____ NaOH _____		<b>Temperature on Receipt</b> <u>4.9 °C</u>			
Comments: <u>Please Hold until authorized by Langan</u>		Samples Relinquished By <u>TC Hall</u> Date/Time <u>6/19/15 13:50</u> Samples Relinquished By _____ Date/Time _____		Samples Received By <u>TC Hall</u> Date/Time <u>6/19/15 12:45</u> Samples Received in LAB by _____ Date/Time _____					





YORK ANALYTICAL LABORATORIES  
120 RESEARCH DR.  
STRAFORD, CT 06615  
(203) 325-1371  
FAX (203) 357-0166

**YORK**  
ANALYTICAL LABORATORIES INC

# Field Chain-of-Custody Record

NOTE: York's Std. Terms & Conditions are listed on the back side of this document.  
This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions.

Page 6 of 13

York Project No. 15F0769

<b>YOUR Information</b> Company: <u>Lanyon Engineering</u> Address: <u>555 Long Wharf Dr.</u> <u>New Haven CT</u> Phone No. <u>203-562-5711</u> Contact Person: <u>Justin Hall</u> E-Mail Address: <u>JHall@Lanyon</u>		<b>Report To:</b> Company: _____ Address: <u>SAME</u> Phone No. _____ Attention: _____ E-Mail Address: _____		<b>Invoice To:</b> Company: _____ Address: <u>SAME</u> Phone No. _____ Attention: _____ E-Mail Address: _____		<b>YOUR Project ID</b> <u>140109002</u> <b>Purchase Order No.</b> _____		<b>Turn-Around Time</b> RUSH - Same Day <input type="checkbox"/> RUSH - Next Day <input type="checkbox"/> RUSH - Two Day <input type="checkbox"/> RUSH - Three Day <input type="checkbox"/> RUSH - Four Day <input type="checkbox"/> Standard (5-7 Days) <input checked="" type="checkbox"/>		<b>Report Type</b> Summary Report <input type="checkbox"/> Summary w/ QA Summary <input type="checkbox"/> CT RCP Package <input checked="" type="checkbox"/> CTRCP DQA/DUE Pkg <input type="checkbox"/> NY ASP A Package <input type="checkbox"/> NY ASP B Package <input type="checkbox"/> NJDEP Red. Deliv. <input type="checkbox"/> Electronic Data Deliverables (EDD) <input checked="" type="checkbox"/>	
<b>Volatiles</b> 8260 full 624 STARS list Nassau Co. BTEX MTBE TCL list TAGM list CT RCP list Arom. only Halog. only App. IX list 8021B list		<b>Semi-Vols. Permitted</b> 8270 or 625 STARS list BN Only Acids Only PAH list TAGM list CT RCP list TCL list TAGM list CT RCP list Arom. only Halog. only App. IX list 8021B list		<b>Metals</b> RCRA8 PP13 list TAL CT15 list TAGM list NIDEF list Total Dissolved TCLP Herb SFLP or TCLP Ind. Metals (List Below)		<b>Misc. Org.</b> TPH GRO TPH DRO CT ETPH NY 310-13 TPH 1664 Air TO14A Air TO15 Air STARS Air VPH Air TICs Methane Helium		<b>Full Lists</b> Pri. Poll. TCL Ograns TAL MacCN Full TCLP Full App. IX Part 360-Routine Part 360-Baseline Part 360-Equival Part 360-Equival NYDEP Sewer NYDEP Sewer TAGM Silica		<b>Misc.</b> Corrosivity Reactivity Ignitability Flash Point Sieve Anal. Heterotrophs TOX BTU/lb. Aquatic Tox. TOC Asbestos Silica	

Sample Identification		Date/Time Sampled	Sample Matrix	Choose Analyses Needed from the Menu Above and Enter Below										Container Description(s)
HA-10-SW1 (3-4)		6-18-15 10:14	S	Aqueous										1-4oz Jar
HA-10-SW2 (0-1)		10:16		HOLD										
HA-10-SW2 (1-2)		10:17		HOLD										
HA-10-SW2 (2-3)		10:18		HOLD										
HA-10-SW2 (3-4)		10:19		HOLD										
HA-10-SW3 (0-1)		10:21		HOLD										
HA-10-SW3 (1-2)		10:22		HOLD										
HA-10-SW3 (2-3)		10:23		HOLD										
HA-5-E4 (0-1)		11:01		HOLD										
HA-5-E4 (1-2)		11:02		HOLD										





**YORK**  
ANALYTICAL LABORATORIES

YORK ANALYTICAL LABORATORIES  
120 RESEARCH DR.  
STRATFORD, CT 06615  
(203) 325-1371  
FAX (203) 357-0166

# Field Chain-of-Custody Record

Page 7 of 13

NOTE: York's Std. Terms & Conditions are listed on the back side of this document.  
This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions.

York Project No. 15F0769

YOUR INFORMATION		Report To:		Invoice To:		YOUR PROJECT ID		Turn-Around Time		Report Type	
Company: <u>Carson Engineering</u>	Company: _____	Company: _____	Company: _____	Company: _____	Company: _____	Company: _____	Company: _____	Company: _____	Company: _____	Company: _____	Company: _____
Address: <u>555 Long Wharf Dr.</u>	Address: <u>SAME</u>	Address: <u>SAME</u>	Address: _____	Address: _____	Address: _____	Address: _____	Address: _____	Address: _____	Address: _____	Address: _____	Address: _____
Phone No. <u>203-562-5771</u>	Phone No. _____	Phone No. _____	Phone No. _____	Phone No. _____	Phone No. _____	Phone No. _____	Phone No. _____	Phone No. _____	Phone No. _____	Phone No. _____	Phone No. _____
Contact Person: <u>Justin Hall</u>	Contact Person: _____	Contact Person: _____	Contact Person: _____	Contact Person: _____	Contact Person: _____	Contact Person: _____	Contact Person: _____	Contact Person: _____	Contact Person: _____	Contact Person: _____	Contact Person: _____
E-Mail Address: <u>JHall@Carson</u>	E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____
<p><b>Print Clearly and Legibly. All Information must be complete. Samples will NOT be logged in and the turn-around time clock will not begin until any questions by York are resolved.</b></p>											
<p>Matrix Codes S - soil Other - specify (oil, etc.) WW - wastewater GW - groundwater DW - drinking water Air-A - ambient air Air-SV - soil vapor</p>											
<p>Samples Collected/Authorized By (Signature) <u>Justin Hall</u> Name (printed)</p>											
<p>Choose Analyses Needed from the Menu Above and Enter Below</p>											
Sample Identification	Date/Time Sampled	Sample Matrix	4°C	Frozen	HCl	MeOH	Ascorbic Acid	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	NaOH	Temperature on Receipt
HA-S-E4 (2-3)	6-18-15 11:03	S									4.9 °C
HA-S-E4 (3-4)	11:04										
HA-S-E6 (0-1)	11:06										
HA-S-E6 (1-2)	11:07										
HA-S-E6 (2-3)	11:08										
HA-S-E6 (3-4)	11:09										
HA-S-E3 (0-1)	11:11										
HA-S-E3 (1-2)	11:12										
HA-S-E3 (2-3)	11:13										
HA-S-E3 (3-4)	11:14										
<p>Comments: <u>Please hold until authorized by Carson</u></p>											
<p>Preservation: Check those Applicable Special Instructions: <input type="checkbox"/> Field Filtered <input type="checkbox"/> Lab to Filter</p>											
<p>Samples Relinquished By: <u>Justin Hall</u> Date/Time: <u>6-19-15 12:45</u> Samples Received By: <u>Justin Hall</u> Date/Time: <u>6-19-15 1350</u></p>											
<p>Samples Relinquished By: _____ Date/Time: _____ Samples Received in LAB by: _____ Date/Time: _____</p>											









YORK ANALYTICAL LABORATORIES  
120 RESEARCH DR.  
STRATFORD, CT 06615  
(203) 325-1371  
FAX (203) 357-0166

# Field Chain-of-Custody Record

Page 9 of 13

NOTE: York's Std. Terms & Conditions are listed on the back side of this document.  
This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions.

York Project No. 15F0769

<b>YOUR INFORMATION</b> Company: <u>Lanyon Engineering</u> Address: <u>555 Long Wharf Dr.</u> <u>New Haven CT</u> Phone No. <u>203-562-5771</u> Contact Person: <u>Justin Hall</u> E-Mail Address: <u>JHall@Lanyon</u>		<b>Report To:</b> Company: <u>GANE</u> Address: <u>GANE</u> Phone No. <u></u> Attention: <u></u> E-Mail Address: <u></u>		<b>Invoice To:</b> Company: <u>GANE</u> Address: <u>GANE</u> Phone No. <u></u> Attention: <u></u> E-Mail Address: <u></u>		<b>YOUR PROJECT ID</b> <u>140109002</u> <b>Purchase Order No.</b> <u></u>		<b>Turn-Around Time</b> RUSH - Same Day <input type="checkbox"/> RUSH - Next Day <input type="checkbox"/> RUSH - Two Day <input type="checkbox"/> RUSH - Three Day <input type="checkbox"/> RUSH - Four Day <input type="checkbox"/> <b>Standard (5-7 Days)</b> <input checked="" type="checkbox"/>		<b>Report Type</b> Summary Report <input type="checkbox"/> Summary w/ QA Summary <input type="checkbox"/> CT RCP Package <input checked="" type="checkbox"/> CTRCP DQA/DUE Pkg <input type="checkbox"/> NY ASP A Package <input type="checkbox"/> NY ASP B Package <input type="checkbox"/> NJDEP Red. Deliv. <input type="checkbox"/> Electronic Data Deliverables (EDD) <input type="checkbox"/> Simple Excel <input type="checkbox"/> NYSEDEC EQUIS <input type="checkbox"/> EQUIS (std) <input type="checkbox"/> EZ-EDD (EQUIS) <input type="checkbox"/> NJDEP SRP HazSite EDD <input type="checkbox"/> GIS/KEY (std) <input type="checkbox"/> Other <u>pdf</u> York Regulatory Comparison <input checked="" type="checkbox"/> Excel Spreadsheet <input checked="" type="checkbox"/> Compare to the following Regs. (please fill in): <u>CTDEEP RSLs</u>	
--	--	---	--	--	--	--	--	---	--	---	--

**Print Clearly and Legibly. All Information must be complete. Samples will NOT be logged in and the turn-around time clock will not begin until any questions by York are resolved.**

Signature: Justin Hall  
Name (printed): Justin Hall  
Samples Collected/Authorized By (Signature):

Sample Identification	Date/Time Sampled	Sample Matrix	Choose Analyses Needed from the Menu Above and Enter Below	Container Description(s)
HA-S-N6 (2-3)	6-18-15 11:28	S	Argenic	1-4oz Jar
HA-S-N6 (3-4)	11:29		HOLD	
HA-S-N3 (0-1)	11:31			
HA-S-N3 (1-2)	11:32		HOLD	
HA-S-N3 (2-3)	11:33		HOLD	
HA-S-N3 (3-4)	11:34		HOLD	
HA-S-N5 (0-1)	11:36		HOLD	
HA-S-N5 (1-2)	11:37		HOLD	
HA-S-N5 (2-3)	11:38		HOLD	
HA-S-N5 (3-4)	11:39		HOLD	

Comments: <u>Please hold until authorized by Lanyon</u>	Preservation Check those Applicable: Special Instructions <input type="checkbox"/> Field Filtered <input type="checkbox"/> Lab to Filter <input type="checkbox"/>	4°C <input type="checkbox"/> Frozen <input type="checkbox"/> HCl <input type="checkbox"/> MeOH <input type="checkbox"/> HNO <sub>3</sub> <input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> <input type="checkbox"/> NaOH <input type="checkbox"/> Other <input type="checkbox"/>	Temperature on Receipt: <u>4.9 °C</u>
	Samples Relinquished By: <u>Justin Hall</u> Date/Time: <u>6-19-15 12:45</u>	Samples Received By: <u>TC Hall</u> Date/Time: <u>6/19/15 1350</u>	Samples Relinquished By: <u></u> Date/Time: <u></u>





YORK ANALYTICAL LABORATORIES  
120 RESEARCH DR.  
STRATFORD, CT 06615  
(203) 325-1371  
FAX (203) 357-0166

# Field Chain-of-Custody Record

Page 10 of 13

York Project No. 1540769

NOTE: York's Std. Terms & Conditions are listed on the back side of this document. This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions.

<b>YOUR Information</b> Company: <u>Lanyon Engineering</u> Address: <u>555 Long Wharf Dr.</u> <u>New Haven CT</u> Phone No. <u>203-562-5771</u> Contact Person: <u>Justin Hall</u> E-Mail Address: <u>jh11@lanyon</u>		<b>Report To:</b> Company: _____ Address: <u>SANU</u> Phone No. _____ Attention: _____ E-Mail Address: _____		<b>Invoice To:</b> Company: _____ Address: <u>SANU</u> Phone No. _____ Attention: _____ E-Mail Address: _____		<b>YOUR Project ID</b> <u>140109002</u> <b>Purchase Order No.</b> _____		<b>Turn-Around Time</b> RUSH - Same Day <input type="checkbox"/> RUSH - Next Day <input type="checkbox"/> RUSH - Two Day <input type="checkbox"/> RUSH - Three Day <input type="checkbox"/> RUSH - Four Day <input type="checkbox"/> Standard(5-7 Days) <input checked="" type="checkbox"/>		<b>Report Type</b> Summary Report _____ Summary w/ QA Summary _____ CT RCP Package <input checked="" type="checkbox"/> CT RCP DQA/DUE Pkg _____ NY ASP A Package _____ NY ASP B Package _____ NJDEP Red. Deliv. _____ Electronic Data Deliverables (EDD) _____ Simple Excel _____ NYSECE EQuIS _____ EQuIS (std) _____ EZ-EDD (EQuIS) _____ NJDEP SRP HazSite EDD _____ GIS/KEY (std) _____ Other <u>pel f</u> _____ York Regulatory Comparison _____ Excel Spreadsheet <input checked="" type="checkbox"/> Compare to the following Regs. (please fill in): <u>CTDEEP R525</u>	
---	--	---	--	--	--	--	--	---	--	--	--

**Print Clearly and Legibly. All Information must be complete. Samples will NOT be logged in and the turn-around time clock will not begin until any questions by York are resolved.**

Matrix Codes  
 S - soil  
 Other - specify (oil, etc.)  
 WW - wastewater  
 GW - groundwater  
 DW - drinking water  
 Air-A - ambient air  
 Air-SV - soil vapor

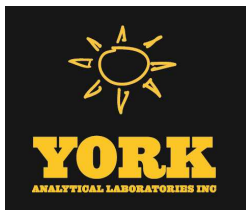
Samples Collected/Authorized By (Signature)  
Justin Hall  
 Name (printed)

Sample Identification	Date/Time Sampled	Sample Matrix	Choose Analyses Needed from the Menu Above and Enter Below	Container Description(s)
HA-21-NE1 (0-1)	6-18-15 11:41	S	Arsenic	1-4oz Jar
HA-21-NE1 (1-2)	11:42		HOLD	
HA-21-NE1 (2-3)	11:43		HOLD	
HA-21-NE1 (3-4)	11:44		HOLD	
HA-21-NE2 (0-1)	11:46		HOLD	
HA-21-NE2 (1-2)	11:47		HOLD	
HA-21-NE2 (2-3)	11:48		HOLD	
HA-21-NE2 (3-4)	11:49		HOLD	
HA-10-NE1 (0-1)	11:51		HOLD	
HA-10-NE1 (1-2)	11:52		HOLD	

Preservation Check those Applicable Special Instructions Field Filled <input type="checkbox"/> Lab to Filter <input type="checkbox"/>	4°C _____ Frozen _____ ZnAc _____ MeOH _____ Ascorbic Acid _____ HNO <sub>3</sub> _____ H <sub>2</sub> SO <sub>4</sub> _____ NaOH _____	Temperature on Receipt <u>4.9 °C</u>
---	--	---

Comments: Please hold until authorized by Lanyon

Samples Relinquished By Justin Hall Date/Time 6-19-15 12:45  
 Samples Received By Justin Hall Date/Time 6/19/15 1350  
 Samples Relinquished in LAB by \_\_\_\_\_ Date/Time \_\_\_\_\_



# Technical Report

prepared for:

**Langan Engineering & Environmental Services (CT)**

Long Wharf Maritime Center, 555 Long Wharf Drive

New Haven CT, 06511

**Attention: Justin Hall**

Report Date: 07/01/2015

**Client Project ID: 140109002**

York Project (SDG) No.: 15F0780

Revision No. 1.0

CT Cert. No. PH-0723

New Jersey Cert. No. CT-005



New York Cert. No. 10854

PA Cert. No. 68-04440



Report Date: 07/01/2015  
Client Project ID: 140109002  
York Project (SDG) No.: 15F0780

**Langan Engineering & Environmental Services (CT)**  
Long Wharf Maritime Center, 555 Long Wharf Drive  
New Haven CT, 06511  
Attention: Justin Hall

---

## Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on June 19, 2015 and listed below. The project was identified as your project: **140109002**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Notes section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the attachment to this report, and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
15F0780-01	HA-10-NE1 (1-2)	Soil	06/18/2015	06/19/2015
15F0780-04	HA-10-N2 (0-1)	Soil	06/18/2015	06/19/2015
15F0780-05	HA-10-N2 (1-2)	Soil	06/18/2015	06/19/2015
15F0780-08	HA-13-SE1 (0-1)	Soil	06/18/2015	06/19/2015
15F0780-12	HA-13-E4 (0-1)	Soil	06/18/2015	06/19/2015
15F0780-16	HA-13-E3 (0-1)	Soil	06/18/2015	06/19/2015
15F0780-24	DUP-6.18.15	Soil	06/18/2015	06/19/2015

## **General Notes for York Project (SDG) No.: 15F0780**

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All samples were received in proper condition for analysis with proper documentation, unless otherwise noted.
6. All analyses conducted met method or Laboratory SOP requirements. See the Qualifiers and/or Narrative sections for further information.
7. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
8. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.

**Approved By:**



**Benjamin Gulizia**  
Laboratory Director

**Date:** 07/01/2015





### Sample Information

**Client Sample ID:** HA-10-NE1 (1-2)

**York Sample ID:** 15F0780-01

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

15F0780

140109002

Soil

June 18, 2015 11:52 am

06/19/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	4.32		mg/kg dry	1.16	1	EPA 6010C	06/30/2015 11:12	06/30/2015 18:05	ALD

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	85.9		%	0.100	1	SM 2540G	06/27/2015 11:08	06/29/2015 15:20	SCA

### Sample Information

**Client Sample ID:** HA-10-N2 (0-1)

**York Sample ID:** 15F0780-04

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

15F0780

140109002

Soil

June 18, 2015 11:56 am

06/19/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	41.1		mg/kg dry	1.15	1	EPA 6010C	06/25/2015 11:42	06/25/2015 18:57	ALD

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	87.0		%	0.100	1	SM 2540G	06/22/2015 10:48	06/22/2015 15:57	KK

### Sample Information

**Client Sample ID:** HA-10-N2 (1-2)

**York Sample ID:** 15F0780-05

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

15F0780

140109002

Soil

June 18, 2015 11:57 am

06/19/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:



### Sample Information

**Client Sample ID:** HA-10-N2 (1-2)

**York Sample ID:** 15F0780-05

York Project (SDG) No.  
15F0780

Client Project ID  
140109002

Matrix  
Soil

Collection Date/Time  
June 18, 2015 11:57 am

Date Received  
06/19/2015

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	9.07		mg/kg dry	1.15	1	EPA 6010C	06/30/2015 11:12	06/30/2015 18:35	ALD

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	87.1		%	0.100	1	SM 2540G	06/27/2015 11:08	06/29/2015 15:20	SCA

### Sample Information

**Client Sample ID:** HA-13-SE1 (0-1)

**York Sample ID:** 15F0780-08

York Project (SDG) No.  
15F0780

Client Project ID  
140109002

Matrix  
Soil

Collection Date/Time  
June 18, 2015 12:01 pm

Date Received  
06/19/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	3.44		mg/kg dry	1.13	1	EPA 6010C	06/25/2015 11:42	06/25/2015 19:02	ALD

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	88.4		%	0.100	1	SM 2540G	06/22/2015 10:48	06/22/2015 15:57	KK

### Sample Information

**Client Sample ID:** HA-13-E4 (0-1)

**York Sample ID:** 15F0780-12

York Project (SDG) No.  
15F0780

Client Project ID  
140109002

Matrix  
Soil

Collection Date/Time  
June 18, 2015 12:06 pm

Date Received  
06/19/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	6.30		mg/kg dry	1.14	1	EPA 6010C	06/25/2015 11:42	06/25/2015 19:07	ALD



### Sample Information

**Client Sample ID:** HA-13-E4 (0-1)

**York Sample ID:** 15F0780-12

York Project (SDG) No.  
15F0780

Client Project ID  
140109002

Matrix  
Soil

Collection Date/Time  
June 18, 2015 12:06 pm

Date Received  
06/19/2015

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	87.4		%	0.100	1	SM 2540G	06/22/2015 10:48	06/22/2015 15:57	KK

### Sample Information

**Client Sample ID:** HA-13-E3 (0-1)

**York Sample ID:** 15F0780-16

York Project (SDG) No.  
15F0780

Client Project ID  
140109002

Matrix  
Soil

Collection Date/Time  
June 18, 2015 12:11 pm

Date Received  
06/19/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	5.01		mg/kg dry	1.07	1	EPA 6010C	06/25/2015 11:42	06/25/2015 19:12	ALD

#### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	93.1		%	0.100	1	SM 2540G	06/22/2015 10:48	06/22/2015 15:57	KK

### Sample Information

**Client Sample ID:** DUP-6.18.15

**York Sample ID:** 15F0780-24

York Project (SDG) No.  
15F0780

Client Project ID  
140109002

Matrix  
Soil

Collection Date/Time  
June 18, 2015 3:00 pm

Date Received  
06/19/2015

#### Arsenic by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	28.6		mg/kg dry	1.14	1	EPA 6010C	06/25/2015 11:42	06/25/2015 19:34	ALD

#### Total Solids

#### Log-in Notes:

#### Sample Notes:





## Sample Information

**Client Sample ID:**    **DUP-6.18.15**

**York Sample ID:**        **15F0780-24**

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

15F0780

140109002

Soil

June 18, 2015   3:00 pm

06/19/2015

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	87.8		%	0.100	1	SM 2540G	06/22/2015 10:48	06/22/2015 15:57	KK



## REASONABLE CONFIDENCE PROTOCOL

### LABORATORY ANALYSIS QA/QC CERTIFICATION FORM

Laboratory Name: York Analytical Laboratories, Inc.

Client: Langan Engineering & Environmental Serv

Project Location: 140109002

Lab Project No.: 15F0780

Laboratory Sample ID(s): 15F0780-01 - 15F0780-24

Sampling Date(s): 06/18/2015 - 06/18/2015

RCP Methods Used: See Narrative and Method Reference Section of this Technical Report

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed (including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP RCPs)?	YES
1A	Were the method specified preservation and holding time requirements met?	YES
1B	VPH and EPH Methods only: Was the VPH or EPH method conducted without significant modifications (see Section 11.3 of respective RCP methods)?	NR
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	YES
3	Were samples received at an appropriate temperature (<6°C )?	YES
4	Were all QA/QC performance criteria specified in the CTDEP Reasonable Confidence Protocol documents achieved?	NO
5A	Were reporting limits specified or referenced on the chain-of-custody?	YES
5B	Were these reporting limits met?	YES
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	NO
7	Are project-specific matrix spikes and laboratory duplicates included in this data set?	YES

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to questions #1, #1A, or #1B is "No", the data package does not meet the requirements for "Reasonable Confidence".

This form may not be altered and all questions must be answered.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.

Authorized  
Signature:

Position: Laboratory Director

Printed Name: Benjamin Gulizia

Date: 07/01/2015

# YORK



## **Case Narrative**

Client: Langan Engineering & Environmental Services (CT)

Client Project ID: 140109002

Prepared for: Justin Hall

### **Introduction**

This Case Narrative applies to the following samples submitted to our laboratory on **06/19/2015 13:50**:

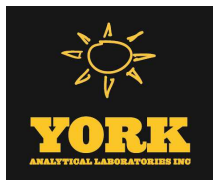
<b><u>Sample Name</u></b>	<b><u>Matrix</u></b>
DUP-6.18.15	Soil
HA-10-N2 (0-1)	Soil
HA-10-N2 (1-2)	Soil
HA-10-N2 (2-3)	Soil
HA-10-N2 (3-4)	Soil
HA-10-NE1 (1-2)	Soil
HA-10-NE1 (2-3)	Soil
HA-10-NE1 (3-4)	Soil
HA-13-E3 (0-1)	Soil
HA-13-E3 (1-2)	Soil
HA-13-E3 (2-3)	Soil
HA-13-E3 (3-4)	Soil
HA-13-E4 (0-1)	Soil
HA-13-E4 (1-2)	Soil
HA-13-E4 (2-3)	Soil
HA-13-E4 (3-4)	Soil
HA-13-E5 (0-1)	Soil
HA-13-E5 (1-2)	Soil
HA-13-E5 (2-3)	Soil
HA-13-E5 (3-4)	Soil
HA-13-SE1 (0-1)	Soil
HA-13-SE1 (1-2)	Soil
HA-13-SE1 (2-3)	Soil
HA-13-SE1 (3-4)	Soil

The 24 sample(s) were received intact in a custody-sealed cooler unless otherwise noted. Upon receipt, cooler temperature(s) was determined using a NIST traceable digital infrared thermometer. The cooler temperature was acceptable (2-6oC) and documented as:

### **Cooler**

#### **Default Cooler**

<b><u>Cooler</u></b>	<b><u>Temp C°</u></b>
Default Cooler	4.9



Chain-of-custody was maintained from receipt through analysis in the laboratory.

### **Methodology**

Preparation and analysis were conducted according to the SW-846 methods, as detailed in the sample information table, and the requirements of the State of Connecticut Reasonable Confidence Protocols (RCP).

For initial calibrations (ICAL), initial calibration verifications (ICV) and continuing calibration verifications (CCV) for organics determined by GC/MS methods (TO15 volatiles, 8260 volatiles and 8270 semi-volatiles) all method criteria and laboratory SOP criteria were met unless otherwise noted below. Any compounds in the ICAL, ICV or CCV exceeding RCP specified limits are available upon request. This data is not used for Data Quality Assessment or Data Usability Evaluation (assignment of compound bias) which are determined from other lines of evidence. Therefore the data is not detailed in this narrative.

These terms may be used interchangeably. Both are measures of the accuracy of an analysis by measurement of a known material from a source other than that used for calibration. By definition, a **Standard Reference Material (SRM)** is a material containing known levels of analytes used to evaluate the performance of the analytical system with respect to a defined set of acceptance criteria. It is processed exactly as a sample. An **LCS (Laboratory Control Sample)** is second-source standard containing known levels of analyte(s), treated exactly as a sample, run with each analytical batch. Both are metrics used to establish accuracy of the preparation/analysis methods.

### **Metals – Total (Arsenic)**

No problems were encountered during analysis of the samples, other than detailed below.

#### *Method Blank*

No target analyte was detected at or above the RL in the method blanks.

#### *Batch QC*

Two Standard Reference Materials and MS/Dup analysis on sample “HA-10-NE1 (1-2)” were run as batch QC for this project. Please refer to the Quality Control Data attached to this report for bias information.

#### *Dilutions*

No sample dilutions were required.



## Analytical Batch Summary

**Batch ID:** BF51052      **Preparation Method:** % Solids Prep      **Prepared By:** KK

YORK Sample ID	Client Sample ID	Preparation Date
15F0780-04	HA-10-N2 (0-1)	06/22/15
15F0780-08	HA-13-SE1 (0-1)	06/22/15
15F0780-12	HA-13-E4 (0-1)	06/22/15
15F0780-16	HA-13-E3 (0-1)	06/22/15
15F0780-24	DUP-6.18.15	06/22/15

**Batch ID:** BF51275      **Preparation Method:** EPA 3050B      **Prepared By:** ALD

YORK Sample ID	Client Sample ID	Preparation Date
15F0780-04	HA-10-N2 (0-1)	06/25/15
15F0780-08	HA-13-SE1 (0-1)	06/25/15
15F0780-12	HA-13-E4 (0-1)	06/25/15
15F0780-16	HA-13-E3 (0-1)	06/25/15
15F0780-24	DUP-6.18.15	06/25/15
BF51275-BLK1	Blank	06/25/15
BF51275-SRM1	Reference	06/25/15

**Batch ID:** BF51395      **Preparation Method:** % Solids Prep      **Prepared By:** KK

YORK Sample ID	Client Sample ID	Preparation Date
15F0780-01	HA-10-NE1 (1-2)	06/27/15
15F0780-05	HA-10-N2 (1-2)	06/27/15

**Batch ID:** BF51517      **Preparation Method:** EPA 3050B      **Prepared By:** ALD

YORK Sample ID	Client Sample ID	Preparation Date
15F0780-01	HA-10-NE1 (1-2)	06/30/15
15F0780-05	HA-10-N2 (1-2)	06/30/15
BF51517-BLK1	Blank	06/30/15
BF51517-DUP1	Duplicate	06/30/15
BF51517-MS1	Matrix Spike	06/30/15
BF51517-SRM1	Reference	06/30/15





### Metals by ICP - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BF51275 - EPA 3050B											
Blank (BF51275-BLK1)								Prepared & Analyzed: 06/25/2015			
Arsenic	ND	1.00	mg/kg wet								
Reference (BF51275-SRM1)								Prepared & Analyzed: 06/25/2015			
Arsenic	111	1.00	mg/kg wet	122		91.2	70-145.1				
Batch BF51517 - EPA 3050B											
Blank (BF51517-BLK1)								Prepared & Analyzed: 06/30/2015			
Arsenic	ND	1.00	mg/kg wet								
Duplicate (BF51517-DUP1)								Prepared & Analyzed: 06/30/2015			
Arsenic	4.90	1.16	mg/kg dry		4.32				12.6	35	
Matrix Spike (BF51517-MS1)								Prepared & Analyzed: 06/30/2015			
Arsenic	232	1.16	mg/kg dry	233	4.32	97.9	75-125				
Reference (BF51517-SRM1)								Prepared & Analyzed: 06/30/2015			
Arsenic	115	1.00	mg/kg wet	122		94.0	70-145.1				



## Notes and Definitions

M-CCVO CCV Out. Samples bracketed by acceptable CCVs.

---

*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
Non-Dir.	Non-dir. flag (Non-Directional Bias ) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

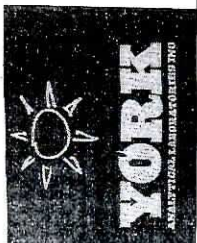
Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.

For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic performance.

---

Revision Description: Client took some samples off hold



YORK ANALYTICAL LABORATORIES  
120 RESEARCH DR.  
STRATFORD, CT 06615  
(203) 325-1371  
FAX (203) 357-0166

# Field Chain-of-Custody Record

NOTE: York's Std. Terms & Conditions are listed on the back side of this document.  
This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions.

Page 10 of 13  
ISF-0780  
York Project No. 1547769

<b>YOUR Information</b> Company: <u>Canyon Engineering</u> Address: <u>555 Long Street Dr.</u> <u>Newtown CT</u> Phone No. <u>203-562-5771</u> Contact Person: <u>Justin Hall</u> E-Mail Address: <u>JHall@Canyon</u>		<b>Report To:</b> Company: _____ Address: _____ Phone No. _____ Attention: _____ E-Mail Address: _____		<b>Invoice To:</b> Company: _____ Address: _____ Phone No. _____ Attention: _____ E-Mail Address: _____		<b>YOUR Project ID</b> <u>140109002</u> <b>Purchase Order No.</b> _____		<b>Turn-Around Time</b> RUSH - Same Day <input type="checkbox"/> RUSH - Next Day <input type="checkbox"/> RUSH - Two Day <input type="checkbox"/> RUSH - Three Day <input type="checkbox"/> RUSH - Four Day <input type="checkbox"/> Standard (5-7 Days) <input checked="" type="checkbox"/>		<b>Report Type</b> Summary Report _____ Summary w/ QA Summary _____ CT RCP Package <input checked="" type="checkbox"/> CT RCP DQA/DUE Pkg _____ NY ASP A Package _____ NY ASP B Package _____ NJDEP Red. Deliv. _____ <i>Electronic Data Deliverables (EDD)</i> Simple Excel _____ NYSDEC EQUIS _____ EQUIS (std) _____ EZ-EDD (EQUIS) _____ NJDEP SRP HazSite EDD _____ GIS/KEY (std) _____ Other <u>plc</u> _____ York Regulatory Comparison _____ Excel Spreadsheet <input checked="" type="checkbox"/> Compare to the following Regs. (please fill in): <u>CTDEEP R512-5</u>	
---	--	---	--	--	--	--	--	--	--	---	--

**Print Clearly and Legibly. All Information must be complete. Samples will NOT be logged in and the turn-around time clock will not begin until any questions by York are resolved.**

Samples Collected/Authorized By (Signature)  
Justin Hall  
Name (printed)  
Justin Hall

Sample Identification	Date/Time Sampled	Sample Matrix	Choose Analyses Needed from the Menu Above and Enter Below										Container Description(s)
HA-21-NE1 (0-1)	6-18-15 11:41	S	Ascentic										1-4oz Jar
HA-21-NE1 (1-2)	11:42		HOLD										
HA-21-NE1 (2-3)	11:43		HOLD										
HA-21-NE1 (3-4)	11:44		HOLD										
HA-21-NE2 (0-1)	11:46		HOLD										
HA-21-NE2 (1-2)	11:47		HOLD										
HA-21-NE2 (2-3)	11:48		HOLD										
HA-21-NE2 (3-4)	11:49		HOLD										
HA-10-NE1 (0-1)	11:51												
HA-10-NE1 (1-2)	11:52												

<b>Preservation</b> Check those Applicable Special Instructions Field Filtered <input type="checkbox"/> Lab to Filter <input type="checkbox"/>		<b>Temperature on Receipt</b> 4.9 °C	
Samples Relinquished By <u>Justin Hall</u> Date/Time <u>6-19-15 12:45</u>		Samples Received By <u>Justin Hall</u> Date/Time <u>6-19-15 13:50</u>	
Samples Relinquished By _____ Date/Time _____		Samples Received in LAB by _____ Date/Time _____	





YORK ANALYTICAL LABORATORIES  
120 RESEARCH DR.  
STRAITFORD, CT 06615  
(203) 325-1371  
FAX (203) 357-0166

**YORK**  
ANALYTICAL LABORATORIES, INC.

# Field Chain-of-Custody Record

NOTE: York's Std. Terms & Conditions are listed on the back side of this document.  
This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions.

Page 11 of 13  
15F0780  
York Project No. 15F0780

YOUR INFORMATION		Report To:		Invoice To:		YOUR PROJECT ID		Turn-Around Time		Report Type	
Company: <u>Cayman Engineering</u>	Company: <u>SAUNA</u>	Company: <u>SAUNA</u>	Company: <u>SAUNA</u>	RUSH - Same Day <input type="checkbox"/>	RUSH - Next Day <input type="checkbox"/>	RUSH - Two Day <input type="checkbox"/>	RUSH - Three Day <input type="checkbox"/>	RUSH - Four Day <input type="checkbox"/>	Summary Report <input type="checkbox"/>	Summary w/ QA Summary <input type="checkbox"/>	CT RCP Package <input checked="" type="checkbox"/>
Address: <u>555 Long Wharf Dr.</u>	Address: <u>SAUNA</u>	Address: <u>SAUNA</u>	Address: <u>SAUNA</u>	CT RCP DQADUE Pkg <input type="checkbox"/>	NY ASP A Package <input type="checkbox"/>	NY ASP B Package <input type="checkbox"/>	NJDEP Red. Deliv. <input type="checkbox"/>	Electronic Data Deliverables (EDD) <input checked="" type="checkbox"/>	Simple Excel <input type="checkbox"/>	NYSDEC EQUIS <input type="checkbox"/>	EQUIS (std) <input type="checkbox"/>
Phone No. <u>203-562-5771</u>	Phone No. <u>SAUNA</u>	Phone No. <u>SAUNA</u>	Phone No. <u>SAUNA</u>	Full Poll. <input type="checkbox"/>	Full Poll. <input type="checkbox"/>	Full Poll. <input type="checkbox"/>	Full Poll. <input type="checkbox"/>	Full Poll. <input type="checkbox"/>	Full Poll. <input type="checkbox"/>	Full Poll. <input type="checkbox"/>	Full Poll. <input type="checkbox"/>
Contact Person: <u>Justin Hall</u>	Contact Person: <u>SAUNA</u>	Contact Person: <u>SAUNA</u>	Contact Person: <u>SAUNA</u>	Full Poll. <input type="checkbox"/>	Full Poll. <input type="checkbox"/>	Full Poll. <input type="checkbox"/>	Full Poll. <input type="checkbox"/>	Full Poll. <input type="checkbox"/>	Full Poll. <input type="checkbox"/>	Full Poll. <input type="checkbox"/>	Full Poll. <input type="checkbox"/>
E-Mail Address: <u>JHall@Cayman</u>	E-Mail Address: <u>SAUNA</u>	E-Mail Address: <u>SAUNA</u>	E-Mail Address: <u>SAUNA</u>	Full Poll. <input type="checkbox"/>	Full Poll. <input type="checkbox"/>	Full Poll. <input type="checkbox"/>	Full Poll. <input type="checkbox"/>	Full Poll. <input type="checkbox"/>	Full Poll. <input type="checkbox"/>	Full Poll. <input type="checkbox"/>	Full Poll. <input type="checkbox"/>

**Print Clearly and Legibly. All Information must be complete. Samples will NOT be logged in and the turn-around time clock will not begin until any questions by York are resolved.**

Matrix Codes: S - soil  
Other - specify (oil, etc.)  
WW - wastewater  
GW - groundwater  
DW - drinking water  
Air-A - ambient air  
Air-SV - soil vapor

Samples Collected/Authorized By (Signature)  
Justin Hall  
Name (printed)

Sample Identification	Date/Time Sampled	Sample Matrix	Choose Analyses Needed from the Menu Above and Enter Below	Container Description(s)
HA-10-NE1 (2-3)	6-18-15 11:53	S	Arsenic	1-4oz Jar
HA-10-NE1 (3-4)	11:54		HOLD	
HA-10-N2 (6-1)	11:56		HOLD	
HA-10-N2 (1-2)	11:57		HOLD	
HA-10-N2 (2-3)	11:58		HOLD	
HA-10-N2 (3-4)	11:59		HOLD	
HA-13-SE1 (0-1)	12:01		HOLD	
HA-13-SE1 (1-2)	12:02		HOLD	
HA-13-SE1 (2-3)	12:03		HOLD	
HA-13-SE1 (3-4)	12:04		HOLD	





YORK ANALYTICAL LABORATORIES  
120 RESEARCH DR.  
STRATFORD, CT 06615  
(203) 325-1371  
FAX (203) 357-0166

# Field Chain-of-Custody Record

Page 12 of 13  
15F0780  
York Project No. 15F0780

NOTE: York's Std. Terms & Conditions are listed on the back side of this document.  
This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions.

YOUR INFORMATION		Report To:		Invoice To:		YOUR Project ID		Turn-Around Time		Report Type	
Company: <u>Lanyon Engineering</u>		Company: <u>SAINT</u>		Company: <u>SAINT</u>		140109002		RUSH - Same Day <input type="checkbox"/>		Summary Report	
Address: <u>555 Long Wharf Dr.</u>		Address: <u>SAINT</u>		Address: <u>SAINT</u>				RUSH - Next Day <input type="checkbox"/>		Summary w/ QA Summary	
Phone No. <u>203-562-5771</u>		Phone No. <u>SAINT</u>		Phone No. <u>SAINT</u>				RUSH - Two Day <input type="checkbox"/>		CT RCP Package <input checked="" type="checkbox"/>	
Contact Person: <u>Justin Hall</u>		Attention: <u>SAINT</u>		Attention: <u>SAINT</u>				RUSH - Three Day <input type="checkbox"/>		CT RCP DQ/DUE Pkg	
E-Mail Address: <u>JHall@Lanyon</u>		E-Mail Address: <u>SAINT</u>		E-Mail Address: <u>SAINT</u>				RUSH - Four Day <input type="checkbox"/>		NY ASP A Package	
								Standard (5-7 Days) <input checked="" type="checkbox"/>		NY ASP B Package	
										NJDEP Red. Deliv.	
										Electronic Data Deliverables (EDD)	
										Simple Excel	
										NY/DEC EQUIS	
										EQUIS (std)	
										EZ-EDD (EQUIS)	
										NJDEP SRP HazSite EDD	
										GIS/KEY (std)	
										Other <u>1011</u>	
										York Regulatory Comparison	
										Excel Spreadsheet <input checked="" type="checkbox"/>	
										Compare to the following Regs. (please fill in):	
										CTDEP RSRs	

Sample Identification		Date/Time Sampled	Sample Matrix	Choose Analyses Needed from the Menu Above and Enter Below										Container Description(s)	
HA-13-E4 (0-1)		6-18-15 12:06	S	Asenize											1-402 Jar
HA-13-E4 (1-2)		12:07		HOLD											
HA-13-E4 (2-3)		12:08		HOLD											
HA-13-E4 (3-4)		12:09		HOLD											
HA-13-E3 (0-1)		12:11													
HA-13-E3 (1-2)		12:12		HOLD											
HA-13-E3 (2-3)		12:13		HOLD											
HA-13-E3 (3-4)		12:14		HOLD											
HA-13-E5 (0-1)		12:16													
HA-13-E5 (1-2)		12:17		HOLD											



# Field Chain-of-Custody Record

Page 13 of 13

082051

**York Project No.**

**NOTE:** York's Std. Terms & Conditions are listed on the back side of this document. This document serves as your written authorization to York to proceed with the analyses requested. signature binds you to York's Std. Terms & Conditions.

[illegible][illegible]