

# **Cover Page**

**Order ID:** 01233

Project ID: NYCDDC Phase II SCI Arthur Kill Road CEQR

Client: Louis Berger U.S., Inc., A WSP Company

Lab Sample Number	Client Sample Number
O1233-02	B-P34A
O1233-03	B-P34B
O1233-04	B-P36A
O1233-05	B-P36B
O1233-06	B-P37A
O1233-07	B-P37B
O1233-08	B-P38A
O1233-09	B-P38B
O1233-10	WC-38
O1233-11	B-P38C
O1233-12	FB01

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature :	Date:	9/12/2023

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012



# **CASE NARRATIVE**

Louis Berger U.S., Inc., A WSP Company

Project Name: NYCDDC Phase II SCI Arthur Kill Road CEQR

Project # N/A

Chemtech Project # O1233 Test Name: VOC-TCLVOA-10

# A. Number of Samples and Date of Receipt:

10 Solid samples were received on 01/19/2023. 1 Water sample was received on 01/19/2023.

#### **B.** Parameters

According to the Chain of Custody document, the following analyses were requested: Corrosivity, Diesel Range Organics, Gasoline Range Organics, Ignitability, Mercury, Metals ICP-TAL, METALS-TAL, Paint Filter, PCB, Pesticide-TCL, RCRA CHARACTERISTICS, Reactive Cyanide, Reactive Sulfide, SVOC-PAH, SVOC-TCL BNA -20, TCLP Extraction, TCLP ICP Metals, TCLP Mercury, TCLP METALS, VOC-TCLVOA-10 and VOC-TCLVOA-10. This data package contains results for VOC-TCLVOA-10.

### C. Analytical Techniques:

The analysis performed on instrument MSVOA\_D were done using GC column RTX-VMS which is 20 meters, 0.18 mm id, 1.0 um df, Restek Cat. #49914. The Trap was supplied by SUPELCO, K (VOACARB 3000), TEKMAR LSC-2000 Concentrator. The analysis performed on instrument MSVOA\_N were done using GC column RXI-624SIL MS 30m 0.25mm 1.4 um. Cat#13868. The analysis performed on instrument MSVOA\_Y were done using GC column Rxi-624Sil MS, which is 30 meters, 0.25 mm id, 1.4 um df, Restek Cat. #13868. The Trap was supplied by Supelco, VOCARB 3000, ATOMAX XYZ Concentrator. The analysis of VOC-TCLVOA-10 was based on method 8260D.

# D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria except for

B-P36B [1,2-Dichloroethane-d4 - 185%],

B-P38A [1,2-Dichloroethane-d4 - 181%],

B-P38ARE [Dibromofluoromethane - 52%], sample was reanalyzed to confirm the failure and reported, while for

B-P37B [1,2-Dichloroethane-d4 - 166%], as corrective action sample was reanalyzed o confirm the failure but not purged therefore sample reported with failure, while for B-P38C [4-Bromofluorobenzene - 182%] Due to high concentration of compounds, this sample required dilution. Therefore, sample was reanalyzed with dilution and reported.



The Internal Standards Areas met the acceptable requirements except for B-P36B,B-P36BRE, B-P38A, B-P38ARE, B-P38B and B-P38BRE samples were reanalyzed to confirm the failure and reported, while for B-P37B, sample reanalyzed to confirm the failure but not purged therefore sample reported with failure.

The Retention Times were acceptable for all samples.

The RPD met criteria.

The Blank Spike met requirements for all samples.

The Blank Spike Duplicate met requirements for all samples.

The Blank analysis did not indicate the presence of lab contamination.

The %RSD is greater than 15% in the Initial Calibration method (82D011823S.M) for Dichlorodifluoromethane, Methylene Chloride are passing on Linear Regression.

The %RSD is greater than 15% in the Initial Calibration method (82N011623W.M) for Acetone, Methylene Chloride, 1,4-Dichlorobenzene, 1,2,4-Trichlorobenzene, 1,2,3-Trichlorobenzene are passing on Linear Regression.

The %RSD is greater than 15% in the Initial Calibration method (82Y011623S.M) for Methylene Chloride,1,2-Dichloroethane-d4,Toluene-d8 are passing on Linear Regression.

The Continuous Calibration File ID VD075168.D met the requirements except for Acetone is failing high but no positive hit in associate sample therefore no corrective action taken.

The Tuning criteria met requirements.

Sample B-P38C was directly analyzed in methanol as low level soil vial not purged.

Sample B-P38C was diluted due to high concentration.

#### **E. Additional Comments:**

This data Package has been revised to correct the Client ID of sample # 08 as per client request.

Samples for MS/MSD for VOC analysis were not provided with this set of samples. The Blank Spike Duplicate is reported with the data.

Trip Blank was not provided with this set of samples.

The soil samples results are based on a dry weight basis.

Please use %D calculated based on Avg RF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <15% for the Initial Calibration curve and use %D calculated based on Amount added and Calculated amount for all compounds using Linear Regression when the %RSD value for a compound is > 15% for the Initial Calibration curve for SW-846 analysis.

# **F. Manual Integration Comments:**

Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.



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# **CASE NARRATIVE**

Louis Berger U.S., Inc., A WSP Company

Project Name: NYCDDC Phase II SCI Arthur Kill Road CEQR

Project # N/A

Chemtech Project # O1233

**Test Name: Gasoline Range Organics** 

# A. Number of Samples and Date of Receipt:

10 Solid samples were received on 01/19/2023. 1 Water sample was received on 01/19/2023.

#### **B.** Parameters

According to the Chain of Custody document, the following analyses were requested: Corrosivity, Diesel Range Organics, Gasoline Range Organics, Ignitability, Mercury, Metals ICP-TAL, METALS-TAL, Paint Filter, PCB, Pesticide-TCL, RCRA CHARACTERISTICS, Reactive Cyanide, Reactive Sulfide, SVOC-PAH, SVOC-TCL BNA -20, TCLP Extraction, TCLP ICP Metals, TCLP Mercury, TCLP METALS, VOC-TCLVOA-10 and VOC-TCLVOA-10. This data package contains results for Gasoline Range Organics.

### C. Analytical Techniques:

The analysis performed on instrument FID\_B were done using GC column RTX502.2 which is 60 meters, 0.53mm ID, 3.0 um df, cat#10909.The analysis of Gasoline Range Organics was based on method 8015D.

### D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria.

The Retention Times were acceptable for all samples.

The RPD met criteria.

The Blank Spike met requirements for all samples.

The Blank Spike Duplicate met requirements for all samples.

The Blank analysis did not indicate the presence of lab contamination.

The Initial Calibration met the requirements.

The Continuous Calibration met the requirements.

For Sample # WC-38, both soil vial did not purge therefore analyzed directly in methanol.

#### E. Additional Comments:

The soil samples results are based on a dry weight basis.



# **F. Manual Integration Comments:**

Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

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# **CASE NARRATIVE**

Louis Berger U.S., Inc., A WSP Company

Project Name: NYCDDC Phase II SCI Arthur Kill Road CEQR

Project # N/A

Chemtech Project # O1233

Test Name: SVOC-TCL BNA -20

# A. Number of Samples and Date of Receipt:

10 Solid samples were received on 01/19/2023. 1 Water sample was received on 01/19/2023.

#### **B.** Parameters

According to the Chain of Custody document, the following analyses were requested: Corrosivity, Diesel Range Organics, Gasoline Range Organics, Ignitability, Mercury, Metals ICP-TAL, METALS-TAL, Paint Filter, PCB, Pesticide-TCL, RCRA CHARACTERISTICS, Reactive Cyanide, Reactive Sulfide, SVOC-PAH, SVOC-TCL BNA -20, TCLP Extraction, TCLP ICP Metals, TCLP Mercury, TCLP METALS, VOC-TCLVOA-10 and VOC-TCLVOA-10. This data package contains results for SVOC-TCL BNA -20.

### C. Analytical Techniques:

The samples were analyzed on instrument BNA\_F using GC Column DB-UI 8270D which is 20 meters, 0.18 mm ID, 0.36 um df The samples were analyzed on instrument BNA\_G using GC Column ZB-Semi Volatiles Guardian which is 30 meters, 0.25 mm ID, 0.5 um df, Catalog # 7HG-G027-17-GGAThe samples were analyzed on instrument BNA\_P using GC Column ZB-Semi Volatiles Guardian which is 30 meters, 0.25 mm ID, 0.5 um df, Catalog # 7HG-G027-17-GGAThe analysis of SVOC-TCL BNA -20 was based on method 8270E and extraction was done based on method 3541.

#### D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria.

The Internal Standards Areas met the acceptable requirements.

The Retention Times were acceptable for all samples.

The MS recoveries met the requirements for all compounds.

The MSD recoveries met the acceptable requirements.

The RPD met criteria.

The Blank Spike met requirements for all samples.

The Blank analysis did not indicate the presence of lab contamination.

The % RSD is greater than 15% in the Initial Calibration (Method 8270-BF011923.M) for 2-Nitrophenol ,Benzoic acid, 2-Nitroaniline , 2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol, Butylbenzylphthalate ,Bis(2-ethylhexyl)phthalate, Indeno(1,2,3-cd)pyrene,



Benzo(g,h,i)perylene, these compounds are passing on Linear Regression and Di-n-octyl phthalate is passing on Quadratic regression.

The % RSD is greater than 15% in the Initial Calibration (8270-BP012323.M) for Hexachlorocyclopentadiene, 2 -Nitroaniline, 2,6-Dinitrotoluene, 3-Nitroaniline, 4-Nitrophenol, 2,4-Dinitrotoluene, 4-Nitroaniline, Pentachlorophenol these compounds are passing on Linear Regression and 2-Nitrophenol, 2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol passing on Quadratic regression.

The Continuous Calibration File ID BF132164.D met the requirements except for 2,4-Dinitrotoluene, The associate samples have no positive hit for these compounds therefore no corrective action was taken.

The Continuous Calibration File ID BP013571.D met the requirements except for 2,4-Dinitrophenol,2,4-Dinitrotoluene,2-Nitrophenol and 4,6-Dinitro-2-methylphenol, The associate samples have no positive hit for these compounds therefore no corrective action was taken.

The Tuning criteria met requirements.

Sample B-P38C was diluted due to high concentration.

#### E. Additional Comments:

This data Package has been revised to correct the Client ID of sample # 08 as per client request.

The Form 6 is not included in the data package because the Initial Calibration was performed using 7 points.

Please use %D calculated based on Avg RF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <15% for the Initial Calibration curve and use %D calculated based on Amount added and Calculated amount for all compounds using Linear Regression when the %RSD value for a compound is > 15% for the Initial Calibration curve for SW-846 analysis.

### F. Manual Integration Comments:

Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.

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# **CASE NARRATIVE**

Louis Berger U.S., Inc., A WSP Company

Project Name: NYCDDC Phase II SCI Arthur Kill Road CEQR

Project # N/A

Chemtech Project # O1233 Test Name: SVOC-PAH

# A. Number of Samples and Date of Receipt:

10 Solid samples were received on 01/19/2023. 1 Water sample was received on 01/19/2023.

#### **B.** Parameters

According to the Chain of Custody document, the following analyses were requested: Corrosivity, Diesel Range Organics, Gasoline Range Organics, Ignitability, Mercury, Metals ICP-TAL, METALS-TAL, Paint Filter, PCB, Pesticide-TCL, RCRA CHARACTERISTICS, Reactive Cyanide, Reactive Sulfide, SVOC-PAH, SVOC-TCL BNA -20, TCLP Extraction, TCLP ICP Metals, TCLP Mercury, TCLP METALS, VOC-TCLVOA-10 and VOC-TCLVOA-10. This data package contains results for SVOC-PAH.

### C. Analytical Techniques:

The samples were analyzed on instrument BNA\_F using GC Column DB-UI 8270D which is 20 meters, 0.18 mm ID, 0.36 um df The samples were analyzed on instrument BNA\_G using GC Column ZB-SemiVolatiles Guardian which is 30 meters, 0.25 mm ID, 0.5 um df, Catalog # 7HG-G027-17-GGAThe samples were analyzed on instrument BNA\_P using GC Column ZB-SemiVolatiles Guardian which is 30 meters, 0.25 mm ID, 0.5 um df, Catalog # 7HG-G027-17-GGAThe analysis of SVOC-PAH was based on method 8270E and extraction was done based on method 3541.

#### D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria.

The Internal Standards Areas met the acceptable requirements.

The Retention Times were acceptable for all samples.

The MS recoveries met the requirements for all compounds.

The MSD recoveries met the acceptable requirements.

The RPD met criteria.

The Blank Spike met requirements for all samples.

The Blank analysis did not indicate the presence of lab contamination.

The % RSD is greater than 15% in the Initial Calibration (8270-BP012322.M) for Indeno(1,2,3-cd)pyrene, Benzo(g,h,i)perylene, these compounds are passing on Linear Regression.



The Continuous Calibration met the requirements.

The Tuning criteria met requirements.

#### **E. Additional Comments:**

The Form 6 is not included in the data package because the Initial Calibration was performed using 7 points.

Please use %D calculated based on Avg RF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <15% for the Initial Calibration curve and use %D calculated based on Amount added and Calculated amount for all compounds using Linear Regression when the %RSD value for a compound is > 15% for the Initial Calibration curve for SW-846 analysis.

# **F. Manual Integration Comments:**

Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.

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# **CASE NARRATIVE**

Louis Berger U.S., Inc., A WSP Company

Project Name: NYCDDC Phase II SCI Arthur Kill Road CEQR

Project # N/A

Chemtech Project # O1233 Test Name: Pesticide-TCL

# A. Number of Samples and Date of Receipt:

10 Solid samples were received on 01/19/2023. 1 Water sample was received on 01/19/2023.

#### **B.** Parameters

According to the Chain of Custody document, the following analyses were requested: Corrosivity, Diesel Range Organics, Gasoline Range Organics, Ignitability, Mercury, Metals ICP-TAL, METALS-TAL, Paint Filter, PCB, Pesticide-TCL, RCRA CHARACTERISTICS, Reactive Cyanide, Reactive Sulfide, SVOC-PAH, SVOC-TCL BNA -20, TCLP Extraction, TCLP ICP Metals, TCLP Mercury, TCLP METALS, VOC-TCLVOA-10 and VOC-TCLVOA-10. This data package contains results for Pesticide-TCL.

### C. Analytical Techniques:

The analysis was performed on instrument ECD\_L. The front column is ZB-MR2 which is 30 meters, 0.32 mm ID, 0.25 um df, Catalog #: 7HMG017- 11 The rear column is ZB-MR1 which is 30 meters, 0.32 mm ID, 0. 5 um df,: Catalog # 7HM-G016-17. .The analysis of Pesticide-TCLs was based on method 8081B and extraction was done based on method 3541.

#### D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria.

The Retention Times were acceptable for all samples.

The MS recoveries met the requirements for all compounds.

The MSD recoveries met the acceptable requirements.

The RPD met criteria.

The Blank Spike met requirements for all samples.

The Blank analysis did not indicate the presence of lab contamination.

The Initial Calibration met the requirements.

The Continuous Calibration met the requirements.

### **E. Additional Comments:**

This data Package has been revised to correct the Client ID of sample # 08 as per client request.

The soil samples results are based on a dry weight basis.



# **F. Manual Integration Comments:**

Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

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# **CASE NARRATIVE**

Louis Berger U.S., Inc., A WSP Company

Project Name: NYCDDC Phase II SCI Arthur Kill Road CEQR

Project # N/A

**Chemtech Project # O1233** 

**Test Name: PCB** 

# A. Number of Samples and Date of Receipt:

10 Solid samples were received on 01/19/2023. 1 Water sample was received on 01/19/2023.

#### **B.** Parameters

According to the Chain of Custody document, the following analyses were requested: Corrosivity, Diesel Range Organics, Gasoline Range Organics, Ignitability, Mercury, Metals ICP-TAL, METALS-TAL, Paint Filter, PCB, Pesticide-TCL, RCRA CHARACTERISTICS, Reactive Cyanide, Reactive Sulfide, SVOC-PAH, SVOC-TCL BNA -20, TCLP Extraction, TCLP ICP Metals, TCLP Mercury, TCLP METALS, VOC-TCLVOA-10 and VOC-TCLVOA-10. This data package contains results for PCB.

### C. Analytical Techniques:

The analyses were performed on instrument GCECD\_P. The front column is ZB-MR1 which is 30 meters, 0.32 mm ID, 0.5 um df, Catalogue # 7HM-G016-17. The rear column is ZB-MR2 which is 30 meters, 0.32 mm ID, 0.25  $\mu$ m; Catalogue # 7HM-G017-11.The analysis of PCBs was based on method 8082A and extraction was done based on method 3541.

# **D. QA/ QC Samples:**

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria.

The Retention Times were acceptable for all samples.

The MS recoveries met the requirements for all compounds.

The MSD recoveries met the acceptable requirements.

The RPD met criteria.

The Blank Spike met requirements for all samples.

The Blank analysis did not indicate the presence of lab contamination.

The Initial Calibration met the requirements.

The Continuous Calibration met the requirements.

#### **E. Additional Comments:**

This data Package has been revised to correct the Client ID of sample # 08 as per client request.

The soil samples results are based on a dry weight basis.

#### **F. Manual Integration Comments:**

Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.



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# **CASE NARRATIVE**

Louis Berger U.S., Inc., A WSP Company

Project Name: NYCDDC Phase II SCI Arthur Kill Road CEQR

Project # N/A

**Chemtech Project # O1233** 

**Test Name: Diesel Range Organics** 

# A. Number of Samples and Date of Receipt:

10 Solid samples were received on 01/19/2023. 1 Water sample was received on 01/19/2023.

#### **B.** Parameters

According to the Chain of Custody document, the following analyses were requested: Corrosivity, Diesel Range Organics, Gasoline Range Organics, Ignitability, Mercury, Metals ICP-TAL, METALS-TAL, Paint Filter, PCB, Pesticide-TCL, RCRA CHARACTERISTICS, Reactive Cyanide, Reactive Sulfide, SVOC-PAH, SVOC-TCL BNA -20, TCLP Extraction, TCLP ICP Metals, TCLP Mercury, TCLP METALS, VOC-TCLVOA-10 and VOC-TCLVOA-10. This data package contains results for Diesel Range Organics.

### C. Analytical Techniques:

The analysis were performed on instrument FID\_F. The column is RXI-1MS which is 20 meters, 0.18mm ID, 0.18 um df, catalog 13302. The analysis of Diesel Range Organics was based on method 8015D and extraction was done based on method 3541.

### D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria.

The Retention Times were acceptable for all samples.

The MS recoveries met the requirements for all compounds.

The MSD recoveries met the acceptable requirements.

The RPD met criteria.

The Blank Spike met requirements for all samples.

The Blank analysis did not indicate the presence of lab contamination.

The Initial Calibration met the requirements.

The Continuous Calibration met the requirements.

Samples WC-38 was diluted due to bad matrix The above sample original run is reported as screening data in miscellaneous data.

# **E. Additional Comments:**

The soil samples results are based on a dry weight basis.

### **F. Manual Integration Comments:**



Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.

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# **CASE NARRATIVE**

Louis Berger U.S., Inc., A WSP Company

Project Name: NYCDDC Phase II SCI Arthur Kill Road CEQR

Project # N/A

**Chemtech Project # O1233** 

**Test Name: Mercury, Metals ICP-TAL** 

#### A. Number of Samples and Date of Receipt:

10 Solid samples were received on 01/19/2023. 1 Water sample was received on 01/19/2023.

#### **B. Parameters:**

According to the Chain of Custody document, the following analyses were requested: Corrosivity, Diesel Range Organics, Gasoline Range Organics, Ignitability, Mercury, Metals ICP-TAL, METALS-TAL, Paint Filter, PCB, Pesticide-TCL, RCRA CHARACTERISTICS, Reactive Cyanide, Reactive Sulfide, SVOC-PAH, SVOC-TCL BNA -20, TCLP Extraction, TCLP ICP Metals, TCLP Mercury, TCLP METALS, VOC-TCLVOA-10 and VOC-TCLVOA-10. This data package contains results for Mercury, Metals ICP-TAL.

# C. Analytical Techniques:

The analysis of Metals ICP-TAL was based on method 6010D, digestion based on method 3050 (soils). The analysis and digestion of Mercury was based on method 7471B.

#### D. OA/ OC Samples:

The Holding Times were met for all analysis.

The Blank Spike met requirements for all samples.

The Duplicate analysis met criteria for all samples.

The Matrix Spike (B-P17AMS) analysis met criteria for all samples except for

Antimony, Beryllium, and Copper due to chemical interference during digestion process.

The Matrix Spike Duplicate analysis met criteria for all samples.

The Blank analysis did not indicate the presence of lab contamination.

The Calibration met the requirements.

The Serial Dilution met the acceptable requirements.

#### **E. Additional Comments:**

This data Package has been revised to correct the Client ID of sample O1233-08 as per client request.

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# **CASE NARRATIVE**

Louis Berger U.S., Inc., A WSP Company

Project Name: NYCDDC Phase II SCI Arthur Kill Road CEQR

Project # N/A

**Chemtech Project # O1233** 

Test Name: TCLP ICP Metals, TCLP Mercury

#### A. Number of Samples and Date of Receipt:

10 Solid samples were received on 01/19/2023. 1 Water sample was received on 01/19/2023.

#### **B. Parameters:**

According to the Chain of Custody document, the following analyses were requested: Corrosivity, Diesel Range Organics, Gasoline Range Organics, Ignitability, Mercury, Metals ICP-TAL, METALS-TAL, Paint Filter, PCB, Pesticide-TCL, RCRA CHARACTERISTICS, Reactive Cyanide, Reactive Sulfide, SVOC-PAH, SVOC-TCL BNA -20, TCLP Extraction, TCLP ICP Metals, TCLP Mercury, TCLP METALS, VOC-TCLVOA-10 and VOC-TCLVOA-10. This data package contains results for TCLP ICP Metals, TCLP Mercury.

# C. Analytical Techniques:

The analysis of TCLP ICP Metals was based on method 6010D, digestion based on method 3010 (waters). The analysis and digestion of TCLP Mercury was based on method 7470A and TCLP extraction method was 1311.

#### D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Blank Spike met requirements for all samples.

The Duplicate analysis met criteria for all samples.

The Matrix Spike analysis met criteria for all samples.

The Matrix Spike Duplicate analysis met criteria for all samples.

The Blank analysis did not indicate the presence of lab contamination.

The Calibration met the requirements.

The Serial Dilution met the acceptable requirements.

#### **E. Additional Comments:**

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# **CASE NARRATIVE**

Louis Berger U.S., Inc., A WSP Company

Project Name: NYCDDC Phase II SCI Arthur Kill Road CEQR

Project # N/A

**Chemtech Project # O1233** 

Test Name: Corrosivity, Ignitability, Paint Filter, Reactive Cyanide, Reactive Sulfide

#### A. Number of Samples and Date of Receipt:

10 Solid samples were received on 01/19/2023.

1 Water sample was received on 01/19/2023.

#### **B. Parameters:**

According to the Chain of Custody document, the following analyses were requested: Corrosivity, Diesel Range Organics, Gasoline Range Organics, Ignitability, Mercury, Metals ICP-TAL, METALS-TAL, Paint Filter, PCB, Pesticide-TCL, RCRA CHARACTERISTICS, Reactive Cyanide, Reactive Sulfide, SVOC-PAH, SVOC-TCL BNA -20, TCLP Extraction, TCLP ICP Metals, TCLP Mercury, TCLP METALS, VOC-TCLVOA-10 and VOC-TCLVOA-10. This data package contains results for Corrosivity, Ignitability, Paint Filter, Reactive Cyanide, Reactive Sulfide.

# C. Analytical Techniques:

The analysis of Ignitability was based on method 1030, The analysis of Reactive Cyanide was based on method 9012B, The analysis of Reactive Sulfide was based on method 9034, The analysis of Corrosivity was based on method 9045D and The analysis of Paint Filter was based on method 9095B.

#### D. OA/ OC Samples:

The Holding Times were met for all samples except for WC-38 of Corrosivity as sample receive out of hold.

The Blank Spike met requirements for all samples.

The Duplicate analysis met criteria for all samples.

The Blank analysis did not indicate the presence of lab contamination.

The Calibration met the requirements.

#### **E. Additional Comments:**

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