



March 18, 2021

Mr. Frank Chinnici  
 Legacy Development  
 250 Ramsdell Avenue  
 Buffalo, New York 14216

Re: Phase II Environmental Investigation  
 Unaddressed Parcels off Grand Island Boulevard and Baseline Road  
 Grand Island, New York

Dear Mr. Chinnici:

TurnKey Environmental Restoration, LLC (TurnKey) has prepared this report to present the results of a Phase II Environmental Investigation performed at the following unaddressed parcels located in the Town of Grand Island, Erie County, New York (Site).

| Parcel No. | Parcel Address           | Size (acres) | Tax ID No.    | Current Owner                   | Current Use                |
|------------|--------------------------|--------------|---------------|---------------------------------|----------------------------|
| 1          | 0 Baseline Road          | 8.01         | 37.03-1-37.11 | Randon P. Hillock               | Vacant underutilized land. |
| 2          | 0 Grand Island Boulevard | 13.37        | 37.03-1-60    | John R. Simon Enterprises Ltd.  |                            |
| 3          | 0 Grand Island Boulevard | 2.94         | 37.03-1-21.1  | 1958 Grand Island Boulevard LLC |                            |

A Site Location and Vicinity Map is provided as Figure 1.

### **CURRENT SITE CONDITIONS AND BACKGROUND**

The 24.3-acre Site consisting of three contiguous parcels is currently vacant and underutilized land. Historic aerial photographs indicate unknown disturbances across the Site between 1958 and 2015. Additional information relative to the history of the Site, based on historic aerial photographs reviewed online at [historicaerials.com](http://historicaerials.com), is provided in the table below:

| Aerial Year       | Observations                                                                                                                                                                                     |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1958, 1963, 1966, | The Site appears to be mostly vacant undeveloped land with disturbances noted on the northern, central, and western portions of the Site.                                                        |
| 1972, 1995        | The Site appears similar to above with disturbances noted on the northern portion of the Site as well as the central and southeast portions of the Site.                                         |
| 2002              | Disturbances remain throughout the Site.                                                                                                                                                         |
| 2005 to 2017      | The Site appears generally similar to above with disturbances across the Site. However, an apparent pond is present on the northwestern portion of the Site in the area of a former disturbance. |

### **INVESTIGATION ACTIVITIES**

On February 18, 2021 and March 4, 2021, sixteen test pits identified as TP-1 through TP-16 were completed across the Site using a mini-excavator. Each test pit was completed to the maximum reach of the excavator at approximately six feet below ground surface (fbgs) or the

depth of groundwater infiltration noted at depths between three fbgs and five fbgs at test pits TP-3, TP-5, TP-13, TP-14, TP-15, and TP-16. Test pit locations are shown on Figure 2.

The soil/fill samples from each test pit were screened for volatile organics using a MiniRae 3000 Photoionization Detector (PID), visual characteristics for each sample were classified using the ASTM D2488 Visual-Manual Procedure Description, and olfactory observations, if any, were noted.

Thirteen subsurface soil/fill samples were submitted to the laboratory for analysis of polycyclic aromatic hydrocarbons (PAHs) and Resource Conservation and Recovery Act (RCRA) metals. Specifically, subsurface samples were collected from the soil/fill layers at TP-1 (0-0.5 fbgs), TP-2 (0-1 fbgs), TP-3 (1-1.5 fbgs), TP-5 (1-3 fbgs), TP-6 (0-2 fbgs), TP-7 (0-2 fbgs), TP-8 (0-2 fbgs), TP-9 (0.5-1.5 fbgs), TP-10 (0-2 fbgs), TP-12 (0-1 fbgs), TP-14 (2-3 fbgs), TP-15 (2-3 fbgs), TP-16 (0-2 fbgs).

All samples were collected in laboratory provided sample bottles and were cooled to 4<sup>0</sup> C prior to transport.

## **FIELD OBSERVATIONS AND FINDINGS**

In general, fill material was identified at 12 of 16 investigation locations. Specifically, fill material consisting of sand, silty sand or gravel mixed with coal, graphite, cinders, ash and/or fragments of wood, concrete, glass, brick or metal was observed from the ground surface to depths up to 3 fbgs. The fill material is underlain by native soils consisting of sandy lean clay to a depth of at least 6 fbgs.

Test pit details with additional information relative to lithology and field observations are included in Table 2. Photographs taken during the work are included in Appendix A.

## **LABORATORY ANALYTICAL RESULTS**

Laboratory analytical reports are provided in Appendix B. Analytical results were compared to 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives (USCOs), Restricted-Residential Soil Cleanup Objectives (RRSCOs), Commercial SCOs (CSCOs), and Industrial SCOs (ISCOs). We note that as the Site is slated for residential redevelopment, RRSCOs are the most applicable SCOs for this end use.

As summarized on Table 1 and Figure 3, one or more individual PAHs exceeded their respective ISCOs at three soil/fill samples collected from Parcels 1 and 2 at TP-6 (0-2 fbgs), TP-7 (0-2 fbgs), and TP-10 (0-2 fbgs). The highest PAH concentrations were identified in the fill material at TP-7 on Parcel 2 from 0-2 fbgs.

Regarding metals, arsenic exceeded its ISCO of 16 mg/kg at Parcel 3 at TP-15 (29 milligrams per kilogram, mg/kg) and TP-16 (30.2 mg/kg). Barium exceeded its CSCO of 400 mg/kg at Parcel 3 at TP-14 (776 mg/kg). Cadmium and mercury exceeded their respective CSCOs at Parcel 1 at TP-10. In addition, lead exceeded its RRSCO at TP-10.

In summary, sampling indicates PAHs and/or metals at concentrations exceeding RRSCOs, CSCOs and/or ISCOs at samples from each of the three parcels.

### CONCLUSIONS

The Site soil/fill is impacted by PAHs and/or metals with concentrations exceeding Part 375 RRSCOs (the applicable SCO for the Site based on the planned redevelopment as a residential development) in soil/fill samples collected across the Site. Based on this information, as urban fill was observed by TurnKey at a majority of the investigation locations, it appears that PAH- and/or metals-impacted soil/fill is present across the Site.

We understand that the Site is being considered for redevelopment. Based on the findings detailed above, the Site is a potential candidate for the New York State BCP. Regardless of whether the BCP is pursued, PAHs- and metals-impacted soil/fill materials present on-Site will require exposure control, remediation, and/or proper soil management either prior to or during the redevelopment project.

### DECLARATIONS/LIMITATIONS

This report has been prepared for the exclusive use of Legacy Development. The contents of this report are limited to information available at the time of the subject site investigation. Data provided by others as referenced herein is assumed to be accurate and reliable. The findings herein may be relied upon only at the discretion of Legacy Development and are limited to the terms and conditions identified in the agreement between TurnKey and its client. Use of or reliance upon this report or its findings by any other person or entity is prohibited without written permission of TurnKey Environmental Restoration, LLC.

Please contact us if you have any questions or require additional information.

Sincerely,  
TurnKey Environmental Restoration, LLC

  
Michael A. Lesakowski  
Principal

  
Bryan W. Mayback  
Project Manager

## TABLES





**TABLE 1**  
**SUMMARY OF SOIL ANALYTICAL RESULTS**

**GRAND ISLAND SITE**  
**GRAND ISLAND, NEW YORK**

| PARAMETER <sup>1</sup>                                | Unrestricted<br>Use SCOs <sup>2</sup> | Restricted<br>Residential<br>Use SCOs <sup>2</sup> | Commercial<br>Use SCOs <sup>2</sup> | Industrial<br>Use SCOs <sup>2</sup> | SAMPLE LOCATION (DEPTH) |                |                  |                |                |                |                |                    |                 |                 |                 |                 |                 |
|-------------------------------------------------------|---------------------------------------|----------------------------------------------------|-------------------------------------|-------------------------------------|-------------------------|----------------|------------------|----------------|----------------|----------------|----------------|--------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|                                                       |                                       |                                                    |                                     |                                     | TP-1<br>(0-0.5')        | TP-2<br>(0-1') | TP-3<br>(1-1.5') | TP-5<br>(1-3') | TP-6<br>(0-2') | TP-7<br>(0-2') | TP-8<br>(0-2') | TP-9<br>(0.5-1.5') | TP-10<br>(0-2') | TP-12<br>(0-1') | TP-14<br>(2-3') | TP-15<br>(2-3') | TP-16<br>(0-2') |
| Sample Date                                           | 02/18/2021                            |                                                    |                                     |                                     |                         |                |                  |                |                |                |                |                    | 03/04/2021      |                 |                 |                 |                 |
| Polyaromatic Hydrocarbons (PAHs) - mg/Kg <sup>3</sup> |                                       |                                                    |                                     |                                     |                         |                |                  |                |                |                |                |                    |                 |                 |                 |                 |                 |
| Acenaphthene                                          | 20                                    | 100                                                | 500                                 | 1000                                | ND                      | ND             | ND               | ND             | ND             | 2.5            | ND             | ND                 | ND              | ND              | ND              | ND              | ND              |
| Fluoranthene                                          | 100                                   | 100                                                | 500                                 | 1000                                | 0.7 J                   | 0.056 J        | 0.87 J           | 1 J            | 5              | 36             | ND             | 1.2                | 11              | 1.5             | ND              | ND              | ND              |
| Naphthalene                                           | 12                                    | 100                                                | 500                                 | 1000                                | ND                      | ND             | ND               | ND             | ND             | 0.85 J         | ND             | ND                 | ND              | ND              | ND              | ND              | ND              |
| Benzo(a)anthracene                                    | 1                                     | 1                                                  | 5.6                                 | 11                                  | 0.34 J                  | ND             | 0.41 J           | 0.52 J         | 2.3            | 11             | ND             | 0.51               | 5.5             | 0.7             | ND              | ND              | ND              |
| Benzo(a)pyrene                                        | 1                                     | 1                                                  | 1                                   | 1.1                                 | 0.33 J                  | ND             | 0.43 J           | 0.49 J         | 2.2            | 11             | ND             | 0.56               | 6.2             | 0.75            | ND              | ND              | ND              |
| Benzo(b)fluoranthene                                  | 1                                     | 1                                                  | 5.6                                 | 11                                  | 0.36 J                  | ND             | 0.52 J           | 0.52 J         | 2.5            | 15             | ND             | 0.61               | 7               | 0.8             | ND              | ND              | ND              |
| Benzo(k)fluoranthene                                  | 0.8                                   | 3.9                                                | 56                                  | 110                                 | 0.17 J                  | ND             | 0.2 J            | 0.29 J         | 1.2            | 6.9            | ND             | 0.31               | 4.2 J           | 0.4             | ND              | ND              | ND              |
| Chrysene                                              | 1                                     | 3.9                                                | 56                                  | 110                                 | 0.28 J                  | ND             | 0.33 J           | 0.39 J         | 2.1            | 15             | ND             | 0.49               | 5.7             | 0.69            | ND              | ND              | ND              |
| Acenaphthylene                                        | 100                                   | 100                                                | 500                                 | 1000                                | ND                      | ND             | ND               | ND             | 0.73 J         | 0.25 J         | ND             | 0.15 J             | ND              | 0.22 J          | ND              | ND              | ND              |
| Anthracene                                            | 100                                   | 100                                                | 500                                 | 1000                                | ND                      | ND             | ND               | ND             | 0.62 J         | 2.2            | ND             | 0.14 J             | 1.4 J           | 0.19 J          | ND              | ND              | ND              |
| Benzo(ghi)perylene                                    | 100                                   | 100                                                | 500                                 | 1000                                | 0.2 J                   | ND             | 0.28 J           | 0.32 J         | 1.3            | 6.3            | ND             | 0.36               | 4.9             | 0.45            | ND              | ND              | ND              |
| Fluorene                                              | 30                                    | 100                                                | 500                                 | 1000                                | ND                      | ND             | ND               | ND             | 0.16 J         | 2.3            | ND             | 0.056 J            | ND              | 0.077 J         | ND              | ND              | ND              |
| Phenanthrene                                          | 100                                   | 100                                                | 500                                 | 1000                                | 0.41 J                  | ND             | 0.53 J           | 0.64 J         | 2              | 29             | ND             | ND                 | 5               | 0.72            | ND              | ND              | ND              |
| Dibenzo(a,h)anthracene                                | 0.33                                  | 0.33                                               | 0.56                                | 1.1                                 | ND                      | ND             | ND               | ND             | 0.41 J         | 2.1            | ND             | 0.095 J            | 1.6 J           | 0.15 J          | ND              | ND              | ND              |
| Indeno(1,2,3-cd)pyrene                                | 0.5                                   | 0.5                                                | 5.6                                 | 11                                  | 0.18 J                  | ND             | 0.25 J           | 0.3 J          | 1.2            | 6.4            | ND             | ND                 | 4.5 J           | 0.43            | ND              | ND              | ND              |
| Pyrene                                                | 100                                   | 100                                                | 500                                 | 1000                                | 0.6 J                   | 0.041 J        | 0.75 J           | 0.88 J         | 4.1            | 26             | ND             | ND                 | 9.7             | 1.2             | ND              | ND              | ND              |
| Metals - mg/Kg                                        |                                       |                                                    |                                     |                                     |                         |                |                  |                |                |                |                |                    |                 |                 |                 |                 |                 |
| Arsenic                                               | 13                                    | 16                                                 | 16                                  | 16                                  | 5.3                     | 5.2            | 7                | 7              | 6.1            | 4.1            | 3.4            | 11.7               | 10.6            | 13              | 15.3            | 29              | 30.2            |
| Barium                                                | 350                                   | 400                                                | 400                                 | 10000                               | 103 B F1                | 124 B          | 123 B            | 172 B          | 86.4 B         | 131 B          | 69.5 B         | 127                | 184             | 104             | 776             | 230             | 394             |
| Cadmium                                               | 2.5                                   | 4.3                                                | 9.3                                 | 60                                  | 0.57 B                  | 0.42 B         | 0.74 B           | 0.8 B          | 1.3 B          | 0.39 B         | 0.4 B          | 0.81               | 56.8            | 1               | 0.35 J          | 0.4             | 0.28            |
| Chromium                                              | 31                                    | 180                                                | 1500                                | 6800                                | 23.5                    | 30.8           | 33.7             | 60.7           | 27.6           | 60.7           | 14.9           | 33.6               | 68.9            | 42.6            | 154             | 30.1            | 35.7            |
| Lead                                                  | 64                                    | 400                                                | 1000                                | 3900                                | 72.7 F1                 | 34.7           | 100              | 144            | 139            | 62.8           | 55.1           | 54.6               | 815             | 122             | 10.1            | 11.7            | 10.8            |
| Mercury                                               | 0.18                                  | 0.81                                               | 2.8                                 | 5.7                                 | 0.12                    | 0.093          | 0.22             | 0.099          | 0.19           | 0.042          | 0.063          | 0.11               | 4.4             | 0.21            | 0.027           | 0.2             | 0.077           |
| Selenium                                              | 3.9                                   | 180                                                | 1500                                | 6800                                | ND                      | ND             | 1 J              | 0.74 J         | 0.57 J         | 0.64 J         | ND             | 0.91 J             | 1.7             | 0.7 J           | ND              | 1.1 J           | 0.81 J          |
| Silver                                                | 2                                     | 180                                                | 1500                                | 6800                                | ND                      | ND             | 0.37 J           | 0.4 J          | ND             | 0.3 J          | 0.25 J         | ND                 | 3.5             | ND              | ND              | ND              | ND              |

**Notes:**

- Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
- Values per 6NYCRR Part 375 Soil Cleanup Objectives (SCOs).
- Sample results were reported by the laboratory in ug/kg and converted to mg/kg for comparisons to SCLs

**Definitions:**

ND = Parameter not detected above laboratory detection limit.

J = Estimated value; result is less than the sample quantitation limit but greater than zero.

B = Analyte was detected in associated method blank.

|             |                                                                              |
|-------------|------------------------------------------------------------------------------|
| <b>Bold</b> | : Results exceed Part 375 Unrestricted Use Soil Cleanup Objectives           |
| <b>Bold</b> | : Results exceed Part 375 Restricted Residential Use Soil Cleanup Objectives |
| <b>Bold</b> | : Results exceed Part 375 Commercial Use Soil Cleanup Objectives             |
| <b>Bold</b> | : Results exceed Part 375 Industrial Use Soil Cleanup Objectives             |



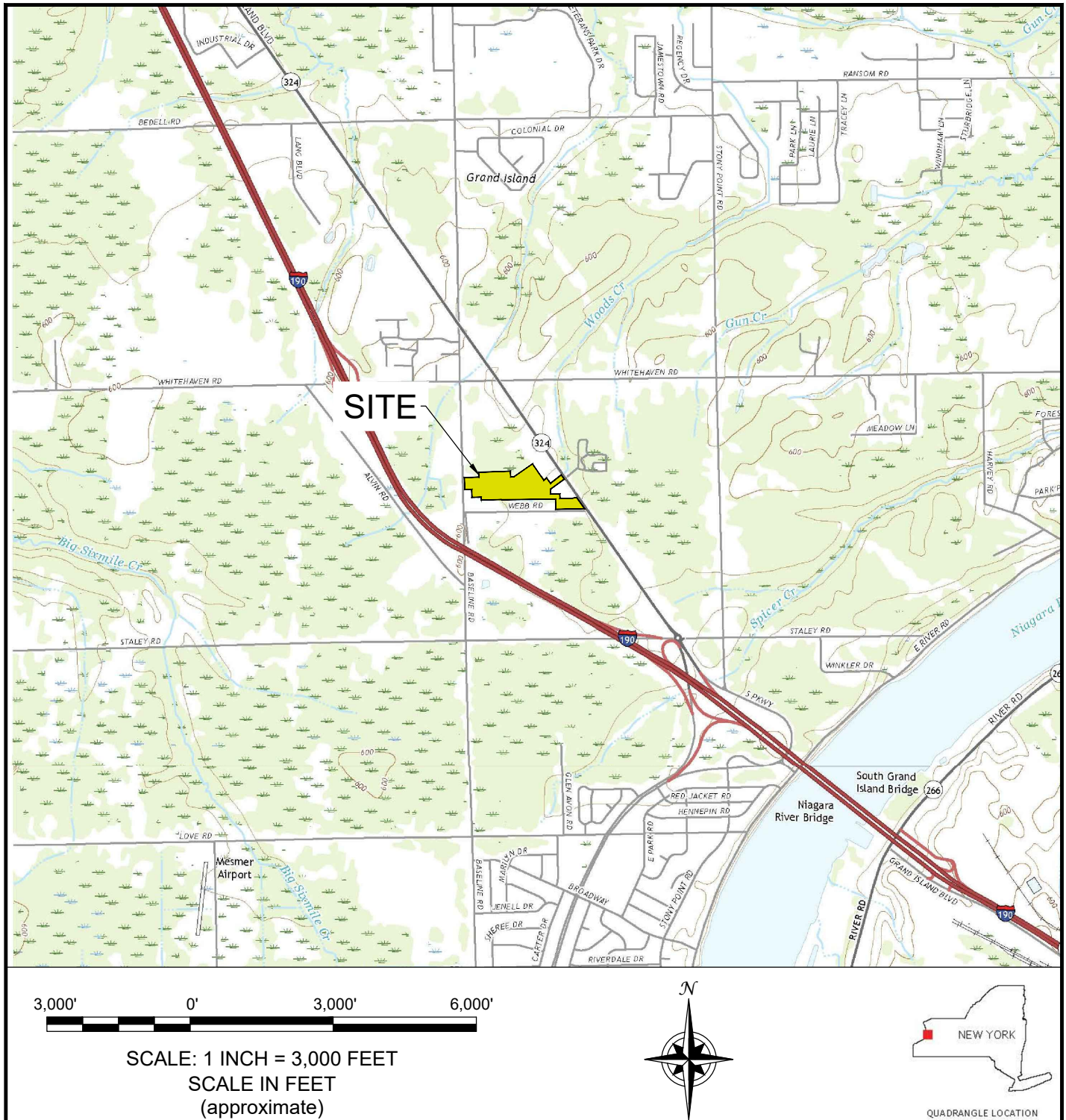
TABLE 2  
SUMMARY OF SUBSURFACE FIELD OBSERVATIONS  
PHASE II ENVIRONMENTAL INVESTIGATION REPORT  
GRAND ISLAND SITE  
GRAND ISLAND, NEW YORK

| Location | Date      | Parcel       | Fill Present | Odors | Water Present | Depth of Test Pit (fbgs) | Thickness of Fill (ft) | Length of Test Pits (ft) | Test Pit Width (ft) | PID Measurements | Sample Depth (ft) | Depth (fbgs) and Soil Description                                                                                                         |
|----------|-----------|--------------|--------------|-------|---------------|--------------------------|------------------------|--------------------------|---------------------|------------------|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| TP-1     | 02/18/21  | 37.02-137.11 | Yes          | No    | No            | 5                        | 8"                     | 63                       | 2                   | 0                | 0-0.6 ft          | 0 to 8 in: FILL - Dark brown, moist, mostly silty sand, few brick, few cinders, medium dense                                              |
|          |           |              |              |       |               |                          |                        |                          |                     | 0                |                   | 8 in to 5 ft: SANDY LEAN CLAY - Reddish brown, moist, mostly clay, with some fine sand, very stiff.                                       |
| TP-2     | 02/18/21  | 37.02-137.11 | No           | No    | No            | 6                        | N/a                    | 60                       | 2                   | 0                | 0-1 ft            | 0 to 1 ft: SILTY SAND - Brown, moist, mostly fine sand, some silt, medium dense, no odors                                                 |
|          |           |              |              |       |               |                          |                        |                          |                     | 0                |                   | 1 to 6 ft: SANDY LEAN CLAY - Reddish brown, moist, mostly clay, with some fine sand, very stiff                                           |
| TP-3     | 02/18/21  | 37.02-137.11 | Yes          | No    | Yes           | 6                        | 1.5                    | 30                       | 2                   | 0                |                   | 0 to 1 ft: SILTY SAND - Brown, moist, mostly fine sand, some silt, medium dense, no odors                                                 |
|          |           |              |              |       |               |                          |                        |                          |                     | 0                | 1-1.5 ft          | 1 to 1.5 ft: SILTY SAND WITH FILL - Black, wet, mostly organics (wood, peat) some silty sand, medium dense, no odors, water rushing in    |
|          |           |              |              |       |               |                          |                        |                          |                     | 0                |                   | 1.5 to 6 ft: SANDY LEAN CLAY - Reddish brown, moist, mostly clay, with some fine sand, very stiff                                         |
| TP-4     | 2/18/2021 | 37.03-1-60   | No           | No    | No            | 5                        | N/a                    | 40                       | 2                   | 0                |                   | 0 to 5 ft: SANDY LEAN CLAY - Reddish brown, moist, mostly clay, with some fine sand, very stiff                                           |
| TP-5     | 02/18/21  | 37.03-1-60   | Yes          | No    | Yes           | 4                        | 3                      | 50                       | 2                   | 0                |                   | 0 - 1 ft: REWORKED SANDY LEAN CLAY - Dark brown, moist, mostly silt, some fine sand, with little clay, trace fine gravel.                 |
|          |           |              |              |       |               |                          |                        |                          |                     | 0                |                   | 1 to 3 ft. FILL - Black/brown, moist, mostly fill (wood, brick, cinders, glass, ash), water rushing in at 3 feet, loose when disturbed    |
|          |           |              |              |       |               |                          |                        |                          |                     | 0                |                   | 3 to 4 ft: SANDY LEAN CLAY - Reddish brown, moist, mostly clay, with some fine sand, very stiff                                           |
| TP-6     | 02/18/21  | 37.03-1-60   | Yes          | No    | No            | 5                        | 3                      | 25                       | 2                   | 0                | 1-3 ft            | 0 to 3 ft: FILL - Dark brown, moist, mostly silty sand, some fill (coal, brick, graphite, wood), medium dense                             |
|          |           |              |              |       |               |                          |                        |                          |                     | 0                |                   | 3 to 5 ft: SANDY LEAN CLAY - Reddish brown, moist, mostly clay, with some fine sand, very stiff                                           |
| TP-7     | 02/18/21  | 37.03-1-60   | Yes          | No    | No            | 5                        | 2                      | 35                       | 2                   | 0                | 0-2 ft            | 0 to 2 ft: FILL - Grey/brown, moist, mostly fine sand, some fill (concrete, brick, asphalt, wood), medium dense, no odors                 |
|          |           |              |              |       |               |                          |                        |                          |                     | 0                |                   | 2 to 5 ft: SANDY LEAN CLAY - Reddish brown, moist, mostly clay, with some fine sand, very stiff                                           |
| TP-8     | 02/18/21  | 37.03-1-60   | Yes          | No    | No            | 5                        | 2                      | 35                       | 2                   | 0                | 0-2 ft            | 0 to 2 ft: FILL - Grey/brown, moist, mostly fine sand, some fill (concrete, brick, asphalt, wood, metal, cinders), medium dense, no odors |
|          |           |              |              |       |               |                          |                        |                          |                     | 0                |                   | 2 to 5 ft: SANDY LEAN CLAY - Reddish brown, moist, mostly clay, with some fine sand, very stiff                                           |
| TP-9     | 03/04/21  | 37.02-137.11 | Yes          | No    | Yes           | 5                        | 2                      | 30                       | 2                   | 0                |                   | 0 - 6 in: REWORKED SANDY LEAN CLAY WITH GRAVEL - Reddish brown, moist, mostly clay with some fine sand and gravel, stiff                  |
|          |           |              |              |       |               |                          |                        |                          |                     | 0                | 0.5-1.5 ft        | 0.5 to 1.5 ft FILL - Brown/dark brown, mostly silty sand, some fill (slag, brick, cinders, coal), loose when disturbed                    |
|          |           |              |              |       |               |                          |                        |                          |                     | 0                |                   | 1.5 - 5 ft: SANDY LEAN CLAY - reddish brown, Wet water rushing into test pit, mostly clay, some fine sand, stiff.                         |
| TP-10    | 03/04/21  | 37.02-137.11 | Yes          | No    | No            | 5                        | 2                      | 30                       | 2                   | 0                | 0-2 ft            | 0 to 2 ft: FILL- Mostly subangular gravel, some fill (brick, wood, concrete, cinders, green and blue gravel, loose when disturbed         |
|          |           |              |              |       |               |                          |                        |                          |                     | 0                |                   | 2- 5 ft: SANDY LEAN CLAY - Reddish brown, moist, mostly clay, some fine sand, stiff.                                                      |
| TP-11    | 03/04/21  | 37.03-1-60   | Yes          | No    | No            | 6                        | 6                      | 25                       | 2                   | 0                |                   | 0 to 6 ft: REWORKED SOILS- Black/ brown, moist, mixture of silty sand and sandy lean clay with few fill (brick, cinders), stiff           |
| TP-12    | 03/04/21  | 37.03-1-60   | Yes          | No    | No            | 5                        | 1                      | 30                       | 2                   | 0                | 0-1 ft            | 0 to 1 ft FILL - Brown, moist, mostly silty sand, some fill (cinders, glass, brick, slag), medium dense                                   |
|          |           |              |              |       |               |                          |                        |                          |                     | 0                |                   | 1 - 5 ft: SANDY LEAN CLAY - Reddish brown, moist, mostly clay, some fine sand, stiff.                                                     |
| TP-13    | 03/04/21  | 37.03-1-21.1 | No           | No    | Yes           | 5                        | n/a                    | 20                       | 2                   | 0                |                   | 0 - 0.3 ft: TOPSOIL - Dark brown, moist, mostly silt, some fine sand, medium dense                                                        |
|          |           |              |              |       |               |                          |                        |                          |                     | 0                |                   | 0.3 - 4 ft: FINE SAND WITH SILT - Black, moist to wet (3') mostly fine sand, some silt, medium dense                                      |
|          |           |              |              |       |               |                          |                        |                          |                     | 0                |                   | 4- 5 ft: SANDY LEAN CLAY - Reddish brown, moist, mostly clay, some fine sand, stiff.                                                      |
| TP-14    | 03/04/21  | 37.03-1-21.1 | Yes          | No    | Yes           | 5                        | 3                      | 20                       | 2                   | 0                |                   | 0 - 0.25 ft: TOPSOIL - Dark brown, moist, mostly silt, some fine sand, cinders and brick, roots.                                          |
|          |           |              |              |       |               |                          |                        |                          |                     | 0                | 0.25-3 ft         | 0.25 - 3 ft: FILL - Black, moist, mostly black fines, some fine sand, little fill (cinders, wood), wet at 3'                              |
|          |           |              |              |       |               |                          |                        |                          |                     | 0                |                   | 3- 5 ft: SANDY LEAN CLAY - Reddish brown, moist, mostly clay, some fine sand, stiff.                                                      |
| TP-15    | 03/04/21  | 37.03-1-21.1 | Yes          | No    | Yes           | 5                        | 3                      | 20                       | 2                   | 0                |                   | 0 - 0.5 ft: TOPSOIL - Dark brown, moist, mostly silt, some fine sand, cinders and brick, roots.                                           |
|          |           |              |              |       |               |                          |                        |                          |                     | 0                |                   | 0.5 - 2 ft: FINE SAND WITH SILT - Black, moist to wet (3') mostly fine sand, some silt, medium dense                                      |
|          |           |              |              |       |               |                          |                        |                          |                     | 0                | 2-3 ft            | 2 - 3 ft: FILL - Black, wet (3') mostly fine sand, some fill (few slag with iron staining), loose when disturbed                          |
|          |           |              |              |       |               |                          |                        |                          |                     | 0                |                   | 3- 5 ft: SANDY LEAN CLAY - Reddish brown, moist, mostly clay, some fine sand, stiff.                                                      |
| TP-16    | 03/04/21  | 37.03-1-21.1 | Yes          | No    | Yes           | 6                        | 1                      | 20                       | 2                   | 0                | 0-2 ft            | 0 - 1 ft: TOPSOIL - Dark brown, moist, mostly silt, some fine sand, cinders and brick, roots.                                             |
|          |           |              |              |       |               |                          |                        |                          |                     | 0                |                   | 1 - 1.25 ft: FILL - Black, moist, mostly cinders, some silty sand, medium dense                                                           |
|          |           |              |              |       |               |                          |                        |                          |                     | 0                |                   | 1.25 - 5 ft: FINE SAND - Tan, wet, mostly fine sand, medium dense, no odors                                                               |
|          |           |              |              |       |               |                          |                        |                          |                     | 0                |                   | 5 - 6 ft: REWORKED SANDY LEAN CLAY - Reddish brown, moist, mostly clay, some fine sand, stiff.                                            |

Definitions:  
fbgs = feet below ground surface

## FIGURES

**FIGURE 1**



**2558 HAMBURG TURNPIKE**  
**SUITE 300**  
**BUFFALO, NY 14218**  
**(716) 858-0635**

PROJECT NO.: T0395-021-001

DATE: MARCH 2021

DRAFTED BY: CNK

## SITE LOCATION AND VICINITY MAP

PHASE II ENVIRONMENTAL INVESTIGATION  
 GRAND ISLAND BOULEVARD AND BASELINE ROAD SITE

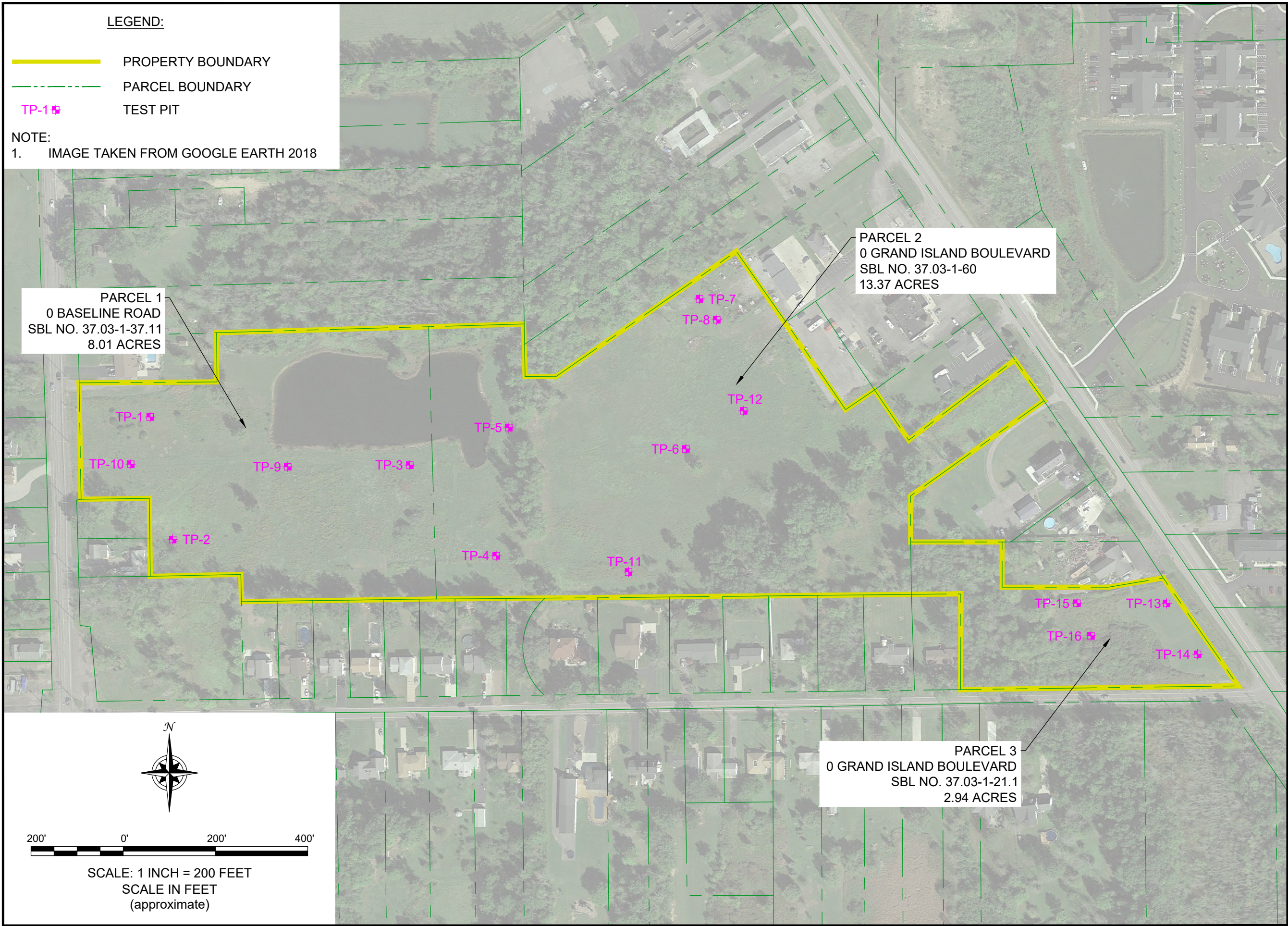
GRAND ISLAND, NEW YORK  
 PREPARED FOR  
 LEGACY DEVELOPMENT

**DISCLAIMER:**  
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F:\CAD\TurnKey\Legacy Development\Grand Island Site\Phase II\Figure 2: Site Plan (Aerial).dwg, 3/18/2021 11:20:21 AM, DWG To PDF.pc3

DATE: MARCH 2021  
DRAFTED BY: CNK



## INVESTIGATION LOCATIONS

PHASE II ENVIRONMENTAL INVESTIGATION  
GRAND ISLAND BOULEVARD AND BASELINE ROAD SITE  
GRAND ISLAND, NEW YORK  
PREPARED FOR  
LEGACY DEVELOPMENT

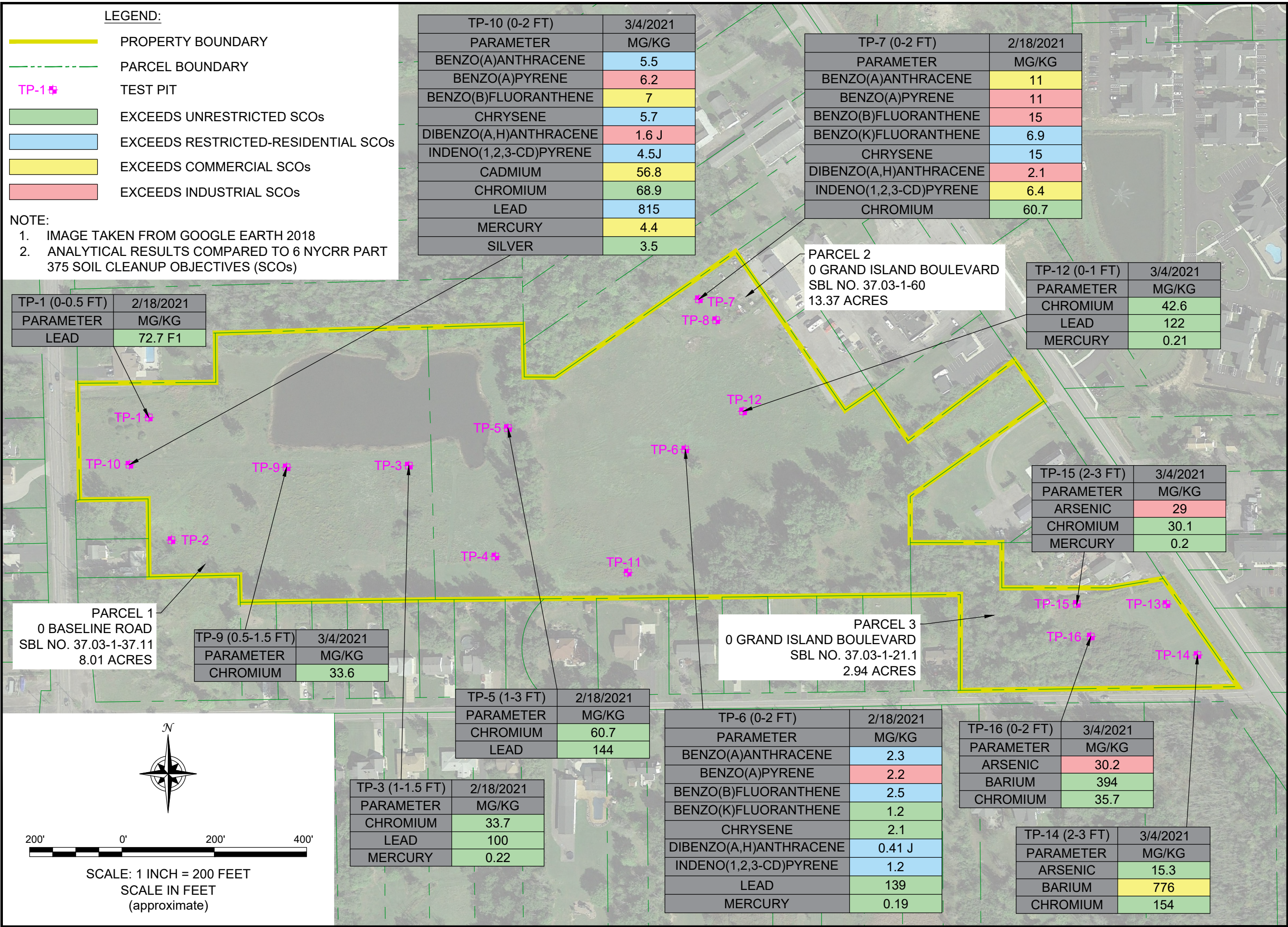
**FIGURE 2**



JOB NO.: T0395-021-001

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INVESTIGATION LOCATIONS AND AREAS OF CONCERN

PHASE II ENVIRONMENTAL INVESTIGATION  
GRAND ISLAND BOULEVARD AND BASELINE ROAD SITE  
GRAND ISLAND, NEW YORK  
PREPARED FOR  
LEGACY DEVELOPMENT

FIGURE 3



JOB NO.: T0395-021-001



# APPENDIX A

## PHOTO LOG

## SITE PHOTOGRAPHS

Photo 1:



Photo 2:



Photo 3:



Photo 4:



Photo 1,2: View of the fill materials noted at the Site.

Photo 3: View of a typical test pit at the Site with fill materials.

Photo 4: View of the fill materials noted on the southern portion of the Site.

Grand Island Site





## SITE PHOTOGRAPHS

Photo 5:



Photo 6:



Photo 7:



Photo 8:



Photo 5: View of the fill materials noted at TP-15.

Photo 6: View of the fill materials noted at TP-16.

Photo 7: View of the fill materials noted at TP-5.

Photo 8: Another view of TP-5.

**Grand Island Site**



## APPENDIX B

### LABORATORY ANALYTICAL REPORT



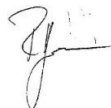
## ANALYTICAL REPORT

Eurofins TestAmerica, Buffalo  
10 Hazelwood Drive  
Amherst, NY 14228-2298  
Tel: (716)691-2600

Laboratory Job ID: 480-181318-1  
Client Project/Site: Legacy Grand Island

For:  
Benchmark Env. Eng. & Science, PLLC  
2558 Hamburg Turnpike  
Lackawanna, New York 14218

Attn: Bryan Mayback



Authorized for release by:  
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### LINKS

Review your project  
results through  
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Have a Question?



Visit us at:  
[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

*The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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## Definitions/Glossary

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Legacy Grand Island

Job ID: 480-181318-1

### Qualifiers

#### GC/MS Semi VOA

| Qualifier | Qualifier Description                                                                                          |
|-----------|----------------------------------------------------------------------------------------------------------------|
| J         | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |
| S1-       | Surrogate recovery exceeds control limits, low biased.                                                         |
| S1+       | Surrogate recovery exceeds control limits, high biased.                                                        |

#### Metals

| Qualifier | Qualifier Description                                                                                          |
|-----------|----------------------------------------------------------------------------------------------------------------|
| B         | Compound was found in the blank and sample.                                                                    |
| F1        | MS and/or MSD recovery exceeds control limits.                                                                 |
| J         | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

### Glossary

| Abbreviation   | These commonly used abbreviations may or may not be present in this report.                                 |
|----------------|-------------------------------------------------------------------------------------------------------------|
| □              | Listed under the "D" column to designate that the result is reported on a dry weight basis                  |
| %R             | Percent Recovery                                                                                            |
| CFL            | Contains Free Liquid                                                                                        |
| CFU            | Colony Forming Unit                                                                                         |
| CNF            | Contains No Free Liquid                                                                                     |
| DER            | Duplicate Error Ratio (normalized absolute difference)                                                      |
| Dil Fac        | Dilution Factor                                                                                             |
| DL             | Detection Limit (DoD/DOE)                                                                                   |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC            | Decision Level Concentration (Radiochemistry)                                                               |
| EDL            | Estimated Detection Limit (Dioxin)                                                                          |
| LOD            | Limit of Detection (DoD/DOE)                                                                                |
| LOQ            | Limit of Quantitation (DoD/DOE)                                                                             |
| MCL            | EPA recommended "Maximum Contaminant Level"                                                                 |
| MDA            | Minimum Detectable Activity (Radiochemistry)                                                                |
| MDC            | Minimum Detectable Concentration (Radiochemistry)                                                           |
| MDL            | Method Detection Limit                                                                                      |
| ML             | Minimum Level (Dioxin)                                                                                      |
| MPN            | Most Probable Number                                                                                        |
| MQL            | Method Quantitation Limit                                                                                   |
| NC             | Not Calculated                                                                                              |
| ND             | Not Detected at the reporting limit (or MDL or EDL if shown)                                                |
| NEG            | Negative / Absent                                                                                           |
| POS            | Positive / Present                                                                                          |
| PQL            | Practical Quantitation Limit                                                                                |
| PRES           | Presumptive                                                                                                 |
| QC             | Quality Control                                                                                             |
| RER            | Relative Error Ratio (Radiochemistry)                                                                       |
| RL             | Reporting Limit or Requested Limit (Radiochemistry)                                                         |
| RPD            | Relative Percent Difference, a measure of the relative difference between two points                        |
| TEF            | Toxicity Equivalent Factor (Dioxin)                                                                         |
| TEQ            | Toxicity Equivalent Quotient (Dioxin)                                                                       |
| TNTC           | Too Numerous To Count                                                                                       |

# Case Narrative

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Legacy Grand Island

Job ID: 480-181318-1

## Job ID: 480-181318-1

Laboratory: Eurofins TestAmerica, Buffalo

### Narrative

#### Job Narrative 480-181318-1

### Comments

No additional comments.

### Receipt

The samples were received on 2/19/2021 12:10 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.6° C.

### GC/MS Semi VOA

Method 8270D: The following samples were diluted due to color, appearance, and viscosity: TP-1 0-6 IN (480-181318-1), TP-3 1-1.5 FT (480-181318-3), TP-5 1-3 FT (480-181318-4), TP-6 0-2 FT (480-181318-5), TP-7 0-2 FT (480-181318-6), TP-8 0-2 FT (480-181318-7), (480-181318-A-1-D MS) and (480-181318-A-1-E MSD). Elevated reporting limits (RL) are provided.

Method 8270D: The following sample was diluted due to the nature of the sample matrix: TP-8 0-2 FT (480-181318-7). As such, surrogate recoveries are below the calibration range or are not reported, and elevated reporting limits (RLs) are provided.

Method 8270D: Six surrogates are used for this analysis. The laboratory's SOP allows one acid and one base of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: TP-7 0-2 FT (480-181318-6). These results have been reported and qualified.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

### Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

### Organic Prep

Method 3550C: Due to the matrix, the following sample could not be concentrated to the final method required volume: TP-8 0-2 FT (480-181318-7). The reporting limits (RLs) are elevated proportionately.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.



## Detection Summary

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Legacy Grand Island

Job ID: 480-181318-1

### Client Sample ID: TP-1 0-6 IN

### Lab Sample ID: 480-181318-1

| Analyte                | Result | Qualifier | RL    | MDL   | Unit  | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|-------|-------|-------|---------|---|--------|-----------|
| Benzo[a]anthracene     | 340    | J         | 1100  | 110   | ug/Kg | 5       | ✱ | 8270D  | Total/NA  |
| Benzo[a]pyrene         | 330    | J         | 1100  | 160   | ug/Kg | 5       | ✱ | 8270D  | Total/NA  |
| Benzo[b]fluoranthene   | 360    | J         | 1100  | 170   | ug/Kg | 5       | ✱ | 8270D  | Total/NA  |
| Benzo[g,h,i]perylene   | 200    | J         | 1100  | 110   | ug/Kg | 5       | ✱ | 8270D  | Total/NA  |
| Benzo[k]fluoranthene   | 170    | J         | 1100  | 140   | ug/Kg | 5       | ✱ | 8270D  | Total/NA  |
| Chrysene               | 280    | J         | 1100  | 240   | ug/Kg | 5       | ✱ | 8270D  | Total/NA  |
| Fluoranthene           | 700    | J         | 1100  | 110   | ug/Kg | 5       | ✱ | 8270D  | Total/NA  |
| Indeno[1,2,3-cd]pyrene | 180    | J         | 1100  | 130   | ug/Kg | 5       | ✱ | 8270D  | Total/NA  |
| Pyrene                 | 600    | J         | 1100  | 130   | ug/Kg | 5       | ✱ | 8270D  | Total/NA  |
| Phenanthrene           | 410    | J         | 1100  | 160   | ug/Kg | 5       | ✱ | 8270D  | Total/NA  |
| Arsenic                | 5.3    |           | 2.5   | 0.50  | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Barium                 | 103    | B F1      | 0.63  | 0.14  | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Cadmium                | 0.57   | B         | 0.25  | 0.038 | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Chromium               | 23.5   |           | 0.63  | 0.25  | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Lead                   | 72.7   | F1        | 1.3   | 0.30  | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Mercury                | 0.12   |           | 0.026 | 0.010 | mg/Kg | 1       | ✱ | 7471B  | Total/NA  |

### Client Sample ID: TP-2 0-1 FT

### Lab Sample ID: 480-181318-2

| Analyte      | Result | Qualifier | RL    | MDL   | Unit  | Dil Fac | D | Method | Prep Type |
|--------------|--------|-----------|-------|-------|-------|---------|---|--------|-----------|
| Fluoranthene | 56     | J         | 250   | 27    | ug/Kg | 1       | ✱ | 8270D  | Total/NA  |
| Pyrene       | 41     | J         | 250   | 30    | ug/Kg | 1       | ✱ | 8270D  | Total/NA  |
| Arsenic      | 5.2    |           | 2.9   | 0.58  | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Barium       | 124    | B         | 0.73  | 0.16  | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Cadmium      | 0.42   | B         | 0.29  | 0.044 | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Chromium     | 30.8   |           | 0.73  | 0.29  | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Lead         | 34.7   |           | 1.5   | 0.35  | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Mercury      | 0.093  |           | 0.028 | 0.011 | mg/Kg | 1       | ✱ | 7471B  | Total/NA  |

### Client Sample ID: TP-3 1-1.5 FT

### Lab Sample ID: 480-181318-3

| Analyte                | Result | Qualifier | RL    | MDL   | Unit  | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|-------|-------|-------|---------|---|--------|-----------|
| Benzo[a]anthracene     | 410    | J         | 1200  | 120   | ug/Kg | 5       | ✱ | 8270D  | Total/NA  |
| Benzo[a]pyrene         | 430    | J         | 1200  | 180   | ug/Kg | 5       | ✱ | 8270D  | Total/NA  |
| Benzo[b]fluoranthene   | 520    | J         | 1200  | 200   | ug/Kg | 5       | ✱ | 8270D  | Total/NA  |
| Benzo[g,h,i]perylene   | 280    | J         | 1200  | 130   | ug/Kg | 5       | ✱ | 8270D  | Total/NA  |
| Benzo[k]fluoranthene   | 200    | J         | 1200  | 160   | ug/Kg | 5       | ✱ | 8270D  | Total/NA  |
| Chrysene               | 330    | J         | 1200  | 280   | ug/Kg | 5       | ✱ | 8270D  | Total/NA  |
| Fluoranthene           | 870    | J         | 1200  | 130   | ug/Kg | 5       | ✱ | 8270D  | Total/NA  |
| Indeno[1,2,3-cd]pyrene | 250    | J         | 1200  | 150   | ug/Kg | 5       | ✱ | 8270D  | Total/NA  |
| Pyrene                 | 750    | J         | 1200  | 150   | ug/Kg | 5       | ✱ | 8270D  | Total/NA  |
| Phenanthrene           | 530    | J         | 1200  | 180   | ug/Kg | 5       | ✱ | 8270D  | Total/NA  |
| Arsenic                | 7.0    |           | 3.1   | 0.62  | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Barium                 | 123    | B         | 0.77  | 0.17  | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Cadmium                | 0.74   | B         | 0.31  | 0.046 | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Chromium               | 33.7   |           | 0.77  | 0.31  | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Lead                   | 100    |           | 1.5   | 0.37  | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Selenium               | 1.0    | J         | 6.2   | 0.62  | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Silver                 | 0.37   | J         | 0.93  | 0.31  | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Mercury                | 0.22   |           | 0.028 | 0.012 | mg/Kg | 1       | ✱ | 7471B  | Total/NA  |

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Buffalo

## Detection Summary

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Legacy Grand Island

Job ID: 480-181318-1

### Client Sample ID: TP-5 1-3 FT

### Lab Sample ID: 480-181318-4

| Analyte                | Result | Qualifier | RL    | MDL   | Unit  | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|-------|-------|-------|---------|---|--------|-----------|
| Benzo[a]anthracene     | 520    | J         | 1200  | 120   | ug/Kg | 5       | ✱ | 8270D  | Total/NA  |
| Benzo[a]pyrene         | 490    | J         | 1200  | 180   | ug/Kg | 5       | ✱ | 8270D  | Total/NA  |
| Benzo[b]fluoranthene   | 520    | J         | 1200  | 190   | ug/Kg | 5       | ✱ | 8270D  | Total/NA  |
| Benzo[g,h,i]perylene   | 320    | J         | 1200  | 130   | ug/Kg | 5       | ✱ | 8270D  | Total/NA  |
| Benzo[k]fluoranthene   | 290    | J         | 1200  | 160   | ug/Kg | 5       | ✱ | 8270D  | Total/NA  |
| Chrysene               | 390    | J         | 1200  | 270   | ug/Kg | 5       | ✱ | 8270D  | Total/NA  |
| Fluoranthene           | 1000   | J         | 1200  | 130   | ug/Kg | 5       | ✱ | 8270D  | Total/NA  |
| Indeno[1,2,3-cd]pyrene | 300    | J         | 1200  | 150   | ug/Kg | 5       | ✱ | 8270D  | Total/NA  |
| Pyrene                 | 880    | J         | 1200  | 140   | ug/Kg | 5       | ✱ | 8270D  | Total/NA  |
| Phenanthrene           | 640    | J         | 1200  | 180   | ug/Kg | 5       | ✱ | 8270D  | Total/NA  |
| Arsenic                | 7.0    |           | 3.0   | 0.60  | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Barium                 | 172    | B         | 0.75  | 0.16  | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Cadmium                | 0.80   | B         | 0.30  | 0.045 | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Chromium               | 60.7   |           | 0.75  | 0.30  | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Lead                   | 144    |           | 1.5   | 0.36  | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Selenium               | 0.74   | J         | 6.0   | 0.60  | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Silver                 | 0.40   | J         | 0.89  | 0.30  | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Mercury                | 0.099  |           | 0.030 | 0.012 | mg/Kg | 1       | ✱ | 7471B  | Total/NA  |

### Client Sample ID: TP-6 0-2 FT

### Lab Sample ID: 480-181318-5

| Analyte                | Result | Qualifier | RL    | MDL   | Unit  | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|-------|-------|-------|---------|---|--------|-----------|
| Acenaphthylene         | 730    | J         | 1100  | 140   | ug/Kg | 5       | ✱ | 8270D  | Total/NA  |
| Anthracene             | 620    | J         | 1100  | 270   | ug/Kg | 5       | ✱ | 8270D  | Total/NA  |
| Benzo[a]anthracene     | 2300   |           | 1100  | 110   | ug/Kg | 5       | ✱ | 8270D  | Total/NA  |
| Benzo[a]pyrene         | 2200   |           | 1100  | 160   | ug/Kg | 5       | ✱ | 8270D  | Total/NA  |
| Benzo[b]fluoranthene   | 2500   |           | 1100  | 180   | ug/Kg | 5       | ✱ | 8270D  | Total/NA  |
| Benzo[g,h,i]perylene   | 1300   |           | 1100  | 120   | ug/Kg | 5       | ✱ | 8270D  | Total/NA  |
| Benzo[k]fluoranthene   | 1200   |           | 1100  | 140   | ug/Kg | 5       | ✱ | 8270D  | Total/NA  |
| Chrysene               | 2100   |           | 1100  | 250   | ug/Kg | 5       | ✱ | 8270D  | Total/NA  |
| Dibenz(a,h)anthracene  | 410    | J         | 1100  | 200   | ug/Kg | 5       | ✱ | 8270D  | Total/NA  |
| Fluoranthene           | 5000   |           | 1100  | 120   | ug/Kg | 5       | ✱ | 8270D  | Total/NA  |
| Fluorene               | 160    | J         | 1100  | 130   | ug/Kg | 5       | ✱ | 8270D  | Total/NA  |
| Indeno[1,2,3-cd]pyrene | 1200   |           | 1100  | 140   | ug/Kg | 5       | ✱ | 8270D  | Total/NA  |
| Pyrene                 | 4100   |           | 1100  | 130   | ug/Kg | 5       | ✱ | 8270D  | Total/NA  |
| Phenanthrene           | 2000   |           | 1100  | 160   | ug/Kg | 5       | ✱ | 8270D  | Total/NA  |
| Arsenic                | 6.1    |           | 2.6   | 0.53  | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Barium                 | 86.4   | B         | 0.66  | 0.15  | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Cadmium                | 1.3    | B         | 0.26  | 0.040 | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Chromium               | 27.6   |           | 0.66  | 0.26  | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Lead                   | 139    |           | 1.3   | 0.32  | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Selenium               | 0.57   | J         | 5.3   | 0.53  | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Mercury                | 0.19   |           | 0.025 | 0.010 | mg/Kg | 1       | ✱ | 7471B  | Total/NA  |

### Client Sample ID: TP-7 0-2 FT

### Lab Sample ID: 480-181318-6

| Analyte            | Result | Qualifier | RL   | MDL | Unit  | Dil Fac | D | Method | Prep Type |
|--------------------|--------|-----------|------|-----|-------|---------|---|--------|-----------|
| Acenaphthene       | 2500   |           | 1900 | 280 | ug/Kg | 10      | ✱ | 8270D  | Total/NA  |
| Acenaphthylene     | 250    | J         | 1900 | 250 | ug/Kg | 10      | ✱ | 8270D  | Total/NA  |
| Anthracene         | 2200   |           | 1900 | 470 | ug/Kg | 10      | ✱ | 8270D  | Total/NA  |
| Benzo[a]anthracene | 11000  |           | 1900 | 190 | ug/Kg | 10      | ✱ | 8270D  | Total/NA  |
| Benzo[a]pyrene     | 11000  |           | 1900 | 280 | ug/Kg | 10      | ✱ | 8270D  | Total/NA  |

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Buffalo



## Detection Summary

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Legacy Grand Island

Job ID: 480-181318-1

### Client Sample ID: TP-7 0-2 FT (Continued)

Lab Sample ID: 480-181318-6

| Analyte                | Result | Qualifier | RL    | MDL    | Unit  | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Benzo[b]fluoranthene   | 15000  |           | 1900  | 300    | ug/Kg | 10      | ✱ | 8270D  | Total/NA  |
| Benzo[g,h,i]perylene   | 6300   |           | 1900  | 200    | ug/Kg | 10      | ✱ | 8270D  | Total/NA  |
| Benzo[k]fluoranthene   | 6900   |           | 1900  | 250    | ug/Kg | 10      | ✱ | 8270D  | Total/NA  |
| Chrysene               | 15000  |           | 1900  | 430    | ug/Kg | 10      | ✱ | 8270D  | Total/NA  |
| Dibenz(a,h)anthracene  | 2100   |           | 1900  | 340    | ug/Kg | 10      | ✱ | 8270D  | Total/NA  |
| Fluoranthene           | 36000  |           | 1900  | 200    | ug/Kg | 10      | ✱ | 8270D  | Total/NA  |
| Fluorene               | 2300   |           | 1900  | 230    | ug/Kg | 10      | ✱ | 8270D  | Total/NA  |
| Indeno[1,2,3-cd]pyrene | 6400   |           | 1900  | 240    | ug/Kg | 10      | ✱ | 8270D  | Total/NA  |
| Naphthalene            | 850    | J         | 1900  | 250    | ug/Kg | 10      | ✱ | 8270D  | Total/NA  |
| Pyrene                 | 26000  |           | 1900  | 230    | ug/Kg | 10      | ✱ | 8270D  | Total/NA  |
| Phenanthrene           | 29000  |           | 1900  | 280    | ug/Kg | 10      | ✱ | 8270D  | Total/NA  |
| Arsenic                | 4.1    |           | 2.2   | 0.43   | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Barium                 | 131    | B         | 0.54  | 0.12   | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Cadmium                | 0.39   | B         | 0.22  | 0.032  | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Chromium               | 60.7   |           | 0.54  | 0.22   | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Lead                   | 62.8   |           | 1.1   | 0.26   | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Selenium               | 0.64   | J         | 4.3   | 0.43   | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Silver                 | 0.30   | J         | 0.65  | 0.22   | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Mercury                | 0.042  |           | 0.023 | 0.0092 | mg/Kg | 1       | ✱ | 7471B  | Total/NA  |

### Client Sample ID: TP-8 0-2 FT

Lab Sample ID: 480-181318-7

| Analyte  | Result | Qualifier | RL    | MDL    | Unit  | Dil Fac | D | Method | Prep Type |
|----------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Arsenic  | 3.4    |           | 2.1   | 0.43   | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Barium   | 69.5   | B         | 0.53  | 0.12   | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Cadmium  | 0.40   | B         | 0.21  | 0.032  | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Chromium | 14.9   |           | 0.53  | 0.21   | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Lead     | 55.1   |           | 1.1   | 0.26   | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Silver   | 0.25   | J         | 0.64  | 0.21   | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Mercury  | 0.063  |           | 0.019 | 0.0077 | mg/Kg | 1       | ✱ | 7471B  | Total/NA  |

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Buffalo

# Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Legacy Grand Island

Job ID: 480-181318-1

Client Sample ID: TP-1 0-6 IN

Lab Sample ID: 480-181318-1

Date Collected: 02/18/21 09:00

Matrix: Solid

Date Received: 02/19/21 12:10

Percent Solids: 77.6

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte                | Result | Qualifier | RL   | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|------------------------|--------|-----------|------|-----|-------|---|----------------|----------------|---------|
| Acenaphthene           | ND     |           | 1100 | 160 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 15:52 | 5       |
| Acenaphthylene         | ND     |           | 1100 | 140 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 15:52 | 5       |
| Anthracene             | ND     |           | 1100 | 270 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 15:52 | 5       |
| Benzo[a]anthracene     | 340    | J         | 1100 | 110 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 15:52 | 5       |
| Benzo[a]pyrene         | 330    | J         | 1100 | 160 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 15:52 | 5       |
| Benzo[b]fluoranthene   | 360    | J         | 1100 | 170 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 15:52 | 5       |
| Benzo[g,h,i]perylene   | 200    | J         | 1100 | 110 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 15:52 | 5       |
| Benzo[k]fluoranthene   | 170    | J         | 1100 | 140 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 15:52 | 5       |
| Chrysene               | 280    | J         | 1100 | 240 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 15:52 | 5       |
| Dibenz(a,h)anthracene  | ND     |           | 1100 | 190 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 15:52 | 5       |
| Fluoranthene           | 700    | J         | 1100 | 110 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 15:52 | 5       |
| Fluorene               | ND     |           | 1100 | 130 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 15:52 | 5       |
| Indeno[1,2,3-cd]pyrene | 180    | J         | 1100 | 130 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 15:52 | 5       |
| Naphthalene            | ND     |           | 1100 | 140 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 15:52 | 5       |
| Pyrene                 | 600    | J         | 1100 | 130 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 15:52 | 5       |
| Phenanthrene           | 410    | J         | 1100 | 160 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 15:52 | 5       |

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2,4,6-Tribromophenol (Surr) | 68        |           | 54 - 120 | 02/22/21 15:22 | 02/23/21 15:52 | 5       |
| 2-Fluorobiphenyl            | 100       |           | 60 - 120 | 02/22/21 15:22 | 02/23/21 15:52 | 5       |
| 2-Fluorophenol (Surr)       | 94        |           | 52 - 120 | 02/22/21 15:22 | 02/23/21 15:52 | 5       |
| Phenol-d5 (Surr)            | 93        |           | 54 - 120 | 02/22/21 15:22 | 02/23/21 15:52 | 5       |
| p-Terphenyl-d14 (Surr)      | 94        |           | 79 - 130 | 02/22/21 15:22 | 02/23/21 15:52 | 5       |
| Nitrobenzene-d5 (Surr)      | 93        |           | 53 - 120 | 02/22/21 15:22 | 02/23/21 15:52 | 5       |

## Method: 6010C - Metals (ICP)

| Analyte  | Result | Qualifier | RL   | MDL   | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|----------|--------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Arsenic  | 5.3    |           | 2.5  | 0.50  | mg/Kg | ✱ | 02/22/21 15:54 | 02/24/21 14:49 | 1       |
| Barium   | 103    | B F1      | 0.63 | 0.14  | mg/Kg | ✱ | 02/22/21 15:54 | 02/24/21 14:49 | 1       |
| Cadmium  | 0.57   | B         | 0.25 | 0.038 | mg/Kg | ✱ | 02/22/21 15:54 | 02/24/21 14:49 | 1       |
| Chromium | 23.5   |           | 0.63 | 0.25  | mg/Kg | ✱ | 02/22/21 15:54 | 02/24/21 14:49 | 1       |
| Lead     | 72.7   | F1        | 1.3  | 0.30  | mg/Kg | ✱ | 02/22/21 15:54 | 02/24/21 14:49 | 1       |
| Selenium | ND     |           | 5.0  | 0.50  | mg/Kg | ✱ | 02/22/21 15:54 | 02/24/21 14:49 | 1       |
| Silver   | ND     |           | 0.76 | 0.25  | mg/Kg | ✱ | 02/22/21 15:54 | 02/24/21 14:49 | 1       |

## Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL    | MDL   | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------|--------|-----------|-------|-------|-------|---|----------------|----------------|---------|
| Mercury | 0.12   |           | 0.026 | 0.010 | mg/Kg | ✱ | 02/24/21 13:29 | 02/24/21 15:08 | 1       |

# Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Legacy Grand Island

Job ID: 480-181318-1

Client Sample ID: TP-2 0-1 FT

Lab Sample ID: 480-181318-2

Date Collected: 02/18/21 10:00

Matrix: Solid

Date Received: 02/19/21 12:10

Percent Solids: 67.3

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte                | Result | Qualifier | RL  | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|------------------------|--------|-----------|-----|-----|-------|---|----------------|----------------|---------|
| Acenaphthene           | ND     |           | 250 | 37  | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 16:17 | 1       |
| Acenaphthylene         | ND     |           | 250 | 33  | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 16:17 | 1       |
| Anthracene             | ND     |           | 250 | 62  | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 16:17 | 1       |
| Benzo[a]anthracene     | ND     |           | 250 | 25  | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 16:17 | 1       |
| Benzo[a]pyrene         | ND     |           | 250 | 37  | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 16:17 | 1       |
| Benzo[b]fluoranthene   | ND     |           | 250 | 40  | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 16:17 | 1       |
| Benzo[g,h,i]perylene   | ND     |           | 250 | 27  | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 16:17 | 1       |
| Benzo[k]fluoranthene   | ND     |           | 250 | 33  | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 16:17 | 1       |
| Chrysene               | ND     |           | 250 | 56  | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 16:17 | 1       |
| Dibenz[a,h]anthracene  | ND     |           | 250 | 45  | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 16:17 | 1       |
| Fluoranthene           | 56     | J         | 250 | 27  | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 16:17 | 1       |
| Fluorene               | ND     |           | 250 | 30  | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 16:17 | 1       |
| Indeno[1,2,3-cd]pyrene | ND     |           | 250 | 31  | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 16:17 | 1       |
| Naphthalene            | ND     |           | 250 | 33  | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 16:17 | 1       |
| Pyrene                 | 41     | J         | 250 | 30  | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 16:17 | 1       |
| Phenanthrene           | ND     |           | 250 | 37  | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 16:17 | 1       |

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2,4,6-Tribromophenol (Surr) | 76        |           | 54 - 120 | 02/22/21 15:22 | 02/23/21 16:17 | 1       |
| 2-Fluorobiphenyl            | 95        |           | 60 - 120 | 02/22/21 15:22 | 02/23/21 16:17 | 1       |
| 2-Fluorophenol (Surr)       | 85        |           | 52 - 120 | 02/22/21 15:22 | 02/23/21 16:17 | 1       |
| Phenol-d5 (Surr)            | 84        |           | 54 - 120 | 02/22/21 15:22 | 02/23/21 16:17 | 1       |
| p-Terphenyl-d14 (Surr)      | 99        |           | 79 - 130 | 02/22/21 15:22 | 02/23/21 16:17 | 1       |
| Nitrobenzene-d5 (Surr)      | 87        |           | 53 - 120 | 02/22/21 15:22 | 02/23/21 16:17 | 1       |

## Method: 6010C - Metals (ICP)

| Analyte  | Result | Qualifier | RL   | MDL   | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|----------|--------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Arsenic  | 5.2    |           | 2.9  | 0.58  | mg/Kg | ✱ | 02/22/21 15:54 | 02/24/21 15:08 | 1       |
| Barium   | 124    | B         | 0.73 | 0.16  | mg/Kg | ✱ | 02/22/21 15:54 | 02/24/21 15:08 | 1       |
| Cadmium  | 0.42   | B         | 0.29 | 0.044 | mg/Kg | ✱ | 02/22/21 15:54 | 02/24/21 15:08 | 1       |
| Chromium | 30.8   |           | 0.73 | 0.29  | mg/Kg | ✱ | 02/22/21 15:54 | 02/24/21 15:08 | 1       |
| Lead     | 34.7   |           | 1.5  | 0.35  | mg/Kg | ✱ | 02/22/21 15:54 | 02/24/21 15:08 | 1       |
| Selenium | ND     |           | 5.8  | 0.58  | mg/Kg | ✱ | 02/22/21 15:54 | 02/24/21 15:08 | 1       |
| Silver   | ND     |           | 0.88 | 0.29  | mg/Kg | ✱ | 02/22/21 15:54 | 02/24/21 15:08 | 1       |

## Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL    | MDL   | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------|--------|-----------|-------|-------|-------|---|----------------|----------------|---------|
| Mercury | 0.093  |           | 0.028 | 0.011 | mg/Kg | ✱ | 02/24/21 13:29 | 02/24/21 15:09 | 1       |



# Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Legacy Grand Island

Job ID: 480-181318-1

Client Sample ID: TP-3 1-1.5 FT

Lab Sample ID: 480-181318-3

Date Collected: 02/18/21 11:00

Matrix: Solid

Date Received: 02/19/21 12:10

Percent Solids: 67.5

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte                | Result | Qualifier | RL   | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|------------------------|--------|-----------|------|-----|-------|---|----------------|----------------|---------|
| Acenaphthene           | ND     |           | 1200 | 180 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 16:41 | 5       |
| Acenaphthylene         | ND     |           | 1200 | 160 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 16:41 | 5       |
| Anthracene             | ND     |           | 1200 | 310 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 16:41 | 5       |
| Benzo[a]anthracene     | 410    | J         | 1200 | 120 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 16:41 | 5       |
| Benzo[a]pyrene         | 430    | J         | 1200 | 180 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 16:41 | 5       |
| Benzo[b]fluoranthene   | 520    | J         | 1200 | 200 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 16:41 | 5       |
| Benzo[g,h,i]perylene   | 280    | J         | 1200 | 130 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 16:41 | 5       |
| Benzo[k]fluoranthene   | 200    | J         | 1200 | 160 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 16:41 | 5       |
| Chrysene               | 330    | J         | 1200 | 280 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 16:41 | 5       |
| Dibenz(a,h)anthracene  | ND     |           | 1200 | 220 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 16:41 | 5       |
| Fluoranthene           | 870    | J         | 1200 | 130 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 16:41 | 5       |
| Fluorene               | ND     |           | 1200 | 150 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 16:41 | 5       |
| Indeno[1,2,3-cd]pyrene | 250    | J         | 1200 | 150 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 16:41 | 5       |
| Naphthalene            | ND     |           | 1200 | 160 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 16:41 | 5       |
| Pyrene                 | 750    | J         | 1200 | 150 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 16:41 | 5       |
| Phenanthrene           | 530    | J         | 1200 | 180 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 16:41 | 5       |

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2,4,6-Tribromophenol (Surr) | 68        |           | 54 - 120 | 02/22/21 15:22 | 02/23/21 16:41 | 5       |
| 2-Fluorobiphenyl            | 91        |           | 60 - 120 | 02/22/21 15:22 | 02/23/21 16:41 | 5       |
| 2-Fluorophenol (Surr)       | 83        |           | 52 - 120 | 02/22/21 15:22 | 02/23/21 16:41 | 5       |
| Phenol-d5 (Surr)            | 82        |           | 54 - 120 | 02/22/21 15:22 | 02/23/21 16:41 | 5       |
| p-Terphenyl-d14 (Surr)      | 93        |           | 79 - 130 | 02/22/21 15:22 | 02/23/21 16:41 | 5       |
| Nitrobenzene-d5 (Surr)      | 88        |           | 53 - 120 | 02/22/21 15:22 | 02/23/21 16:41 | 5       |

## Method: 6010C - Metals (ICP)

| Analyte  | Result | Qualifier | RL   | MDL   | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|----------|--------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Arsenic  | 7.0    |           | 3.1  | 0.62  | mg/Kg | ✱ | 02/22/21 15:54 | 02/24/21 15:12 | 1       |
| Barium   | 123    | B         | 0.77 | 0.17  | mg/Kg | ✱ | 02/22/21 15:54 | 02/24/21 15:12 | 1       |
| Cadmium  | 0.74   | B         | 0.31 | 0.046 | mg/Kg | ✱ | 02/22/21 15:54 | 02/24/21 15:12 | 1       |
| Chromium | 33.7   |           | 0.77 | 0.31  | mg/Kg | ✱ | 02/22/21 15:54 | 02/24/21 15:12 | 1       |
| Lead     | 100    |           | 1.5  | 0.37  | mg/Kg | ✱ | 02/22/21 15:54 | 02/24/21 15:12 | 1       |
| Selenium | 1.0    | J         | 6.2  | 0.62  | mg/Kg | ✱ | 02/22/21 15:54 | 02/24/21 15:12 | 1       |
| Silver   | 0.37   | J         | 0.93 | 0.31  | mg/Kg | ✱ | 02/22/21 15:54 | 02/24/21 15:12 | 1       |

## Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL    | MDL   | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------|--------|-----------|-------|-------|-------|---|----------------|----------------|---------|
| Mercury | 0.22   |           | 0.028 | 0.012 | mg/Kg | ✱ | 02/24/21 13:29 | 02/24/21 15:10 | 1       |

# Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Legacy Grand Island

Job ID: 480-181318-1

Client Sample ID: TP-5 1-3 FT

Lab Sample ID: 480-181318-4

Date Collected: 02/18/21 12:00

Matrix: Solid

Date Received: 02/19/21 12:10

Percent Solids: 69.1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte                | Result | Qualifier | RL   | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|------------------------|--------|-----------|------|-----|-------|---|----------------|----------------|---------|
| Acenaphthene           | ND     |           | 1200 | 180 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 17:05 | 5       |
| Acenaphthylene         | ND     |           | 1200 | 160 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 17:05 | 5       |
| Anthracene             | ND     |           | 1200 | 300 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 17:05 | 5       |
| Benzo[a]anthracene     | 520    | J         | 1200 | 120 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 17:05 | 5       |
| Benzo[a]pyrene         | 490    | J         | 1200 | 180 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 17:05 | 5       |
| Benzo[b]fluoranthene   | 520    | J         | 1200 | 190 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 17:05 | 5       |
| Benzo[g,h,i]perylene   | 320    | J         | 1200 | 130 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 17:05 | 5       |
| Benzo[k]fluoranthene   | 290    | J         | 1200 | 160 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 17:05 | 5       |
| Chrysene               | 390    | J         | 1200 | 270 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 17:05 | 5       |
| Dibenz(a,h)anthracene  | ND     |           | 1200 | 210 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 17:05 | 5       |
| Fluoranthene           | 1000   | J         | 1200 | 130 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 17:05 | 5       |
| Fluorene               | ND     |           | 1200 | 140 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 17:05 | 5       |
| Indeno[1,2,3-cd]pyrene | 300    | J         | 1200 | 150 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 17:05 | 5       |
| Naphthalene            | ND     |           | 1200 | 160 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 17:05 | 5       |
| Pyrene                 | 880    | J         | 1200 | 140 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 17:05 | 5       |
| Phenanthrene           | 640    | J         | 1200 | 180 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 17:05 | 5       |

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2,4,6-Tribromophenol (Surr) | 68        |           | 54 - 120 | 02/22/21 15:22 | 02/23/21 17:05 | 5       |
| 2-Fluorobiphenyl            | 97        |           | 60 - 120 | 02/22/21 15:22 | 02/23/21 17:05 | 5       |
| 2-Fluorophenol (Surr)       | 89        |           | 52 - 120 | 02/22/21 15:22 | 02/23/21 17:05 | 5       |
| Phenol-d5 (Surr)            | 90        |           | 54 - 120 | 02/22/21 15:22 | 02/23/21 17:05 | 5       |
| p-Terphenyl-d14 (Surr)      | 95        |           | 79 - 130 | 02/22/21 15:22 | 02/23/21 17:05 | 5       |
| Nitrobenzene-d5 (Surr)      | 85        |           | 53 - 120 | 02/22/21 15:22 | 02/23/21 17:05 | 5       |

## Method: 6010C - Metals (ICP)

| Analyte  | Result | Qualifier | RL   | MDL   | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|----------|--------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Arsenic  | 7.0    |           | 3.0  | 0.60  | mg/Kg | ✱ | 02/22/21 15:54 | 02/24/21 15:15 | 1       |
| Barium   | 172    | B         | 0.75 | 0.16  | mg/Kg | ✱ | 02/22/21 15:54 | 02/24/21 15:15 | 1       |
| Cadmium  | 0.80   | B         | 0.30 | 0.045 | mg/Kg | ✱ | 02/22/21 15:54 | 02/24/21 15:15 | 1       |
| Chromium | 60.7   |           | 0.75 | 0.30  | mg/Kg | ✱ | 02/22/21 15:54 | 02/24/21 15:15 | 1       |
| Lead     | 144    |           | 1.5  | 0.36  | mg/Kg | ✱ | 02/22/21 15:54 | 02/24/21 15:15 | 1       |
| Selenium | 0.74   | J         | 6.0  | 0.60  | mg/Kg | ✱ | 02/22/21 15:54 | 02/24/21 15:15 | 1       |
| Silver   | 0.40   | J         | 0.89 | 0.30  | mg/Kg | ✱ | 02/22/21 15:54 | 02/24/21 15:15 | 1       |

## Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL    | MDL   | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------|--------|-----------|-------|-------|-------|---|----------------|----------------|---------|
| Mercury | 0.099  |           | 0.030 | 0.012 | mg/Kg | ✱ | 02/24/21 13:29 | 02/24/21 15:14 | 1       |

# Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Legacy Grand Island

Job ID: 480-181318-1

Client Sample ID: TP-6 0-2 FT

Lab Sample ID: 480-181318-5

Date Collected: 02/18/21 14:00

Matrix: Solid

Date Received: 02/19/21 12:10

Percent Solids: 76.2

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte                | Result | Qualifier | RL   | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|------------------------|--------|-----------|------|-----|-------|---|----------------|----------------|---------|
| Acenaphthene           | ND     |           | 1100 | 160 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 17:29 | 5       |
| Acenaphthylene         | 730    | J         | 1100 | 140 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 17:29 | 5       |
| Anthracene             | 620    | J         | 1100 | 270 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 17:29 | 5       |
| Benzo[a]anthracene     | 2300   |           | 1100 | 110 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 17:29 | 5       |
| Benzo[a]pyrene         | 2200   |           | 1100 | 160 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 17:29 | 5       |
| Benzo[b]fluoranthene   | 2500   |           | 1100 | 180 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 17:29 | 5       |
| Benzo[g,h,i]perylene   | 1300   |           | 1100 | 120 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 17:29 | 5       |
| Benzo[k]fluoranthene   | 1200   |           | 1100 | 140 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 17:29 | 5       |
| Chrysene               | 2100   |           | 1100 | 250 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 17:29 | 5       |
| Dibenz(a,h)anthracene  | 410    | J         | 1100 | 200 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 17:29 | 5       |
| Fluoranthene           | 5000   |           | 1100 | 120 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 17:29 | 5       |
| Fluorene               | 160    | J         | 1100 | 130 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 17:29 | 5       |
| Indeno[1,2,3-cd]pyrene | 1200   |           | 1100 | 140 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 17:29 | 5       |
| Naphthalene            | ND     |           | 1100 | 140 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 17:29 | 5       |
| Pyrene                 | 4100   |           | 1100 | 130 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 17:29 | 5       |
| Phenanthrene           | 2000   |           | 1100 | 160 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 17:29 | 5       |

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2,4,6-Tribromophenol (Surr) | 69        |           | 54 - 120 | 02/22/21 15:22 | 02/23/21 17:29 | 5       |
| 2-Fluorobiphenyl            | 93        |           | 60 - 120 | 02/22/21 15:22 | 02/23/21 17:29 | 5       |
| 2-Fluorophenol (Surr)       | 87        |           | 52 - 120 | 02/22/21 15:22 | 02/23/21 17:29 | 5       |
| Phenol-d5 (Surr)            | 88        |           | 54 - 120 | 02/22/21 15:22 | 02/23/21 17:29 | 5       |
| p-Terphenyl-d14 (Surr)      | 97        |           | 79 - 130 | 02/22/21 15:22 | 02/23/21 17:29 | 5       |
| Nitrobenzene-d5 (Surr)      | 84        |           | 53 - 120 | 02/22/21 15:22 | 02/23/21 17:29 | 5       |

## Method: 6010C - Metals (ICP)

| Analyte  | Result | Qualifier | RL   | MDL   | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|----------|--------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Arsenic  | 6.1    |           | 2.6  | 0.53  | mg/Kg | ✱ | 02/22/21 15:54 | 02/24/21 15:30 | 1       |
| Barium   | 86.4   | B         | 0.66 | 0.15  | mg/Kg | ✱ | 02/22/21 15:54 | 02/24/21 15:30 | 1       |
| Cadmium  | 1.3    | B         | 0.26 | 0.040 | mg/Kg | ✱ | 02/22/21 15:54 | 02/24/21 15:30 | 1       |
| Chromium | 27.6   |           | 0.66 | 0.26  | mg/Kg | ✱ | 02/22/21 15:54 | 02/24/21 15:30 | 1       |
| Lead     | 139    |           | 1.3  | 0.32  | mg/Kg | ✱ | 02/22/21 15:54 | 02/24/21 15:30 | 1       |
| Selenium | 0.57   | J         | 5.3  | 0.53  | mg/Kg | ✱ | 02/22/21 15:54 | 02/24/21 15:30 | 1       |
| Silver   | ND     |           | 0.79 | 0.26  | mg/Kg | ✱ | 02/22/21 15:54 | 02/24/21 15:30 | 1       |

## Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL    | MDL   | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------|--------|-----------|-------|-------|-------|---|----------------|----------------|---------|
| Mercury | 0.19   |           | 0.025 | 0.010 | mg/Kg | ✱ | 02/24/21 13:29 | 02/24/21 15:16 | 1       |



# Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Legacy Grand Island

Job ID: 480-181318-1

Client Sample ID: TP-7 0-2 FT

Lab Sample ID: 480-181318-6

Date Collected: 02/18/21 13:00

Matrix: Solid

Date Received: 02/19/21 12:10

Percent Solids: 88.5

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte                | Result | Qualifier | RL   | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|------------------------|--------|-----------|------|-----|-------|---|----------------|----------------|---------|
| Acenaphthene           | 2500   |           | 1900 | 280 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 17:54 | 10      |
| Acenaphthylene         | 250    | J         | 1900 | 250 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 17:54 | 10      |
| Anthracene             | 2200   |           | 1900 | 470 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 17:54 | 10      |
| Benzo[a]anthracene     | 11000  |           | 1900 | 190 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 17:54 | 10      |
| Benzo[a]pyrene         | 11000  |           | 1900 | 280 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 17:54 | 10      |
| Benzo[b]fluoranthene   | 15000  |           | 1900 | 300 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 17:54 | 10      |
| Benzo[g,h,i]perylene   | 6300   |           | 1900 | 200 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 17:54 | 10      |
| Benzo[k]fluoranthene   | 6900   |           | 1900 | 250 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 17:54 | 10      |
| Chrysene               | 15000  |           | 1900 | 430 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 17:54 | 10      |
| Dibenz(a,h)anthracene  | 2100   |           | 1900 | 340 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 17:54 | 10      |
| Fluoranthene           | 36000  |           | 1900 | 200 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 17:54 | 10      |
| Fluorene               | 2300   |           | 1900 | 230 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 17:54 | 10      |
| Indeno[1,2,3-cd]pyrene | 6400   |           | 1900 | 240 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 17:54 | 10      |
| Naphthalene            | 850    | J         | 1900 | 250 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 17:54 | 10      |
| Pyrene                 | 26000  |           | 1900 | 230 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 17:54 | 10      |
| Phenanthrene           | 29000  |           | 1900 | 280 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 17:54 | 10      |

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2,4,6-Tribromophenol (Surr) | 69        |           | 54 - 120 | 02/22/21 15:22 | 02/23/21 17:54 | 10      |
| 2-Fluorobiphenyl            | 84        |           | 60 - 120 | 02/22/21 15:22 | 02/23/21 17:54 | 10      |
| 2-Fluorophenol (Surr)       | 82        |           | 52 - 120 | 02/22/21 15:22 | 02/23/21 17:54 | 10      |
| Phenol-d5 (Surr)            | 83        |           | 54 - 120 | 02/22/21 15:22 | 02/23/21 17:54 | 10      |
| p-Terphenyl-d14 (Surr)      | 77        | S1-       | 79 - 130 | 02/22/21 15:22 | 02/23/21 17:54 | 10      |
| Nitrobenzene-d5 (Surr)      | 82        |           | 53 - 120 | 02/22/21 15:22 | 02/23/21 17:54 | 10      |

## Method: 6010C - Metals (ICP)

| Analyte  | Result | Qualifier | RL   | MDL   | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|----------|--------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Arsenic  | 4.1    |           | 2.2  | 0.43  | mg/Kg | ✱ | 02/22/21 15:54 | 02/24/21 15:34 | 1       |
| Barium   | 131    | B         | 0.54 | 0.12  | mg/Kg | ✱ | 02/22/21 15:54 | 02/24/21 15:34 | 1       |
| Cadmium  | 0.39   | B         | 0.22 | 0.032 | mg/Kg | ✱ | 02/22/21 15:54 | 02/24/21 15:34 | 1       |
| Chromium | 60.7   |           | 0.54 | 0.22  | mg/Kg | ✱ | 02/22/21 15:54 | 02/24/21 15:34 | 1       |
| Lead     | 62.8   |           | 1.1  | 0.26  | mg/Kg | ✱ | 02/22/21 15:54 | 02/24/21 15:34 | 1       |
| Selenium | 0.64   | J         | 4.3  | 0.43  | mg/Kg | ✱ | 02/22/21 15:54 | 02/24/21 15:34 | 1       |
| Silver   | 0.30   | J         | 0.65 | 0.22  | mg/Kg | ✱ | 02/22/21 15:54 | 02/24/21 15:34 | 1       |

## Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL    | MDL    | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.042  |           | 0.023 | 0.0092 | mg/Kg | ✱ | 02/24/21 13:29 | 02/24/21 15:17 | 1       |

# Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Legacy Grand Island

Job ID: 480-181318-1

Client Sample ID: TP-8 0-2 FT

Lab Sample ID: 480-181318-7

Date Collected: 02/18/21 13:30

Matrix: Solid

Date Received: 02/19/21 12:10

Percent Solids: 90.3

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte                | Result | Qualifier | RL    | MDL  | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|------------------------|--------|-----------|-------|------|-------|---|----------------|----------------|---------|
| Acenaphthene           | ND     |           | 18000 | 2700 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 18:18 | 10      |
| Acenaphthylene         | ND     |           | 18000 | 2400 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 18:18 | 10      |
| Anthracene             | ND     |           | 18000 | 4500 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 18:18 | 10      |
| Benzo[a]anthracene     | ND     |           | 18000 | 1800 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 18:18 | 10      |
| Benzo[a]pyrene         | ND     |           | 18000 | 2700 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 18:18 | 10      |
| Benzo[b]fluoranthene   | ND     |           | 18000 | 2900 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 18:18 | 10      |
| Benzo[g,h,i]perylene   | ND     |           | 18000 | 1900 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 18:18 | 10      |
| Benzo[k]fluoranthene   | ND     |           | 18000 | 2400 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 18:18 | 10      |
| Chrysene               | ND     |           | 18000 | 4100 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 18:18 | 10      |
| Dibenz[a,h]anthracene  | ND     |           | 18000 | 3200 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 18:18 | 10      |
| Fluoranthene           | ND     |           | 18000 | 1900 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 18:18 | 10      |
| Fluorene               | ND     |           | 18000 | 2200 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 18:18 | 10      |
| Indeno[1,2,3-cd]pyrene | ND     |           | 18000 | 2300 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 18:18 | 10      |
| Naphthalene            | ND     |           | 18000 | 2400 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 18:18 | 10      |
| Pyrene                 | ND     |           | 18000 | 2200 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 18:18 | 10      |
| Phenanthrene           | ND     |           | 18000 | 2700 | ug/Kg | ✱ | 02/22/21 15:22 | 02/23/21 18:18 | 10      |

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2,4,6-Tribromophenol (Surr) | 0         | S1-       | 54 - 120 | 02/22/21 15:22 | 02/23/21 18:18 | 10      |
| 2-Fluorobiphenyl            | 104       |           | 60 - 120 | 02/22/21 15:22 | 02/23/21 18:18 | 10      |
| 2-Fluorophenol (Surr)       | 0         | S1-       | 52 - 120 | 02/22/21 15:22 | 02/23/21 18:18 | 10      |
| Phenol-d5 (Surr)            | 157       | S1+       | 54 - 120 | 02/22/21 15:22 | 02/23/21 18:18 | 10      |
| p-Terphenyl-d14 (Surr)      | 94        |           | 79 - 130 | 02/22/21 15:22 | 02/23/21 18:18 | 10      |
| Nitrobenzene-d5 (Surr)      | 142       | S1+       | 53 - 120 | 02/22/21 15:22 | 02/23/21 18:18 | 10      |

## Method: 6010C - Metals (ICP)

| Analyte  | Result | Qualifier | RL   | MDL   | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|----------|--------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Arsenic  | 3.4    |           | 2.1  | 0.43  | mg/Kg | ✱ | 02/22/21 15:54 | 02/24/21 15:38 | 1       |
| Barium   | 69.5   | B         | 0.53 | 0.12  | mg/Kg | ✱ | 02/22/21 15:54 | 02/24/21 15:38 | 1       |
| Cadmium  | 0.40   | B         | 0.21 | 0.032 | mg/Kg | ✱ | 02/22/21 15:54 | 02/24/21 15:38 | 1       |
| Chromium | 14.9   |           | 0.53 | 0.21  | mg/Kg | ✱ | 02/22/21 15:54 | 02/24/21 15:38 | 1       |
| Lead     | 55.1   |           | 1.1  | 0.26  | mg/Kg | ✱ | 02/22/21 15:54 | 02/24/21 15:38 | 1       |
| Selenium | ND     |           | 4.3  | 0.43  | mg/Kg | ✱ | 02/22/21 15:54 | 02/24/21 15:38 | 1       |
| Silver   | 0.25   | J         | 0.64 | 0.21  | mg/Kg | ✱ | 02/22/21 15:54 | 02/24/21 15:38 | 1       |

## Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL    | MDL    | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.063  |           | 0.019 | 0.0077 | mg/Kg | ✱ | 02/24/21 13:29 | 02/24/21 15:18 | 1       |

# Surrogate Summary

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Legacy Grand Island

Job ID: 480-181318-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

| Lab Sample ID      | Client Sample ID   | Percent Surrogate Recovery (Acceptance Limits) |                 |                 |                 |                    |                 |
|--------------------|--------------------|------------------------------------------------|-----------------|-----------------|-----------------|--------------------|-----------------|
|                    |                    | TBP<br>(54-120)                                | FBP<br>(60-120) | 2FP<br>(52-120) | PHL<br>(54-120) | TPHd14<br>(79-130) | NBZ<br>(53-120) |
| 480-181318-1       | TP-1 0-6 IN        | 68                                             | 100             | 94              | 93              | 94                 | 93              |
| 480-181318-1 MS    | TP-1 0-6 IN        | 81                                             | 101             | 95              | 98              | 103                | 96              |
| 480-181318-1 MSD   | TP-1 0-6 IN        | 87                                             | 102             | 92              | 93              | 102                | 96              |
| 480-181318-2       | TP-2 0-1 FT        | 76                                             | 95              | 85              | 84              | 99                 | 87              |
| 480-181318-3       | TP-3 1-1.5 FT      | 68                                             | 91              | 83              | 82              | 93                 | 88              |
| 480-181318-4       | TP-5 1-3 FT        | 68                                             | 97              | 89              | 90              | 95                 | 85              |
| 480-181318-5       | TP-6 0-2 FT        | 69                                             | 93              | 87              | 88              | 97                 | 84              |
| 480-181318-6       | TP-7 0-2 FT        | 69                                             | 84              | 82              | 83              | 77 S1-             | 82              |
| 480-181318-7       | TP-8 0-2 FT        | 0 S1-                                          | 104             | 0 S1-           | 157 S1+         | 94                 | 142 S1+         |
| LCS 480-570232/2-A | Lab Control Sample | 88                                             | 98              | 90              | 94              | 103                | 94              |
| MB 480-570232/1-A  | Method Blank       | 75                                             | 98              | 88              | 90              | 110                | 94              |

### Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)

FBP = 2-Fluorobiphenyl

2FP = 2-Fluorophenol (Surr)

PHL = Phenol-d5 (Surr)

TPHd14 = p-Terphenyl-d14 (Surr)

NBZ = Nitrobenzene-d5 (Surr)



# QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Legacy Grand Island

Job ID: 480-181318-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-570232/1-A

Matrix: Solid

Analysis Batch: 570280

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 570232

| Analyte                | MB Result | MB Qualifier | RL  | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|------------------------|-----------|--------------|-----|-----|-------|---|----------------|----------------|---------|
| Acenaphthene           | ND        |              | 160 | 24  | ug/Kg |   | 02/22/21 15:22 | 02/23/21 14:15 | 1       |
| Acenaphthylene         | ND        |              | 160 | 21  | ug/Kg |   | 02/22/21 15:22 | 02/23/21 14:15 | 1       |
| Anthracene             | ND        |              | 160 | 41  | ug/Kg |   | 02/22/21 15:22 | 02/23/21 14:15 | 1       |
| Benzo[a]anthracene     | ND        |              | 160 | 16  | ug/Kg |   | 02/22/21 15:22 | 02/23/21 14:15 | 1       |
| Benzo[a]pyrene         | ND        |              | 160 | 24  | ug/Kg |   | 02/22/21 15:22 | 02/23/21 14:15 | 1       |
| Benzo[b]fluoranthene   | ND        |              | 160 | 26  | ug/Kg |   | 02/22/21 15:22 | 02/23/21 14:15 | 1       |
| Benzo[g,h,i]perylene   | ND        |              | 160 | 17  | ug/Kg |   | 02/22/21 15:22 | 02/23/21 14:15 | 1       |
| Benzo[k]fluoranthene   | ND        |              | 160 | 21  | ug/Kg |   | 02/22/21 15:22 | 02/23/21 14:15 | 1       |
| Chrysene               | ND        |              | 160 | 37  | ug/Kg |   | 02/22/21 15:22 | 02/23/21 14:15 | 1       |
| Dibenz(a,h)anthracene  | ND        |              | 160 | 29  | ug/Kg |   | 02/22/21 15:22 | 02/23/21 14:15 | 1       |
| Fluoranthene           | ND        |              | 160 | 17  | ug/Kg |   | 02/22/21 15:22 | 02/23/21 14:15 | 1       |
| Fluorene               | ND        |              | 160 | 19  | ug/Kg |   | 02/22/21 15:22 | 02/23/21 14:15 | 1       |
| Indeno[1,2,3-cd]pyrene | ND        |              | 160 | 20  | ug/Kg |   | 02/22/21 15:22 | 02/23/21 14:15 | 1       |
| Naphthalene            | ND        |              | 160 | 21  | ug/Kg |   | 02/22/21 15:22 | 02/23/21 14:15 | 1       |
| Pyrene                 | ND        |              | 160 | 19  | ug/Kg |   | 02/22/21 15:22 | 02/23/21 14:15 | 1       |
| Phenanthrene           | ND        |              | 160 | 24  | ug/Kg |   | 02/22/21 15:22 | 02/23/21 14:15 | 1       |

| Surrogate                   | MB %Recovery | MB Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|--------------|--------------|----------|----------------|----------------|---------|
| 2,4,6-Tribromophenol (Surr) | 75           |              | 54 - 120 | 02/22/21 15:22 | 02/23/21 14:15 | 1       |
| 2-Fluorobiphenyl            | 98           |              | 60 - 120 | 02/22/21 15:22 | 02/23/21 14:15 | 1       |
| 2-Fluorophenol (Surr)       | 88           |              | 52 - 120 | 02/22/21 15:22 | 02/23/21 14:15 | 1       |
| Phenol-d5 (Surr)            | 90           |              | 54 - 120 | 02/22/21 15:22 | 02/23/21 14:15 | 1       |
| p-Terphenyl-d14 (Surr)      | 110          |              | 79 - 130 | 02/22/21 15:22 | 02/23/21 14:15 | 1       |
| Nitrobenzene-d5 (Surr)      | 94           |              | 53 - 120 | 02/22/21 15:22 | 02/23/21 14:15 | 1       |

Lab Sample ID: LCS 480-570232/2-A

Matrix: Solid

Analysis Batch: 570280

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 570232

| Analyte                | Spike Added | LCS Result | LCS Qualifier | Unit  | D | %Rec | %Rec. Limits |
|------------------------|-------------|------------|---------------|-------|---|------|--------------|
| Acenaphthene           | 1630        | 1300       |               | ug/Kg |   | 79   | 62 - 120     |
| Acenaphthylene         | 1630        | 1330       |               | ug/Kg |   | 81   | 58 - 121     |
| Anthracene             | 1630        | 1340       |               | ug/Kg |   | 82   | 62 - 120     |
| Benzo[a]anthracene     | 1630        | 1330       |               | ug/Kg |   | 81   | 65 - 120     |
| Benzo[a]pyrene         | 1630        | 1350       |               | ug/Kg |   | 83   | 64 - 120     |
| Benzo[b]fluoranthene   | 1630        | 1400       |               | ug/Kg |   | 86   | 64 - 120     |
| Benzo[g,h,i]perylene   | 1630        | 1400       |               | ug/Kg |   | 86   | 45 - 145     |
| Benzo[k]fluoranthene   | 1630        | 1290       |               | ug/Kg |   | 79   | 65 - 120     |
| Chrysene               | 1630        | 1370       |               | ug/Kg |   | 84   | 64 - 120     |
| Dibenz(a,h)anthracene  | 1630        | 1430       |               | ug/Kg |   | 87   | 54 - 132     |
| Fluoranthene           | 1630        | 1410       |               | ug/Kg |   | 86   | 62 - 120     |
| Fluorene               | 1630        | 1310       |               | ug/Kg |   | 80   | 63 - 120     |
| Indeno[1,2,3-cd]pyrene | 1630        | 1400       |               | ug/Kg |   | 86   | 56 - 134     |
| Naphthalene            | 1630        | 1180       |               | ug/Kg |   | 73   | 55 - 120     |
| Pyrene                 | 1630        | 1470       |               | ug/Kg |   | 90   | 61 - 133     |
| Phenanthrene           | 1630        | 1350       |               | ug/Kg |   | 82   | 60 - 120     |

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# QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Legacy Grand Island

Job ID: 480-181318-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-570232/2-A

Matrix: Solid

Analysis Batch: 570280

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 570232

|                             | LCS       | LCS       |          |
|-----------------------------|-----------|-----------|----------|
| Surrogate                   | %Recovery | Qualifier | Limits   |
| 2,4,6-Tribromophenol (Surr) | 88        |           | 54 - 120 |
| 2-Fluorobiphenyl            | 98        |           | 60 - 120 |
| 2-Fluorophenol (Surr)       | 90        |           | 52 - 120 |
| Phenol-d5 (Surr)            | 94        |           | 54 - 120 |
| p-Terphenyl-d14 (Surr)      | 103       |           | 79 - 130 |
| Nitrobenzene-d5 (Surr)      | 94        |           | 53 - 120 |

Lab Sample ID: 480-181318-1 MS

Matrix: Solid

Analysis Batch: 570280

Client Sample ID: TP-1 0-6 IN

Prep Type: Total/NA

Prep Batch: 570232

| Analyte                | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit  | D | %Rec | %Rec. Limits |
|------------------------|---------------|------------------|-------------|-----------|--------------|-------|---|------|--------------|
| Acenaphthene           | ND            |                  | 2110        | 1690      |              | ug/Kg | ✱ | 80   | 60 - 120     |
| Acenaphthylene         | ND            |                  | 2110        | 1790      |              | ug/Kg | ✱ | 85   | 58 - 121     |
| Anthracene             | ND            |                  | 2110        | 1880      |              | ug/Kg | ✱ | 89   | 62 - 120     |
| Benzo[a]anthracene     | 340           | J                | 2110        | 2210      |              | ug/Kg | ✱ | 89   | 65 - 120     |
| Benzo[a]pyrene         | 330           | J                | 2110        | 2270      |              | ug/Kg | ✱ | 92   | 64 - 120     |
| Benzo[b]fluoranthene   | 360           | J                | 2110        | 2110      |              | ug/Kg | ✱ | 83   | 10 - 150     |
| Benzo[g,h,i]perylene   | 200           | J                | 2110        | 2140      |              | ug/Kg | ✱ | 92   | 45 - 145     |
| Benzo[k]fluoranthene   | 170           | J                | 2110        | 2120      |              | ug/Kg | ✱ | 93   | 23 - 150     |
| Chrysene               | 280           | J                | 2110        | 2260      |              | ug/Kg | ✱ | 94   | 64 - 120     |
| Dibenz(a,h)anthracene  | ND            |                  | 2110        | 2040      |              | ug/Kg | ✱ | 97   | 54 - 132     |
| Fluoranthene           | 700           | J                | 2110        | 2730      |              | ug/Kg | ✱ | 96   | 62 - 120     |
| Fluorene               | ND            |                  | 2110        | 1840      |              | ug/Kg | ✱ | 88   | 63 - 120     |
| Indeno[1,2,3-cd]pyrene | 180           | J                | 2110        | 2060      |              | ug/Kg | ✱ | 89   | 56 - 134     |
| Naphthalene            | ND            |                  | 2110        | 1690      |              | ug/Kg | ✱ | 80   | 46 - 120     |
| Pyrene                 | 600           | J                | 2110        | 2670      |              | ug/Kg | ✱ | 98   | 61 - 133     |
| Phenanthrene           | 410           | J                | 2110        | 2340      |              | ug/Kg | ✱ | 92   | 60 - 122     |

|                             | MS        | MS        |          |
|-----------------------------|-----------|-----------|----------|
| Surrogate                   | %Recovery | Qualifier | Limits   |
| 2,4,6-Tribromophenol (Surr) | 81        |           | 54 - 120 |
| 2-Fluorobiphenyl            | 101       |           | 60 - 120 |
| 2-Fluorophenol (Surr)       | 95        |           | 52 - 120 |
| Phenol-d5 (Surr)            | 98        |           | 54 - 120 |
| p-Terphenyl-d14 (Surr)      | 103       |           | 79 - 130 |
| Nitrobenzene-d5 (Surr)      | 96        |           | 53 - 120 |

Lab Sample ID: 480-181318-1 MSD

Matrix: Solid

Analysis Batch: 570280

Client Sample ID: TP-1 0-6 IN

Prep Type: Total/NA

Prep Batch: 570232

| Analyte              | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit  | D | %Rec | %Rec. Limits | RPD | Limit |
|----------------------|---------------|------------------|-------------|------------|---------------|-------|---|------|--------------|-----|-------|
| Acenaphthene         | ND            |                  | 2120        | 1740       |               | ug/Kg | ✱ | 82   | 60 - 120     | 3   | 35    |
| Acenaphthylene       | ND            |                  | 2120        | 1750       |               | ug/Kg | ✱ | 83   | 58 - 121     | 2   | 18    |
| Anthracene           | ND            |                  | 2120        | 1870       |               | ug/Kg | ✱ | 88   | 62 - 120     | 1   | 15    |
| Benzo[a]anthracene   | 340           | J                | 2120        | 2000       |               | ug/Kg | ✱ | 79   | 65 - 120     | 10  | 15    |
| Benzo[a]pyrene       | 330           | J                | 2120        | 2010       |               | ug/Kg | ✱ | 79   | 64 - 120     | 12  | 15    |
| Benzo[b]fluoranthene | 360           | J                | 2120        | 2040       |               | ug/Kg | ✱ | 79   | 10 - 150     | 3   | 15    |

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# QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Legacy Grand Island

Job ID: 480-181318-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-181318-1 MSD

Matrix: Solid

Analysis Batch: 570280

Client Sample ID: TP-1 0-6 IN

Prep Type: Total/NA

Prep Batch: 570232

| Analyte                | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit  | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|------------------------|---------------|------------------|-------------|------------|---------------|-------|---|------|--------------|-----|-----------|
| Benzo[g,h,i]perylene   | 200           | J                | 2120        | 2100       |               | ug/Kg | ✱ | 90   | 45 - 145     | 2   | 15        |
| Benzo[k]fluoranthene   | 170           | J                | 2120        | 1810       |               | ug/Kg | ✱ | 77   | 23 - 150     | 16  | 22        |
| Chrysene               | 280           | J                | 2120        | 2080       |               | ug/Kg | ✱ | 85   | 64 - 120     | 9   | 15        |
| Dibenz(a,h)anthracene  | ND            |                  | 2120        | 2010       |               | ug/Kg | ✱ | 95   | 54 - 132     | 2   | 15        |
| Fluoranthene           | 700           | J                | 2120        | 2470       |               | ug/Kg | ✱ | 83   | 62 - 120     | 10  | 15        |
| Fluorene               | ND            |                  | 2120        | 1810       |               | ug/Kg | ✱ | 85   | 63 - 120     | 2   | 15        |
| Indeno[1,2,3-cd]pyrene | 180           | J                | 2120        | 2030       |               | ug/Kg | ✱ | 87   | 56 - 134     | 1   | 15        |
| Naphthalene            | ND            |                  | 2120        | 1700       |               | ug/Kg | ✱ | 80   | 46 - 120     | 1   | 29        |
| Pyrene                 | 600           | J                | 2120        | 2420       |               | ug/Kg | ✱ | 86   | 61 - 133     | 10  | 35        |
| Phenanthrene           | 410           | J                | 2120        | 2140       |               | ug/Kg | ✱ | 82   | 60 - 122     | 9   | 15        |

| Surrogate                   | MSD %Recovery | MSD Qualifier | Limits   |
|-----------------------------|---------------|---------------|----------|
| 2,4,6-Tribromophenol (Surr) | 87            |               | 54 - 120 |
| 2-Fluorobiphenyl            | 102           |               | 60 - 120 |
| 2-Fluorophenol (Surr)       | 92            |               | 52 - 120 |
| Phenol-d5 (Surr)            | 93            |               | 54 - 120 |
| p-Terphenyl-d14 (Surr)      | 102           |               | 79 - 130 |
| Nitrobenzene-d5 (Surr)      | 96            |               | 53 - 120 |

## Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-570215/1-A

Matrix: Solid

Analysis Batch: 570522

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 570215

| Analyte  | MB Result | MB Qualifier | RL   | MDL   | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|----------|-----------|--------------|------|-------|-------|---|----------------|----------------|---------|
| Arsenic  | ND        |              | 2.1  | 0.42  | mg/Kg |   | 02/22/21 15:54 | 02/24/21 13:41 | 1       |
| Barium   | 0.161     | J            | 0.53 | 0.12  | mg/Kg |   | 02/22/21 15:54 | 02/24/21 13:41 | 1       |
| Cadmium  | 0.0642    | J            | 0.21 | 0.032 | mg/Kg |   | 02/22/21 15:54 | 02/24/21 13:41 | 1       |
| Chromium | ND        |              | 0.53 | 0.21  | mg/Kg |   | 02/22/21 15:54 | 02/24/21 13:41 | 1       |
| Lead     | ND        |              | 1.1  | 0.25  | mg/Kg |   | 02/22/21 15:54 | 02/24/21 13:41 | 1       |
| Selenium | ND        |              | 4.2  | 0.42  | mg/Kg |   | 02/22/21 15:54 | 02/24/21 13:41 | 1       |
| Silver   | ND        |              | 0.63 | 0.21  | mg/Kg |   | 02/22/21 15:54 | 02/24/21 13:41 | 1       |

Lab Sample ID: LCSSRM 480-570215/2-A

Matrix: Solid

Analysis Batch: 570522

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 570215

| Analyte  | Spike Added | LCSSRM Result | LCSSRM Qualifier | Unit  | D | %Rec  | %Rec. Limits |
|----------|-------------|---------------|------------------|-------|---|-------|--------------|
| Arsenic  | 162         | 156.6         |                  | mg/Kg |   | 96.7  | 70.4 - 130.2 |
| Barium   | 138         | 131.6         |                  | mg/Kg |   | 95.4  | 74.6 - 124.6 |
| Cadmium  | 135         | 128.2         |                  | mg/Kg |   | 95.0  | 74.8 - 124.4 |
| Chromium | 117         | 110.9         |                  | mg/Kg |   | 94.8  | 70.1 - 129.9 |
| Lead     | 77.6        | 83.55         |                  | mg/Kg |   | 107.7 | 68.8 - 131.4 |

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# QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Legacy Grand Island

Job ID: 480-181318-1

## Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCSSRM 480-570215/2-A

Matrix: Solid

Analysis Batch: 570522

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 570215

| Analyte  | Spike Added | LCSSRM Result | LCSSRM Qualifier | Unit  | D | %Rec | %Rec. Limits |
|----------|-------------|---------------|------------------|-------|---|------|--------------|
| Selenium | 172         | 168.2         |                  | mg/Kg |   | 97.8 | 68.0 - 132.6 |
| Silver   | 24.7        | 22.78         |                  | mg/Kg |   | 92.2 | 67.2 - 133.2 |

Lab Sample ID: 480-181318-1 MS

Matrix: Solid

Analysis Batch: 570522

Client Sample ID: TP-1 0-6 IN

Prep Type: Total/NA

Prep Batch: 570215

| Analyte  | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit  | D | %Rec | %Rec. Limits |
|----------|---------------|------------------|-------------|-----------|--------------|-------|---|------|--------------|
| Arsenic  | 5.3           |                  | 54.1        | 58.24     |              | mg/Kg | ✱ | 98   | 75 - 125     |
| Barium   | 103           | B F1             | 54.1        | 211.4     | F1           | mg/Kg | ✱ | 201  | 75 - 125     |
| Cadmium  | 0.57          | B                | 54.1        | 52.47     |              | mg/Kg | ✱ | 96   | 75 - 125     |
| Chromium | 23.5          |                  | 54.1        | 86.09     |              | mg/Kg | ✱ | 116  | 75 - 125     |
| Lead     | 72.7          | F1               | 54.1        | 141.8     | F1           | mg/Kg | ✱ | 128  | 75 - 125     |
| Selenium | ND            |                  | 54.1        | 51.73     |              | mg/Kg | ✱ | 96   | 75 - 125     |
| Silver   | ND            |                  | 13.5        | 13.05     |              | mg/Kg | ✱ | 96   | 75 - 125     |

Lab Sample ID: 480-181318-1 MSD

Matrix: Solid

Analysis Batch: 570522

Client Sample ID: TP-1 0-6 IN

Prep Type: Total/NA

Prep Batch: 570215

| Analyte  | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit  | D | %Rec | %Rec. Limits | RPD | Limit |
|----------|---------------|------------------|-------------|------------|---------------|-------|---|------|--------------|-----|-------|
| Arsenic  | 5.3           |                  | 53.4        | 56.47      |               | mg/Kg | ✱ | 96   | 75 - 125     | 3   | 20    |
| Barium   | 103           | B F1             | 53.4        | 215.5      | F1            | mg/Kg | ✱ | 211  | 75 - 125     | 2   | 20    |
| Cadmium  | 0.57          | B                | 53.4        | 51.22      |               | mg/Kg | ✱ | 95   | 75 - 125     | 2   | 20    |
| Chromium | 23.5          |                  | 53.4        | 83.38      |               | mg/Kg | ✱ | 112  | 75 - 125     | 3   | 20    |
| Lead     | 72.7          | F1               | 53.4        | 140.2      | F1            | mg/Kg | ✱ | 126  | 75 - 125     | 1   | 20    |
| Selenium | ND            |                  | 53.4        | 50.47      |               | mg/Kg | ✱ | 95   | 75 - 125     | 2   | 20    |
| Silver   | ND            |                  | 13.3        | 12.63      |               | mg/Kg | ✱ | 95   | 75 - 125     | 3   | 20    |

## Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 480-570452/1-A

Matrix: Solid

Analysis Batch: 570474

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 570452

| Analyte | MB Result | MB Qualifier | RL    | MDL    | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------|-----------|--------------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | ND        |              | 0.016 | 0.0063 | mg/Kg |   | 02/24/21 13:29 | 02/24/21 14:43 | 1       |

Lab Sample ID: LCSSRM 480-570452/2-A ^10

Matrix: Solid

Analysis Batch: 570474

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 570452

| Analyte | Spike Added | LCSSRM Result | LCSSRM Qualifier | Unit  | D | %Rec  | %Rec. Limits |
|---------|-------------|---------------|------------------|-------|---|-------|--------------|
| Mercury | 27.2        | 30.03         |                  | mg/Kg |   | 110.4 | 59.9 - 140.1 |

# QC Association Summary

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Legacy Grand Island

Job ID: 480-181318-1

## GC/MS Semi VOA

### Prep Batch: 570232

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 480-181318-1       | TP-1 0-6 IN        | Total/NA  | Solid  | 3550C  |            |
| 480-181318-2       | TP-2 0-1 FT        | Total/NA  | Solid  | 3550C  |            |
| 480-181318-3       | TP-3 1-1.5 FT      | Total/NA  | Solid  | 3550C  |            |
| 480-181318-4       | TP-5 1-3 FT        | Total/NA  | Solid  | 3550C  |            |
| 480-181318-5       | TP-6 0-2 FT        | Total/NA  | Solid  | 3550C  |            |
| 480-181318-6       | TP-7 0-2 FT        | Total/NA  | Solid  | 3550C  |            |
| 480-181318-7       | TP-8 0-2 FT        | Total/NA  | Solid  | 3550C  |            |
| MB 480-570232/1-A  | Method Blank       | Total/NA  | Solid  | 3550C  |            |
| LCS 480-570232/2-A | Lab Control Sample | Total/NA  | Solid  | 3550C  |            |
| 480-181318-1 MS    | TP-1 0-6 IN        | Total/NA  | Solid  | 3550C  |            |
| 480-181318-1 MSD   | TP-1 0-6 IN        | Total/NA  | Solid  | 3550C  |            |

### Analysis Batch: 570280

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 480-181318-1       | TP-1 0-6 IN        | Total/NA  | Solid  | 8270D  | 570232     |
| 480-181318-2       | TP-2 0-1 FT        | Total/NA  | Solid  | 8270D  | 570232     |
| 480-181318-3       | TP-3 1-1.5 FT      | Total/NA  | Solid  | 8270D  | 570232     |
| 480-181318-4       | TP-5 1-3 FT        | Total/NA  | Solid  | 8270D  | 570232     |
| 480-181318-5       | TP-6 0-2 FT        | Total/NA  | Solid  | 8270D  | 570232     |
| 480-181318-6       | TP-7 0-2 FT        | Total/NA  | Solid  | 8270D  | 570232     |
| 480-181318-7       | TP-8 0-2 FT        | Total/NA  | Solid  | 8270D  | 570232     |
| MB 480-570232/1-A  | Method Blank       | Total/NA  | Solid  | 8270D  | 570232     |
| LCS 480-570232/2-A | Lab Control Sample | Total/NA  | Solid  | 8270D  | 570232     |
| 480-181318-1 MS    | TP-1 0-6 IN        | Total/NA  | Solid  | 8270D  | 570232     |
| 480-181318-1 MSD   | TP-1 0-6 IN        | Total/NA  | Solid  | 8270D  | 570232     |

## Metals

### Prep Batch: 570215

| Lab Sample ID         | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|-----------------------|--------------------|-----------|--------|--------|------------|
| 480-181318-1          | TP-1 0-6 IN        | Total/NA  | Solid  | 3050B  |            |
| 480-181318-2          | TP-2 0-1 FT        | Total/NA  | Solid  | 3050B  |            |
| 480-181318-3          | TP-3 1-1.5 FT      | Total/NA  | Solid  | 3050B  |            |
| 480-181318-4          | TP-5 1-3 FT        | Total/NA  | Solid  | 3050B  |            |
| 480-181318-5          | TP-6 0-2 FT        | Total/NA  | Solid  | 3050B  |            |
| 480-181318-6          | TP-7 0-2 FT        | Total/NA  | Solid  | 3050B  |            |
| 480-181318-7          | TP-8 0-2 FT        | Total/NA  | Solid  | 3050B  |            |
| MB 480-570215/1-A     | Method Blank       | Total/NA  | Solid  | 3050B  |            |
| LCSSRM 480-570215/2-A | Lab Control Sample | Total/NA  | Solid  | 3050B  |            |
| 480-181318-1 MS       | TP-1 0-6 IN        | Total/NA  | Solid  | 3050B  |            |
| 480-181318-1 MSD      | TP-1 0-6 IN        | Total/NA  | Solid  | 3050B  |            |

### Prep Batch: 570452

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|------------------|-----------|--------|--------|------------|
| 480-181318-1  | TP-1 0-6 IN      | Total/NA  | Solid  | 7471B  |            |
| 480-181318-2  | TP-2 0-1 FT      | Total/NA  | Solid  | 7471B  |            |
| 480-181318-3  | TP-3 1-1.5 FT    | Total/NA  | Solid  | 7471B  |            |
| 480-181318-4  | TP-5 1-3 FT      | Total/NA  | Solid  | 7471B  |            |
| 480-181318-5  | TP-6 0-2 FT      | Total/NA  | Solid  | 7471B  |            |
| 480-181318-6  | TP-7 0-2 FT      | Total/NA  | Solid  | 7471B  |            |
| 480-181318-7  | TP-8 0-2 FT      | Total/NA  | Solid  | 7471B  |            |

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## QC Association Summary

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Legacy Grand Island

Job ID: 480-181318-1

### Metals (Continued)

#### Prep Batch: 570452 (Continued)

| Lab Sample ID             | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|---------------------------|--------------------|-----------|--------|--------|------------|
| MB 480-570452/1-A         | Method Blank       | Total/NA  | Solid  | 7471B  |            |
| LCSSRM 480-570452/2-A ^10 | Lab Control Sample | Total/NA  | Solid  | 7471B  |            |

#### Analysis Batch: 570474

| Lab Sample ID             | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|---------------------------|--------------------|-----------|--------|--------|------------|
| 480-181318-1              | TP-1 0-6 IN        | Total/NA  | Solid  | 7471B  | 570452     |
| 480-181318-2              | TP-2 0-1 FT        | Total/NA  | Solid  | 7471B  | 570452     |
| 480-181318-3              | TP-3 1-1.5 FT      | Total/NA  | Solid  | 7471B  | 570452     |
| 480-181318-4              | TP-5 1-3 FT        | Total/NA  | Solid  | 7471B  | 570452     |
| 480-181318-5              | TP-6 0-2 FT        | Total/NA  | Solid  | 7471B  | 570452     |
| 480-181318-6              | TP-7 0-2 FT        | Total/NA  | Solid  | 7471B  | 570452     |
| 480-181318-7              | TP-8 0-2 FT        | Total/NA  | Solid  | 7471B  | 570452     |
| MB 480-570452/1-A         | Method Blank       | Total/NA  | Solid  | 7471B  | 570452     |
| LCSSRM 480-570452/2-A ^10 | Lab Control Sample | Total/NA  | Solid  | 7471B  | 570452     |

#### Analysis Batch: 570522

| Lab Sample ID         | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|-----------------------|--------------------|-----------|--------|--------|------------|
| 480-181318-1          | TP-1 0-6 IN        | Total/NA  | Solid  | 6010C  | 570215     |
| 480-181318-2          | TP-2 0-1 FT        | Total/NA  | Solid  | 6010C  | 570215     |
| 480-181318-3          | TP-3 1-1.5 FT      | Total/NA  | Solid  | 6010C  | 570215     |
| 480-181318-4          | TP-5 1-3 FT        | Total/NA  | Solid  | 6010C  | 570215     |
| 480-181318-5          | TP-6 0-2 FT        | Total/NA  | Solid  | 6010C  | 570215     |
| 480-181318-6          | TP-7 0-2 FT        | Total/NA  | Solid  | 6010C  | 570215     |
| 480-181318-7          | TP-8 0-2 FT        | Total/NA  | Solid  | 6010C  | 570215     |
| MB 480-570215/1-A     | Method Blank       | Total/NA  | Solid  | 6010C  | 570215     |
| LCSSRM 480-570215/2-A | Lab Control Sample | Total/NA  | Solid  | 6010C  | 570215     |
| 480-181318-1 MS       | TP-1 0-6 IN        | Total/NA  | Solid  | 6010C  | 570215     |
| 480-181318-1 MSD      | TP-1 0-6 IN        | Total/NA  | Solid  | 6010C  | 570215     |

### General Chemistry

#### Analysis Batch: 570175

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method   | Prep Batch |
|---------------|------------------|-----------|--------|----------|------------|
| 480-181318-1  | TP-1 0-6 IN      | Total/NA  | Solid  | Moisture |            |
| 480-181318-2  | TP-2 0-1 FT      | Total/NA  | Solid  | Moisture |            |
| 480-181318-3  | TP-3 1-1.5 FT    | Total/NA  | Solid  | Moisture |            |
| 480-181318-4  | TP-5 1-3 FT      | Total/NA  | Solid  | Moisture |            |
| 480-181318-5  | TP-6 0-2 FT      | Total/NA  | Solid  | Moisture |            |
| 480-181318-6  | TP-7 0-2 FT      | Total/NA  | Solid  | Moisture |            |
| 480-181318-7  | TP-8 0-2 FT      | Total/NA  | Solid  | Moisture |            |

# Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Legacy Grand Island

Job ID: 480-181318-1

**Client Sample ID: TP-1 0-6 IN**

**Lab Sample ID: 480-181318-1**

Date Collected: 02/18/21 09:00

Matrix: Solid

Date Received: 02/19/21 12:10

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Analysis   | Moisture     |     | 1               | 570175       | 02/21/21 13:10       | DSC     | TAL BUF |

**Client Sample ID: TP-1 0-6 IN**

**Lab Sample ID: 480-181318-1**

Date Collected: 02/18/21 09:00

Matrix: Solid

Date Received: 02/19/21 12:10

Percent Solids: 77.6

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Prep       | 3550C        |     |                 | 570232       | 02/22/21 15:22       | ATG     | TAL BUF |
| Total/NA  | Analysis   | 8270D        |     | 5               | 570280       | 02/23/21 15:52       | JMM     | TAL BUF |
| Total/NA  | Prep       | 3050B        |     |                 | 570215       | 02/22/21 15:54       | ADM     | TAL BUF |
| Total/NA  | Analysis   | 6010C        |     | 1               | 570522       | 02/24/21 14:49       | AMH     | TAL BUF |
| Total/NA  | Prep       | 7471B        |     |                 | 570452       | 02/24/21 13:29       | BMB     | TAL BUF |
| Total/NA  | Analysis   | 7471B        |     | 1               | 570474       | 02/24/21 15:08       | BMB     | TAL BUF |

**Client Sample ID: TP-2 0-1 FT**

**Lab Sample ID: 480-181318-2**

Date Collected: 02/18/21 10:00

Matrix: Solid

Date Received: 02/19/21 12:10

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Analysis   | Moisture     |     | 1               | 570175       | 02/21/21 13:10       | DSC     | TAL BUF |

**Client Sample ID: TP-2 0-1 FT**

**Lab Sample ID: 480-181318-2**

Date Collected: 02/18/21 10:00

Matrix: Solid

Date Received: 02/19/21 12:10

Percent Solids: 67.3

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Prep       | 3550C        |     |                 | 570232       | 02/22/21 15:22       | ATG     | TAL BUF |
| Total/NA  | Analysis   | 8270D        |     | 1               | 570280       | 02/23/21 16:17       | JMM     | TAL BUF |
| Total/NA  | Prep       | 3050B        |     |                 | 570215       | 02/22/21 15:54       | ADM     | TAL BUF |
| Total/NA  | Analysis   | 6010C        |     | 1               | 570522       | 02/24/21 15:08       | AMH     | TAL BUF |
| Total/NA  | Prep       | 7471B        |     |                 | 570452       | 02/24/21 13:29       | BMB     | TAL BUF |
| Total/NA  | Analysis   | 7471B        |     | 1               | 570474       | 02/24/21 15:09       | BMB     | TAL BUF |

**Client Sample ID: TP-3 1-1.5 FT**

**Lab Sample ID: 480-181318-3**

Date Collected: 02/18/21 11:00

Matrix: Solid

Date Received: 02/19/21 12:10

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Analysis   | Moisture     |     | 1               | 570175       | 02/21/21 13:10       | DSC     | TAL BUF |



# Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Legacy Grand Island

Job ID: 480-181318-1

## Client Sample ID: TP-3 1-1.5 FT

## Lab Sample ID: 480-181318-3

Date Collected: 02/18/21 11:00

Matrix: Solid

Date Received: 02/19/21 12:10

Percent Solids: 67.5

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Prep       | 3550C        |     |                 | 570232       | 02/22/21 15:22       | ATG     | TAL BUF |
| Total/NA  | Analysis   | 8270D        |     | 5               | 570280       | 02/23/21 16:41       | JMM     | TAL BUF |
| Total/NA  | Prep       | 3050B        |     |                 | 570215       | 02/22/21 15:54       | ADM     | TAL BUF |
| Total/NA  | Analysis   | 6010C        |     | 1               | 570522       | 02/24/21 15:12       | AMH     | TAL BUF |
| Total/NA  | Prep       | 7471B        |     |                 | 570452       | 02/24/21 13:29       | BMB     | TAL BUF |
| Total/NA  | Analysis   | 7471B        |     | 1               | 570474       | 02/24/21 15:10       | BMB     | TAL BUF |

## Client Sample ID: TP-5 1-3 FT

## Lab Sample ID: 480-181318-4

Date Collected: 02/18/21 12:00

Matrix: Solid

Date Received: 02/19/21 12:10

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Analysis   | Moisture     |     | 1               | 570175       | 02/21/21 13:10       | DSC     | TAL BUF |

## Client Sample ID: TP-5 1-3 FT

## Lab Sample ID: 480-181318-4

Date Collected: 02/18/21 12:00

Matrix: Solid

Date Received: 02/19/21 12:10

Percent Solids: 69.1

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Prep       | 3550C        |     |                 | 570232       | 02/22/21 15:22       | ATG     | TAL BUF |
| Total/NA  | Analysis   | 8270D        |     | 5               | 570280       | 02/23/21 17:05       | JMM     | TAL BUF |
| Total/NA  | Prep       | 3050B        |     |                 | 570215       | 02/22/21 15:54       | ADM     | TAL BUF |
| Total/NA  | Analysis   | 6010C        |     | 1               | 570522       | 02/24/21 15:15       | AMH     | TAL BUF |
| Total/NA  | Prep       | 7471B        |     |                 | 570452       | 02/24/21 13:29       | BMB     | TAL BUF |
| Total/NA  | Analysis   | 7471B        |     | 1               | 570474       | 02/24/21 15:14       | BMB     | TAL BUF |

## Client Sample ID: TP-6 0-2 FT

## Lab Sample ID: 480-181318-5

Date Collected: 02/18/21 14:00

Matrix: Solid

Date Received: 02/19/21 12:10

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Analysis   | Moisture     |     | 1               | 570175       | 02/21/21 13:10       | DSC     | TAL BUF |

## Client Sample ID: TP-6 0-2 FT

## Lab Sample ID: 480-181318-5

Date Collected: 02/18/21 14:00

Matrix: Solid

Date Received: 02/19/21 12:10

Percent Solids: 76.2

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Prep       | 3550C        |     |                 | 570232       | 02/22/21 15:22       | ATG     | TAL BUF |
| Total/NA  | Analysis   | 8270D        |     | 5               | 570280       | 02/23/21 17:29       | JMM     | TAL BUF |
| Total/NA  | Prep       | 3050B        |     |                 | 570215       | 02/22/21 15:54       | ADM     | TAL BUF |
| Total/NA  | Analysis   | 6010C        |     | 1               | 570522       | 02/24/21 15:30       | AMH     | TAL BUF |
| Total/NA  | Prep       | 7471B        |     |                 | 570452       | 02/24/21 13:29       | BMB     | TAL BUF |
| Total/NA  | Analysis   | 7471B        |     | 1               | 570474       | 02/24/21 15:16       | BMB     | TAL BUF |

Eurofins TestAmerica, Buffalo

# Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Legacy Grand Island

Job ID: 480-181318-1

**Client Sample ID: TP-7 0-2 FT**

**Lab Sample ID: 480-181318-6**

Date Collected: 02/18/21 13:00

Matrix: Solid

Date Received: 02/19/21 12:10

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Analysis   | Moisture     |     | 1               | 570175       | 02/21/21 13:10       | DSC     | TAL BUF |

**Client Sample ID: TP-7 0-2 FT**

**Lab Sample ID: 480-181318-6**

Date Collected: 02/18/21 13:00

Matrix: Solid

Date Received: 02/19/21 12:10

Percent Solids: 88.5

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Prep       | 3550C        |     |                 | 570232       | 02/22/21 15:22       | ATG     | TAL BUF |
| Total/NA  | Analysis   | 8270D        |     | 10              | 570280       | 02/23/21 17:54       | JMM     | TAL BUF |
| Total/NA  | Prep       | 3050B        |     |                 | 570215       | 02/22/21 15:54       | ADM     | TAL BUF |
| Total/NA  | Analysis   | 6010C        |     | 1               | 570522       | 02/24/21 15:34       | AMH     | TAL BUF |
| Total/NA  | Prep       | 7471B        |     |                 | 570452       | 02/24/21 13:29       | BMB     | TAL BUF |
| Total/NA  | Analysis   | 7471B        |     | 1               | 570474       | 02/24/21 15:17       | BMB     | TAL BUF |

**Client Sample ID: TP-8 0-2 FT**

**Lab Sample ID: 480-181318-7**

Date Collected: 02/18/21 13:30

Matrix: Solid

Date Received: 02/19/21 12:10

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Analysis   | Moisture     |     | 1               | 570175       | 02/21/21 13:10       | DSC     | TAL BUF |

**Client Sample ID: TP-8 0-2 FT**

**Lab Sample ID: 480-181318-7**

Date Collected: 02/18/21 13:30

Matrix: Solid

Date Received: 02/19/21 12:10

Percent Solids: 90.3

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Prep       | 3550C        |     |                 | 570232       | 02/22/21 15:22       | ATG     | TAL BUF |
| Total/NA  | Analysis   | 8270D        |     | 10              | 570280       | 02/23/21 18:18       | JMM     | TAL BUF |
| Total/NA  | Prep       | 3050B        |     |                 | 570215       | 02/22/21 15:54       | ADM     | TAL BUF |
| Total/NA  | Analysis   | 6010C        |     | 1               | 570522       | 02/24/21 15:38       | AMH     | TAL BUF |
| Total/NA  | Prep       | 7471B        |     |                 | 570452       | 02/24/21 13:29       | BMB     | TAL BUF |
| Total/NA  | Analysis   | 7471B        |     | 1               | 570474       | 02/24/21 15:18       | BMB     | TAL BUF |

## Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

## Accreditation/Certification Summary

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Legacy Grand Island

Job ID: 480-181318-1

### Laboratory: Eurofins TestAmerica, Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority | Program | Identification Number | Expiration Date |
|-----------|---------|-----------------------|-----------------|
| New York  | NELAP   | 10026                 | 03-31-21        |

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

| Analysis Method | Prep Method | Matrix | Analyte          |
|-----------------|-------------|--------|------------------|
| Moisture        |             | Solid  | Percent Moisture |
| Moisture        |             | Solid  | Percent Solids   |

## Method Summary

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Legacy Grand Island

Job ID: 480-181318-1

| Method   | Method Description                     | Protocol | Laboratory |
|----------|----------------------------------------|----------|------------|
| 8270D    | Semivolatile Organic Compounds (GC/MS) | SW846    | TAL BUF    |
| 6010C    | Metals (ICP)                           | SW846    | TAL BUF    |
| 7471B    | Mercury (CVAA)                         | SW846    | TAL BUF    |
| Moisture | Percent Moisture                       | EPA      | TAL BUF    |
| 3050B    | Preparation, Metals                    | SW846    | TAL BUF    |
| 3550C    | Ultrasonic Extraction                  | SW846    | TAL BUF    |
| 7471B    | Preparation, Mercury                   | SW846    | TAL BUF    |

### Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

### Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600



## Sample Summary

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Legacy Grand Island

Job ID: 480-181318-1

| Lab Sample ID | Client Sample ID | Matrix | Collected      | Received       | Asset ID |
|---------------|------------------|--------|----------------|----------------|----------|
| 480-181318-1  | TP-1 0-6 IN      | Solid  | 02/18/21 09:00 | 02/19/21 12:10 |          |
| 480-181318-2  | TP-2 0-1 FT      | Solid  | 02/18/21 10:00 | 02/19/21 12:10 |          |
| 480-181318-3  | TP-3 1-1.5 FT    | Solid  | 02/18/21 11:00 | 02/19/21 12:10 |          |
| 480-181318-4  | TP-5 1-3 FT      | Solid  | 02/18/21 12:00 | 02/19/21 12:10 |          |
| 480-181318-5  | TP-6 0-2 FT      | Solid  | 02/18/21 14:00 | 02/19/21 12:10 |          |
| 480-181318-6  | TP-7 0-2 FT      | Solid  | 02/18/21 13:00 | 02/19/21 12:10 |          |
| 480-181318-7  | TP-8 0-2 FT      | Solid  | 02/18/21 13:30 | 02/19/21 12:10 |          |

## Chain of Custody Record

10 Hazelwood Drive  
Amherst, NY 14228-2298  
Phone: 716-691-2600 Fax: 716-691-7991

|                                                                                                                                                                                                              |  |                                                                                                                                                                                                                                                                                                                                                       |  |                                                                                                  |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------|--|
| <b>Client Information</b><br>Client Contact: Bryan Mayback<br>Company: Benchmark Env. Eng. & Science, PLLC<br>Address: 2558 Hamburg Turnpike<br>City: Lackawanna<br>State, Zip: NY, 14218<br>Phone:          |  | Sampler: <i>Nick Scud</i><br>Lab PM: Fischer, Brian J<br>E-Mail: Brian.Fischer@Eurofinset.com<br>Phone: <i>716-713-3437</i><br>State of Origin:                                                                                                                                                                                                       |  | Carrier Tracking No(s): 480-156899-34590.1<br>Page: 1 of 2<br>Job #:                             |  |
| Due Date Requested: <i>5/2/2011</i><br>TAT Requested (days):<br>Compliance Project: <i>Yes</i> <input checked="" type="checkbox"/> <i>No</i> <input type="checkbox"/><br>PO #: <i>16395-021-001</i><br>WO #: |  | Preservation Codes:<br>A - HCL M - Hexane<br>B - NaOH N - None<br>C - Zn Acetate O - AsNaO2<br>D - Nitric Acid P - Na2O4S<br>E - NaHSO4 Q - Na2SO3<br>F - MeOH R - Na2S2O3<br>G - Amchlor S - H2SO4<br>H - Ascorbic Acid T - TSP Dodecylhydrate<br>I - Ice U - Acetone<br>J - DI Water V - MCAA<br>K - EDTA W - pH 4-5<br>L - EDA Z - other (specify) |  | Other:                                                                                           |  |
| Project #: 48023385<br>SOW#:                                                                                                                                                                                 |  | Analysis Requested                                                                                                                                                                                                                                                                                                                                    |  | Instructions/Note:                                                                               |  |
| Sample Identification<br>TP-1 0-6"<br>TP-2 6-1 Ft<br>TP-3 1-1.5 Ft<br>TP-5 1-3 Ft<br>TP-6 6-2 Ft<br>TP-7 0-2 Ft<br>TP-8 0-2 Ft<br>TD4 0-2 Ft                                                                 |  | Sample Date<br>2/18/12<br>10:00<br>11:00<br>12:00<br>14:00<br>13:00<br>13:30<br>2/19/12<br>11:30                                                                                                                                                                                                                                                      |  | Sample Type (C=comp, G=grab)<br>G<br>G<br>G<br>G<br>G<br>G<br>G<br>G                             |  |
| Matrix (W=water, S=solid, O=other soil, BIT=biological, A=air)<br>Solid<br>Solid<br>Solid<br>Solid<br>Solid<br>Solid<br>Solid<br>Solid<br>Solid                                                              |  | Field Filtered Sample (Yes or No)<br>N<br>N<br>X<br>X<br>X<br>X<br>X<br>X<br>X                                                                                                                                                                                                                                                                        |  | Perform MS/MSD (Yes or No)<br>N<br>N<br>X<br>X<br>X<br>X<br>X<br>X<br>X                          |  |
| Sample Date<br>2/18/12<br>10:00<br>11:00<br>12:00<br>14:00<br>13:00<br>13:30<br>2/19/12<br>11:30                                                                                                             |  | Sample Time<br>9:00<br>10:00<br>11:00<br>12:00<br>14:00<br>13:00<br>13:30<br>11:30                                                                                                                                                                                                                                                                    |  | Sample Date<br>2/18/12<br>10:00<br>11:00<br>12:00<br>14:00<br>13:00<br>13:30<br>2/19/12<br>11:30 |  |
| Sample Date<br>2/18/12<br>10:00<br>11:00<br>12:00<br>14:00<br>13:00<br>13:30<br>2/19/12<br>11:30                                                                                                             |  | Sample Time<br>9:00<br>10:00<br>11:00<br>12:00<br>14:00<br>13:00<br>13:30<br>11:30                                                                                                                                                                                                                                                                    |  | Sample Date<br>2/18/12<br>10:00<br>11:00<br>12:00<br>14:00<br>13:00<br>13:30<br>2/19/12<br>11:30 |  |
| Sample Date<br>2/18/12<br>10:00<br>11:00<br>12:00<br>14:00<br>13:00<br>13:30<br>2/19/12<br>11:30                                                                                                             |  | Sample Time<br>9:00<br>10:00<br>11:00<br>12:00<br>14:00<br>13:00<br>13:30<br>11:30                                                                                                                                                                                                                                                                    |  | Sample Date<br>2/18/12<br>10:00<br>11:00<br>12:00<br>14:00<br>13:00<br>13:30<br>2/19/12<br>11:30 |  |
| Sample Date<br>2/18/12<br>10:00<br>11:00<br>12:00<br>14:00<br>13:00<br>13:30<br>2/19/12<br>11:30                                                                                                             |  | Sample Time<br>9:00<br>10:00<br>11:00<br>12:00<br>14:00<br>13:00<br>13:30<br>11:30                                                                                                                                                                                                                                                                    |  | Sample Date<br>2/18/12<br>10:00<br>11:00<br>12:00<br>14:00<br>13:00<br>13:30<br>2/19/12<br>11:30 |  |
| Sample Date<br>2/18/12<br>10:00<br>11:00<br>12:00<br>14:00<br>13:00<br>13:30<br>2/19/12<br>11:30                                                                                                             |  | Sample Time<br>9:00<br>10:00<br>11:00<br>12:00<br>14:00<br>13:00<br>13:30<br>11:30                                                                                                                                                                                                                                                                    |  | Sample Date<br>2/18/12<br>10:00<br>11:00<br>12:00<br>14:00<br>13:00<br>13:30<br>2/19/12<br>11:30 |  |
| Sample Date<br>2/18/12<br>10:00<br>11:00<br>12:00<br>14:00<br>13:00<br>13:30<br>2/19/12<br>11:30                                                                                                             |  | Sample Time<br>9:00<br>10:00<br>11:00<br>12:00<br>14:00<br>13:00<br>13:30<br>11:30                                                                                                                                                                                                                                                                    |  | Sample Date<br>2/18/12<br>10:00<br>11:00<br>12:00<br>14:00<br>13:00<br>13:30<br>2/19/12<br>11:30 |  |
| Sample Date<br>2/18/12<br>10:00<br>11:00<br>12:00<br>14:00<br>13:00<br>13:30<br>2/19/12<br>11:30                                                                                                             |  | Sample Time<br>9:00<br>10:00<br>11:00<br>12:00<br>14:00<br>13:00<br>13:30<br>11:30                                                                                                                                                                                                                                                                    |  | Sample Date<br>2/18/12<br>10:00<br>11:00<br>12:00<br>14:00<br>13:00<br>13:30<br>2/19/12<br>11:30 |  |
| Sample Date<br>2/18/12<br>10:00<br>11:00<br>12:00<br>14:00<br>13:00<br>13:30<br>2/19/12<br>11:30                                                                                                             |  | Sample Time<br>9:00<br>10:00<br>11:00<br>12:00<br>14:00<br>13:00<br>13:30<br>11:30                                                                                                                                                                                                                                                                    |  | Sample Date<br>2/18/12<br>10:00<br>11:00<br>12:00<br>14:00<br>13:00<br>13:30<br>2/19/12<br>11:30 |  |
| Sample Date<br>2/18/12<br>10:00<br>11:00<br>12:00<br>14:00<br>13:00<br>13:30<br>2/19/12<br>11:30                                                                                                             |  | Sample Time<br>9:00<br>10:00<br>11:00<br>12:00<br>14:00<br>13:00<br>13:30<br>11:30                                                                                                                                                                                                                                                                    |  | Sample Date<br>2/18/12<br>10:00<br>11:00<br>12:00<br>14:00<br>13:00<br>13:30<br>2/19/12<br>11:30 |  |
| Sample Date<br>2/18/12<br>10:00<br>11:00<br>                                                                                                                                                                 |  |                                                                                                                                                                                                                                                                                                                                                       |  |                                                                                                  |  |

## Login Sample Receipt Checklist

Client: Benchmark Env. Eng. & Science, PLLC

Job Number: 480-181318-1

**Login Number: 181318**

**List Source: Eurofins TestAmerica, Buffalo**

**List Number: 1**

**Creator: Stopa, Erik S**

| Question                                                                         | Answer | Comment |
|----------------------------------------------------------------------------------|--------|---------|
| Radioactivity either was not measured or, if measured, is at or below background | True   |         |
| The cooler's custody seal, if present, is intact.                                | True   |         |
| The cooler or samples do not appear to have been compromised or tampered with.   | True   |         |
| Samples were received on ice.                                                    | True   |         |
| Cooler Temperature is acceptable.                                                | True   |         |
| Cooler Temperature is recorded.                                                  | True   |         |
| COC is present.                                                                  | True   |         |
| COC is filled out in ink and legible.                                            | True   |         |
| COC is filled out with all pertinent information.                                | True   |         |
| Is the Field Sampler's name present on COC?                                      | True   |         |
| There are no discrepancies between the sample IDs on the containers and the COC. | True   |         |
| Samples are received within Holding Time (Excluding tests with immediate HTs)..  | True   |         |
| Sample containers have legible labels.                                           | True   |         |
| Containers are not broken or leaking.                                            | True   |         |
| Sample collection date/times are provided.                                       | True   |         |
| Appropriate sample containers are used.                                          | True   |         |
| Sample bottles are completely filled.                                            | True   |         |
| Sample Preservation Verified                                                     | True   |         |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True   |         |
| VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.     | True   |         |
| If necessary, staff have been informed of any short hold time or quick TAT needs | True   |         |
| Multiphasic samples are not present.                                             | True   |         |
| Samples do not require splitting or compositing.                                 | True   |         |
| Sampling Company provided.                                                       | True   | BMTK    |
| Samples received within 48 hours of sampling.                                    | True   |         |
| Samples requiring field filtration have been filtered in the field.              | N/A    |         |
| Chlorine Residual checked.                                                       | N/A    |         |

## ANALYTICAL REPORT

Eurofins TestAmerica, Buffalo  
10 Hazelwood Drive  
Amherst, NY 14228-2298  
Tel: (716)691-2600

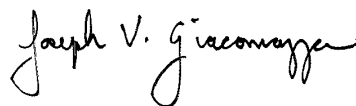
Laboratory Job ID: 480-181693-1

Client Project/Site: Benchmark - Grand Island Blvd. site

For:

Benchmark Env. Eng. & Science, PLLC  
2558 Hamburg Turnpike  
Lackawanna, New York 14218

Attn: Bryan Mayback



Authorized for release by:  
3/12/2021 11:00:09 AM

Joe Giacomazza, Project Manager I  
[joe.giacomazza@testamericainc.com](mailto:joe.giacomazza@testamericainc.com)

Designee for

Brian Fischer, Manager of Project Management  
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### LINKS

Review your project  
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[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

*The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*



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# Definitions/Glossary

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Benchmark - Grand Island Blvd. site

Job ID: 480-181693-1

## Qualifiers

### GC/MS Semi VOA

| Qualifier | Qualifier Description                                                                                          |
|-----------|----------------------------------------------------------------------------------------------------------------|
| J         | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |
| S1-       | Surrogate recovery exceeds control limits, low biased.                                                         |
| S1+       | Surrogate recovery exceeds control limits, high biased.                                                        |

### Metals

| Qualifier | Qualifier Description                                                                                          |
|-----------|----------------------------------------------------------------------------------------------------------------|
| J         | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

## Glossary

| Abbreviation   | These commonly used abbreviations may or may not be present in this report.                                 |
|----------------|-------------------------------------------------------------------------------------------------------------|
| □              | Listed under the "D" column to designate that the result is reported on a dry weight basis                  |
| %R             | Percent Recovery                                                                                            |
| CFL            | Contains Free Liquid                                                                                        |
| CFU            | Colony Forming Unit                                                                                         |
| CNF            | Contains No Free Liquid                                                                                     |
| DER            | Duplicate Error Ratio (normalized absolute difference)                                                      |
| Dil Fac        | Dilution Factor                                                                                             |
| DL             | Detection Limit (DoD/DOE)                                                                                   |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC            | Decision Level Concentration (Radiochemistry)                                                               |
| EDL            | Estimated Detection Limit (Dioxin)                                                                          |
| LOD            | Limit of Detection (DoD/DOE)                                                                                |
| LOQ            | Limit of Quantitation (DoD/DOE)                                                                             |
| MCL            | EPA recommended "Maximum Contaminant Level"                                                                 |
| MDA            | Minimum Detectable Activity (Radiochemistry)                                                                |
| MDC            | Minimum Detectable Concentration (Radiochemistry)                                                           |
| MDL            | Method Detection Limit                                                                                      |
| ML             | Minimum Level (Dioxin)                                                                                      |
| MPN            | Most Probable Number                                                                                        |
| MQL            | Method Quantitation Limit                                                                                   |
| NC             | Not Calculated                                                                                              |
| ND             | Not Detected at the reporting limit (or MDL or EDL if shown)                                                |
| NEG            | Negative / Absent                                                                                           |
| POS            | Positive / Present                                                                                          |
| PQL            | Practical Quantitation Limit                                                                                |
| PRES           | Presumptive                                                                                                 |
| QC             | Quality Control                                                                                             |
| RER            | Relative Error Ratio (Radiochemistry)                                                                       |
| RL             | Reporting Limit or Requested Limit (Radiochemistry)                                                         |
| RPD            | Relative Percent Difference, a measure of the relative difference between two points                        |
| TEF            | Toxicity Equivalent Factor (Dioxin)                                                                         |
| TEQ            | Toxicity Equivalent Quotient (Dioxin)                                                                       |
| TNTC           | Too Numerous To Count                                                                                       |

# Case Narrative

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Benchmark - Grand Island Blvd. site

Job ID: 480-181693-1

## Job ID: 480-181693-1

### Laboratory: Eurofins TestAmerica, Buffalo

#### Narrative

#### Job Narrative 480-181693-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 3/5/2021 3:45 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.2° C.

#### GC/MS Semi VOA

Method 8270D: The following sample was diluted due to color, appearance, and viscosity: TP-10 0-2 ft (480-181693-2). Elevated reporting limits (RL) are provided.

Method 8270D: Six surrogates are used for this analysis. The laboratory's SOP allows one acid and one base of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: TP-12 0-1 ft (480-181693-4). These results have been reported and qualified.

Method 8270D: The following sample was diluted due to the nature of the sample matrix: TP-10 0-2 ft (480-181693-2). As such, surrogate recoveries are below the calibration range or are not reported, and elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### Metals

Method 6010C: The following sample was diluted due to the presence of Total Copper which interferes with Lead: TP-10 0-2 ft (480-181693-2). Elevated reporting limits (RLs) are provided.

Method 6010C: The following sample was diluted due to the presence of Total Iron which interferes with Cadmium, Chromium, and Lead: TP-14 3-3 (480-181693-6). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### Organic Prep

Method 3550C: The following sample: TP-14 3-3ft (480-181693-6) was decanted prior to preparation .

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

# Detection Summary

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Benchmark - Grand Island Blvd. site

Job ID: 480-181693-1

Client Sample ID: TP-9 0.5-1.5 ft

Lab Sample ID: 480-181693-1

| Analyte                | Result | Qualifier | RL    | MDL    | Unit  | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Acenaphthylene         | 150    | J         | 220   | 28     | ug/Kg | 1       | ✱ | 8270D  | Total/NA  |
| Anthracene             | 140    | J         | 220   | 53     | ug/Kg | 1       | ✱ | 8270D  | Total/NA  |
| Benzo[a]anthracene     | 510    |           | 220   | 22     | ug/Kg | 1       | ✱ | 8270D  | Total/NA  |
| Benzo[a]pyrene         | 560    |           | 220   | 32     | ug/Kg | 1       | ✱ | 8270D  | Total/NA  |
| Benzo[b]fluoranthene   | 610    |           | 220   | 34     | ug/Kg | 1       | ✱ | 8270D  | Total/NA  |
| Benzo[g,h,i]perylene   | 360    |           | 220   | 23     | ug/Kg | 1       | ✱ | 8270D  | Total/NA  |
| Benzo[k]fluoranthene   | 310    |           | 220   | 28     | ug/Kg | 1       | ✱ | 8270D  | Total/NA  |
| Chrysene               | 490    |           | 220   | 48     | ug/Kg | 1       | ✱ | 8270D  | Total/NA  |
| Dibenz(a,h)anthracene  | 95     | J         | 220   | 38     | ug/Kg | 1       | ✱ | 8270D  | Total/NA  |
| Fluoranthene           | 1200   |           | 220   | 23     | ug/Kg | 1       | ✱ | 8270D  | Total/NA  |
| Fluorene               | 56     | J         | 220   | 25     | ug/Kg | 1       | ✱ | 8270D  | Total/NA  |
| Indeno[1,2,3-cd]pyrene | 310    |           | 220   | 27     | ug/Kg | 1       | ✱ | 8270D  | Total/NA  |
| Pyrene                 | 950    |           | 220   | 25     | ug/Kg | 1       | ✱ | 8270D  | Total/NA  |
| Phenanthrene           | 560    |           | 220   | 32     | ug/Kg | 1       | ✱ | 8270D  | Total/NA  |
| Arsenic                | 11.7   |           | 2.6   | 0.52   | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Barium                 | 127    |           | 0.66  | 0.14   | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Cadmium                | 0.81   |           | 0.26  | 0.039  | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Chromium               | 33.6   |           | 0.66  | 0.26   | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Lead                   | 54.6   |           | 1.3   | 0.31   | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Selenium               | 0.91   | J         | 5.2   | 0.52   | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Mercury                | 0.11   |           | 0.024 | 0.0098 | mg/Kg | 1       | ✱ | 7471B  | Total/NA  |

Client Sample ID: TP-10 0-2 ft

Lab Sample ID: 480-181693-2

| Analyte                | Result | Qualifier | RL   | MDL   | Unit  | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|------|-------|-------|---------|---|--------|-----------|
| Anthracene             | 1400   | J         | 4700 | 1200  | ug/Kg | 20      | ✱ | 8270D  | Total/NA  |
| Benzo[a]anthracene     | 5500   |           | 4700 | 470   | ug/Kg | 20      | ✱ | 8270D  | Total/NA  |
| Benzo[a]pyrene         | 6200   |           | 4700 | 690   | ug/Kg | 20      | ✱ | 8270D  | Total/NA  |
| Benzo[b]fluoranthene   | 7000   |           | 4700 | 740   | ug/Kg | 20      | ✱ | 8270D  | Total/NA  |
| Benzo[g,h,i]perylene   | 4900   |           | 4700 | 500   | ug/Kg | 20      | ✱ | 8270D  | Total/NA  |
| Benzo[k]fluoranthene   | 4200   | J         | 4700 | 610   | ug/Kg | 20      | ✱ | 8270D  | Total/NA  |
| Chrysene               | 5700   |           | 4700 | 1000  | ug/Kg | 20      | ✱ | 8270D  | Total/NA  |
| Dibenz(a,h)anthracene  | 1600   | J         | 4700 | 830   | ug/Kg | 20      | ✱ | 8270D  | Total/NA  |
| Fluoranthene           | 11000  |           | 4700 | 500   | ug/Kg | 20      | ✱ | 8270D  | Total/NA  |
| Indeno[1,2,3-cd]pyrene | 4500   | J         | 4700 | 580   | ug/Kg | 20      | ✱ | 8270D  | Total/NA  |
| Pyrene                 | 9700   |           | 4700 | 550   | ug/Kg | 20      | ✱ | 8270D  | Total/NA  |
| Phenanthrene           | 5000   |           | 4700 | 690   | ug/Kg | 20      | ✱ | 8270D  | Total/NA  |
| Arsenic                | 10.6   |           | 2.8  | 0.56  | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Barium                 | 184    |           | 0.70 | 0.15  | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Cadmium                | 56.8   |           | 0.28 | 0.042 | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Chromium               | 68.9   |           | 0.70 | 0.28  | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Lead                   | 815    |           | 7.0  | 1.7   | mg/Kg | 5       | ✱ | 6010C  | Total/NA  |
| Selenium               | 1.7    | J         | 5.6  | 0.56  | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Silver                 | 3.5    |           | 0.84 | 0.28  | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Mercury                | 4.4    |           | 0.14 | 0.057 | mg/Kg | 5       | ✱ | 7471B  | Total/NA  |

Client Sample ID: TP-12 0-1 ft

Lab Sample ID: 480-181693-4

| Analyte            | Result | Qualifier | RL  | MDL | Unit  | Dil Fac | D | Method | Prep Type |
|--------------------|--------|-----------|-----|-----|-------|---------|---|--------|-----------|
| Acenaphthylene     | 220    | J         | 230 | 29  | ug/Kg | 1       | ✱ | 8270D  | Total/NA  |
| Anthracene         | 190    | J         | 230 | 56  | ug/Kg | 1       | ✱ | 8270D  | Total/NA  |
| Benzo[a]anthracene | 700    |           | 230 | 23  | ug/Kg | 1       | ✱ | 8270D  | Total/NA  |

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Buffalo



# Detection Summary

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Benchmark - Grand Island Blvd. site

Job ID: 480-181693-1

## Client Sample ID: TP-12 0-1 ft (Continued)

## Lab Sample ID: 480-181693-4

| Analyte                | Result | Qualifier | RL    | MDL   | Unit  | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|-------|-------|-------|---------|---|--------|-----------|
| Benzo[a]pyrene         | 750    |           | 230   | 33    | ug/Kg | 1       | ✱ | 8270D  | Total/NA  |
| Benzo[b]fluoranthene   | 800    |           | 230   | 36    | ug/Kg | 1       | ✱ | 8270D  | Total/NA  |
| Benzo[g,h,i]perylene   | 450    |           | 230   | 24    | ug/Kg | 1       | ✱ | 8270D  | Total/NA  |
| Benzo[k]fluoranthene   | 400    |           | 230   | 29    | ug/Kg | 1       | ✱ | 8270D  | Total/NA  |
| Chrysene               | 690    |           | 230   | 51    | ug/Kg | 1       | ✱ | 8270D  | Total/NA  |
| Dibenz(a,h)anthracene  | 150    | J         | 230   | 40    | ug/Kg | 1       | ✱ | 8270D  | Total/NA  |
| Fluoranthene           | 1500   |           | 230   | 24    | ug/Kg | 1       | ✱ | 8270D  | Total/NA  |
| Fluorene               | 77     | J         | 230   | 27    | ug/Kg | 1       | ✱ | 8270D  | Total/NA  |
| Indeno[1,2,3-cd]pyrene | 430    |           | 230   | 28    | ug/Kg | 1       | ✱ | 8270D  | Total/NA  |
| Pyrene                 | 1200   |           | 230   | 27    | ug/Kg | 1       | ✱ | 8270D  | Total/NA  |
| Phenanthrene           | 720    |           | 230   | 33    | ug/Kg | 1       | ✱ | 8270D  | Total/NA  |
| Arsenic                | 13.0   |           | 2.8   | 0.56  | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Barium                 | 104    |           | 0.70  | 0.15  | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Cadmium                | 1.0    |           | 0.28  | 0.042 | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Chromium               | 42.6   |           | 0.70  | 0.28  | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Lead                   | 122    |           | 1.4   | 0.33  | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Selenium               | 0.70   | J         | 5.6   | 0.56  | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Mercury                | 0.21   |           | 0.027 | 0.011 | mg/Kg | 1       | ✱ | 7471B  | Total/NA  |

## Client Sample ID: TP-14 3-3 ft

## Lab Sample ID: 480-181693-6

| Analyte  | Result | Qualifier | RL    | MDL   | Unit  | Dil Fac | D | Method | Prep Type |
|----------|--------|-----------|-------|-------|-------|---------|---|--------|-----------|
| Arsenic  | 15.3   |           | 2.7   | 0.55  | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Barium   | 776    |           | 0.69  | 0.15  | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Cadmium  | 0.35   | J         | 0.55  | 0.082 | mg/Kg | 2       | ✱ | 6010C  | Total/NA  |
| Chromium | 154    |           | 1.4   | 0.55  | mg/Kg | 2       | ✱ | 6010C  | Total/NA  |
| Lead     | 10.1   |           | 2.7   | 0.66  | mg/Kg | 2       | ✱ | 6010C  | Total/NA  |
| Mercury  | 0.027  |           | 0.025 | 0.010 | mg/Kg | 1       | ✱ | 7471B  | Total/NA  |

## Client Sample ID: TP-15 2-3 ft

## Lab Sample ID: 480-181693-7

| Analyte  | Result | Qualifier | RL    | MDL   | Unit  | Dil Fac | D | Method | Prep Type |
|----------|--------|-----------|-------|-------|-------|---------|---|--------|-----------|
| Arsenic  | 29.0   |           | 3.9   | 0.77  | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Barium   | 230    |           | 0.97  | 0.21  | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Cadmium  | 0.40   |           | 0.39  | 0.058 | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Chromium | 30.1   |           | 0.97  | 0.39  | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Lead     | 11.7   |           | 1.9   | 0.46  | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Selenium | 1.1    | J         | 7.7   | 0.77  | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Mercury  | 0.20   |           | 0.034 | 0.014 | mg/Kg | 1       | ✱ | 7471B  | Total/NA  |

## Client Sample ID: TP-16 0-2 ft

## Lab Sample ID: 480-181693-8

| Analyte  | Result | Qualifier | RL    | MDL   | Unit  | Dil Fac | D | Method | Prep Type |
|----------|--------|-----------|-------|-------|-------|---------|---|--------|-----------|
| Arsenic  | 30.2   |           | 2.8   | 0.56  | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Barium   | 394    |           | 0.70  | 0.15  | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Cadmium  | 0.28   |           | 0.28  | 0.042 | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Chromium | 35.7   |           | 0.70  | 0.28  | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Lead     | 10.8   |           | 1.4   | 0.34  | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Selenium | 0.81   | J         | 5.6   | 0.56  | mg/Kg | 1       | ✱ | 6010C  | Total/NA  |
| Mercury  | 0.077  |           | 0.026 | 0.010 | mg/Kg | 1       | ✱ | 7471B  | Total/NA  |

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Buffalo

# Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Benchmark - Grand Island Blvd. site

Job ID: 480-181693-1

Client Sample ID: TP-9 0.5-1.5 ft

Lab Sample ID: 480-181693-1

Date Collected: 03/04/21 09:00

Matrix: Solid

Date Received: 03/05/21 15:45

Percent Solids: 78.7

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte                | Result | Qualifier | RL  | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|------------------------|--------|-----------|-----|-----|-------|---|----------------|----------------|---------|
| Acenaphthene           | ND     |           | 220 | 32  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 16:09 | 1       |
| Acenaphthylene         | 150    | J         | 220 | 28  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 16:09 | 1       |
| Anthracene             | 140    | J         | 220 | 53  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 16:09 | 1       |
| Benzo[a]anthracene     | 510    |           | 220 | 22  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 16:09 | 1       |
| Benzo[a]pyrene         | 560    |           | 220 | 32  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 16:09 | 1       |
| Benzo[b]fluoranthene   | 610    |           | 220 | 34  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 16:09 | 1       |
| Benzo[g,h,i]perylene   | 360    |           | 220 | 23  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 16:09 | 1       |
| Benzo[k]fluoranthene   | 310    |           | 220 | 28  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 16:09 | 1       |
| Chrysene               | 490    |           | 220 | 48  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 16:09 | 1       |
| Dibenz(a,h)anthracene  | 95     | J         | 220 | 38  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 16:09 | 1       |
| Fluoranthene           | 1200   |           | 220 | 23  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 16:09 | 1       |
| Fluorene               | 56     | J         | 220 | 25  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 16:09 | 1       |
| Indeno[1,2,3-cd]pyrene | 310    |           | 220 | 27  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 16:09 | 1       |
| Naphthalene            | ND     |           | 220 | 28  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 16:09 | 1       |
| Pyrene                 | 950    |           | 220 | 25  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 16:09 | 1       |
| Phenanthrene           | 560    |           | 220 | 32  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 16:09 | 1       |

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2,4,6-Tribromophenol (Surr) | 92        |           | 54 - 120 | 03/08/21 07:56 | 03/09/21 16:09 | 1       |
| 2-Fluorobiphenyl            | 98        |           | 60 - 120 | 03/08/21 07:56 | 03/09/21 16:09 | 1       |
| 2-Fluorophenol (Surr)       | 110       |           | 52 - 120 | 03/08/21 07:56 | 03/09/21 16:09 | 1       |
| Phenol-d5 (Surr)            | 91        |           | 54 - 120 | 03/08/21 07:56 | 03/09/21 16:09 | 1       |
| p-Terphenyl-d14 (Surr)      | 104       |           | 79 - 130 | 03/08/21 07:56 | 03/09/21 16:09 | 1       |
| Nitrobenzene-d5 (Surr)      | 93        |           | 53 - 120 | 03/08/21 07:56 | 03/09/21 16:09 | 1       |

## Method: 6010C - Metals (ICP)

| Analyte  | Result | Qualifier | RL   | MDL   | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|----------|--------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Arsenic  | 11.7   |           | 2.6  | 0.52  | mg/Kg | ☆ | 03/08/21 15:02 | 03/09/21 17:52 | 1       |
| Barium   | 127    |           | 0.66 | 0.14  | mg/Kg | ☆ | 03/08/21 15:02 | 03/09/21 17:52 | 1       |
| Cadmium  | 0.81   |           | 0.26 | 0.039 | mg/Kg | ☆ | 03/08/21 15:02 | 03/09/21 17:52 | 1       |
| Chromium | 33.6   |           | 0.66 | 0.26  | mg/Kg | ☆ | 03/08/21 15:02 | 03/09/21 17:52 | 1       |
| Lead     | 54.6   |           | 1.3  | 0.31  | mg/Kg | ☆ | 03/08/21 15:02 | 03/09/21 17:52 | 1       |
| Selenium | 0.91   | J         | 5.2  | 0.52  | mg/Kg | ☆ | 03/08/21 15:02 | 03/09/21 17:52 | 1       |
| Silver   | ND     |           | 0.79 | 0.26  | mg/Kg | ☆ | 03/08/21 15:02 | 03/09/21 17:52 | 1       |

## Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL    | MDL    | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.11   |           | 0.024 | 0.0098 | mg/Kg | ☆ | 03/10/21 13:40 | 03/10/21 15:08 | 1       |

# Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Benchmark - Grand Island Blvd. site

Job ID: 480-181693-1

Client Sample ID: TP-10 0-2 ft

Lab Sample ID: 480-181693-2

Date Collected: 03/04/21 10:00

Matrix: Solid

Date Received: 03/05/21 15:45

Percent Solids: 70.9

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte                       | Result       | Qualifier | RL   | MDL  | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|-------------------------------|--------------|-----------|------|------|-------|---|----------------|----------------|---------|
| Acenaphthene                  | ND           |           | 4700 | 690  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 16:33 | 20      |
| Acenaphthylene                | ND           |           | 4700 | 610  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 16:33 | 20      |
| <b>Anthracene</b>             | <b>1400</b>  | <b>J</b>  | 4700 | 1200 | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 16:33 | 20      |
| <b>Benzo[a]anthracene</b>     | <b>5500</b>  |           | 4700 | 470  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 16:33 | 20      |
| <b>Benzo[a]pyrene</b>         | <b>6200</b>  |           | 4700 | 690  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 16:33 | 20      |
| <b>Benzo[b]fluoranthene</b>   | <b>7000</b>  |           | 4700 | 740  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 16:33 | 20      |
| <b>Benzo[g,h,i]perylene</b>   | <b>4900</b>  |           | 4700 | 500  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 16:33 | 20      |
| <b>Benzo[k]fluoranthene</b>   | <b>4200</b>  | <b>J</b>  | 4700 | 610  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 16:33 | 20      |
| <b>Chrysene</b>               | <b>5700</b>  |           | 4700 | 1000 | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 16:33 | 20      |
| <b>Dibenz(a,h)anthracene</b>  | <b>1600</b>  | <b>J</b>  | 4700 | 830  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 16:33 | 20      |
| <b>Fluoranthene</b>           | <b>11000</b> |           | 4700 | 500  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 16:33 | 20      |
| Fluorene                      | ND           |           | 4700 | 550  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 16:33 | 20      |
| <b>Indeno[1,2,3-cd]pyrene</b> | <b>4500</b>  | <b>J</b>  | 4700 | 580  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 16:33 | 20      |
| Naphthalene                   | ND           |           | 4700 | 610  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 16:33 | 20      |
| <b>Pyrene</b>                 | <b>9700</b>  |           | 4700 | 550  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 16:33 | 20      |
| <b>Phenanthrene</b>           | <b>5000</b>  |           | 4700 | 690  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 16:33 | 20      |

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2,4,6-Tribromophenol (Surr) | 0         | S1-       | 54 - 120 | 03/08/21 07:56 | 03/09/21 16:33 | 20      |
| 2-Fluorobiphenyl            | 96        |           | 60 - 120 | 03/08/21 07:56 | 03/09/21 16:33 | 20      |
| 2-Fluorophenol (Surr)       | 103       |           | 52 - 120 | 03/08/21 07:56 | 03/09/21 16:33 | 20      |
| Phenol-d5 (Surr)            | 122       | S1+       | 54 - 120 | 03/08/21 07:56 | 03/09/21 16:33 | 20      |
| p-Terphenyl-d14 (Surr)      | 108       |           | 79 - 130 | 03/08/21 07:56 | 03/09/21 16:33 | 20      |
| Nitrobenzene-d5 (Surr)      | 90        |           | 53 - 120 | 03/08/21 07:56 | 03/09/21 16:33 | 20      |

## Method: 6010C - Metals (ICP)

| Analyte         | Result      | Qualifier | RL   | MDL   | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|-----------------|-------------|-----------|------|-------|-------|---|----------------|----------------|---------|
| <b>Arsenic</b>  | <b>10.6</b> |           | 2.8  | 0.56  | mg/Kg | ☆ | 03/08/21 15:02 | 03/09/21 17:56 | 1       |
| <b>Barium</b>   | <b>184</b>  |           | 0.70 | 0.15  | mg/Kg | ☆ | 03/08/21 15:02 | 03/09/21 17:56 | 1       |
| <b>Cadmium</b>  | <b>56.8</b> |           | 0.28 | 0.042 | mg/Kg | ☆ | 03/08/21 15:02 | 03/09/21 17:56 | 1       |
| <b>Chromium</b> | <b>68.9</b> |           | 0.70 | 0.28  | mg/Kg | ☆ | 03/08/21 15:02 | 03/09/21 17:56 | 1       |
| <b>Lead</b>     | <b>815</b>  |           | 7.0  | 1.7   | mg/Kg | ☆ | 03/08/21 15:02 | 03/10/21 11:47 | 5       |
| <b>Selenium</b> | <b>1.7</b>  | <b>J</b>  | 5.6  | 0.56  | mg/Kg | ☆ | 03/08/21 15:02 | 03/09/21 17:56 | 1       |
| <b>Silver</b>   | <b>3.5</b>  |           | 0.84 | 0.28  | mg/Kg | ☆ | 03/08/21 15:02 | 03/09/21 17:56 | 1       |

## Method: 7471B - Mercury (CVAA)

| Analyte        | Result     | Qualifier | RL   | MDL   | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|----------------|------------|-----------|------|-------|-------|---|----------------|----------------|---------|
| <b>Mercury</b> | <b>4.4</b> |           | 0.14 | 0.057 | mg/Kg | ☆ | 03/10/21 13:40 | 03/10/21 15:39 | 5       |

# Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Benchmark - Grand Island Blvd. site

Job ID: 480-181693-1

Client Sample ID: TP-12 0-1 ft

Lab Sample ID: 480-181693-4

Date Collected: 03/04/21 12:00

Matrix: Solid

Date Received: 03/05/21 15:45

Percent Solids: 73.9

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte                | Result | Qualifier | RL  | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|------------------------|--------|-----------|-----|-----|-------|---|----------------|----------------|---------|
| Acenaphthene           | ND     |           | 230 | 33  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 16:57 | 1       |
| Acenaphthylene         | 220    | J         | 230 | 29  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 16:57 | 1       |
| Anthracene             | 190    | J         | 230 | 56  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 16:57 | 1       |
| Benzo[a]anthracene     | 700    |           | 230 | 23  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 16:57 | 1       |
| Benzo[a]pyrene         | 750    |           | 230 | 33  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 16:57 | 1       |
| Benzo[b]fluoranthene   | 800    |           | 230 | 36  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 16:57 | 1       |
| Benzo[g,h,i]perylene   | 450    |           | 230 | 24  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 16:57 | 1       |
| Benzo[k]fluoranthene   | 400    |           | 230 | 29  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 16:57 | 1       |
| Chrysene               | 690    |           | 230 | 51  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 16:57 | 1       |
| Dibenz(a,h)anthracene  | 150    | J         | 230 | 40  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 16:57 | 1       |
| Fluoranthene           | 1500   |           | 230 | 24  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 16:57 | 1       |
| Fluorene               | 77     | J         | 230 | 27  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 16:57 | 1       |
| Indeno[1,2,3-cd]pyrene | 430    |           | 230 | 28  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 16:57 | 1       |
| Naphthalene            | ND     |           | 230 | 29  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 16:57 | 1       |
| Pyrene                 | 1200   |           | 230 | 27  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 16:57 | 1       |
| Phenanthrene           | 720    |           | 230 | 33  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 16:57 | 1       |

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2,4,6-Tribromophenol (Surr) | 73        |           | 54 - 120 | 03/08/21 07:56 | 03/09/21 16:57 | 1       |
| 2-Fluorobiphenyl            | 107       |           | 60 - 120 | 03/08/21 07:56 | 03/09/21 16:57 | 1       |
| 2-Fluorophenol (Surr)       | 122       | S1+       | 52 - 120 | 03/08/21 07:56 | 03/09/21 16:57 | 1       |
| Phenol-d5 (Surr)            | 96        |           | 54 - 120 | 03/08/21 07:56 | 03/09/21 16:57 | 1       |
| p-Terphenyl-d14 (Surr)      | 106       |           | 79 - 130 | 03/08/21 07:56 | 03/09/21 16:57 | 1       |
| Nitrobenzene-d5 (Surr)      | 99        |           | 53 - 120 | 03/08/21 07:56 | 03/09/21 16:57 | 1       |

## Method: 6010C - Metals (ICP)

| Analyte  | Result | Qualifier | RL   | MDL   | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|----------|--------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Arsenic  | 13.0   |           | 2.8  | 0.56  | mg/Kg | ☆ | 03/08/21 15:02 | 03/09/21 18:04 | 1       |
| Barium   | 104    |           | 0.70 | 0.15  | mg/Kg | ☆ | 03/08/21 15:02 | 03/09/21 18:04 | 1       |
| Cadmium  | 1.0    |           | 0.28 | 0.042 | mg/Kg | ☆ | 03/08/21 15:02 | 03/09/21 18:04 | 1       |
| Chromium | 42.6   |           | 0.70 | 0.28  | mg/Kg | ☆ | 03/08/21 15:02 | 03/09/21 18:04 | 1       |
| Lead     | 122    |           | 1.4  | 0.33  | mg/Kg | ☆ | 03/08/21 15:02 | 03/09/21 18:04 | 1       |
| Selenium | 0.70   | J         | 5.6  | 0.56  | mg/Kg | ☆ | 03/08/21 15:02 | 03/09/21 18:04 | 1       |
| Silver   | ND     |           | 0.84 | 0.28  | mg/Kg | ☆ | 03/08/21 15:02 | 03/09/21 18:04 | 1       |

## Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL    | MDL   | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------|--------|-----------|-------|-------|-------|---|----------------|----------------|---------|
| Mercury | 0.21   |           | 0.027 | 0.011 | mg/Kg | ☆ | 03/10/21 13:40 | 03/10/21 15:17 | 1       |



# Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Benchmark - Grand Island Blvd. site

Job ID: 480-181693-1

Client Sample ID: TP-14 3-3 ft

Lab Sample ID: 480-181693-6

Date Collected: 03/04/21 13:00

Matrix: Solid

Date Received: 03/05/21 15:45

Percent Solids: 75.9

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte                | Result | Qualifier | RL  | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|------------------------|--------|-----------|-----|-----|-------|---|----------------|----------------|---------|
| Acenaphthene           | ND     |           | 220 | 33  | ug/Kg | ✱ | 03/08/21 07:56 | 03/09/21 17:22 | 1       |
| Acenaphthylene         | ND     |           | 220 | 29  | ug/Kg | ✱ | 03/08/21 07:56 | 03/09/21 17:22 | 1       |
| Anthracene             | ND     |           | 220 | 55  | ug/Kg | ✱ | 03/08/21 07:56 | 03/09/21 17:22 | 1       |
| Benzo[a]anthracene     | ND     |           | 220 | 22  | ug/Kg | ✱ | 03/08/21 07:56 | 03/09/21 17:22 | 1       |
| Benzo[a]pyrene         | ND     |           | 220 | 33  | ug/Kg | ✱ | 03/08/21 07:56 | 03/09/21 17:22 | 1       |
| Benzo[b]fluoranthene   | ND     |           | 220 | 36  | ug/Kg | ✱ | 03/08/21 07:56 | 03/09/21 17:22 | 1       |
| Benzo[g,h,i]perylene   | ND     |           | 220 | 24  | ug/Kg | ✱ | 03/08/21 07:56 | 03/09/21 17:22 | 1       |
| Benzo[k]fluoranthene   | ND     |           | 220 | 29  | ug/Kg | ✱ | 03/08/21 07:56 | 03/09/21 17:22 | 1       |
| Chrysene               | ND     |           | 220 | 50  | ug/Kg | ✱ | 03/08/21 07:56 | 03/09/21 17:22 | 1       |
| Dibenz(a,h)anthracene  | ND     |           | 220 | 39  | ug/Kg | ✱ | 03/08/21 07:56 | 03/09/21 17:22 | 1       |
| Fluoranthene           | ND     |           | 220 | 24  | ug/Kg | ✱ | 03/08/21 07:56 | 03/09/21 17:22 | 1       |
| Fluorene               | ND     |           | 220 | 26  | ug/Kg | ✱ | 03/08/21 07:56 | 03/09/21 17:22 | 1       |
| Indeno[1,2,3-cd]pyrene | ND     |           | 220 | 28  | ug/Kg | ✱ | 03/08/21 07:56 | 03/09/21 17:22 | 1       |
| Naphthalene            | ND     |           | 220 | 29  | ug/Kg | ✱ | 03/08/21 07:56 | 03/09/21 17:22 | 1       |
| Pyrene                 | ND     |           | 220 | 26  | ug/Kg | ✱ | 03/08/21 07:56 | 03/09/21 17:22 | 1       |
| Phenanthrene           | ND     |           | 220 | 33  | ug/Kg | ✱ | 03/08/21 07:56 | 03/09/21 17:22 | 1       |

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2,4,6-Tribromophenol (Surr) | 72        |           | 54 - 120 | 03/08/21 07:56 | 03/09/21 17:22 | 1       |
| 2-Fluorobiphenyl            | 101       |           | 60 - 120 | 03/08/21 07:56 | 03/09/21 17:22 | 1       |
| 2-Fluorophenol (Surr)       | 77        |           | 52 - 120 | 03/08/21 07:56 | 03/09/21 17:22 | 1       |
| Phenol-d5 (Surr)            | 74        |           | 54 - 120 | 03/08/21 07:56 | 03/09/21 17:22 | 1       |
| p-Terphenyl-d14 (Surr)      | 105       |           | 79 - 130 | 03/08/21 07:56 | 03/09/21 17:22 | 1       |
| Nitrobenzene-d5 (Surr)      | 81        |           | 53 - 120 | 03/08/21 07:56 | 03/09/21 17:22 | 1       |

## Method: 6010C - Metals (ICP)

| Analyte  | Result | Qualifier | RL   | MDL   | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|----------|--------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Arsenic  | 15.3   |           | 2.7  | 0.55  | mg/Kg | ✱ | 03/08/21 15:02 | 03/09/21 18:23 | 1       |
| Barium   | 776    |           | 0.69 | 0.15  | mg/Kg | ✱ | 03/08/21 15:02 | 03/09/21 18:23 | 1       |
| Cadmium  | 0.35   | J         | 0.55 | 0.082 | mg/Kg | ✱ | 03/08/21 15:02 | 03/10/21 11:51 | 2       |
| Chromium | 154    |           | 1.4  | 0.55  | mg/Kg | ✱ | 03/08/21 15:02 | 03/10/21 11:51 | 2       |
| Lead     | 10.1   |           | 2.7  | 0.66  | mg/Kg | ✱ | 03/08/21 15:02 | 03/10/21 11:51 | 2       |
| Selenium | ND     |           | 5.5  | 0.55  | mg/Kg | ✱ | 03/08/21 15:02 | 03/09/21 18:23 | 1       |
| Silver   | ND     |           | 0.82 | 0.27  | mg/Kg | ✱ | 03/08/21 15:02 | 03/09/21 18:23 | 1       |

## Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL    | MDL   | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------|--------|-----------|-------|-------|-------|---|----------------|----------------|---------|
| Mercury | 0.027  |           | 0.025 | 0.010 | mg/Kg | ✱ | 03/10/21 13:40 | 03/10/21 15:22 | 1       |

# Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Benchmark - Grand Island Blvd. site

Job ID: 480-181693-1

Client Sample ID: TP-15 2-3 ft

Lab Sample ID: 480-181693-7

Date Collected: 03/04/21 13:30

Matrix: Solid

Date Received: 03/05/21 15:45

Percent Solids: 54.5

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte                | Result | Qualifier | RL  | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|------------------------|--------|-----------|-----|-----|-------|---|----------------|----------------|---------|
| Acenaphthene           | ND     |           | 310 | 46  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 17:47 | 1       |
| Acenaphthylene         | ND     |           | 310 | 40  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 17:47 | 1       |
| Anthracene             | ND     |           | 310 | 77  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 17:47 | 1       |
| Benzo[a]anthracene     | ND     |           | 310 | 31  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 17:47 | 1       |
| Benzo[a]pyrene         | ND     |           | 310 | 46  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 17:47 | 1       |
| Benzo[b]fluoranthene   | ND     |           | 310 | 49  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 17:47 | 1       |
| Benzo[g,h,i]perylene   | ND     |           | 310 | 33  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 17:47 | 1       |
| Benzo[k]fluoranthene   | ND     |           | 310 | 40  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 17:47 | 1       |
| Chrysene               | ND     |           | 310 | 70  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 17:47 | 1       |
| Dibenz(a,h)anthracene  | ND     |           | 310 | 55  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 17:47 | 1       |
| Fluoranthene           | ND     |           | 310 | 33  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 17:47 | 1       |
| Fluorene               | ND     |           | 310 | 37  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 17:47 | 1       |
| Indeno[1,2,3-cd]pyrene | ND     |           | 310 | 38  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 17:47 | 1       |
| Naphthalene            | ND     |           | 310 | 40  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 17:47 | 1       |
| Pyrene                 | ND     |           | 310 | 37  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 17:47 | 1       |
| Phenanthrene           | ND     |           | 310 | 46  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 17:47 | 1       |

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2,4,6-Tribromophenol (Surr) | 77        |           | 54 - 120 | 03/08/21 07:56 | 03/09/21 17:47 | 1       |
| 2-Fluorobiphenyl            | 91        |           | 60 - 120 | 03/08/21 07:56 | 03/09/21 17:47 | 1       |
| 2-Fluorophenol (Surr)       | 87        |           | 52 - 120 | 03/08/21 07:56 | 03/09/21 17:47 | 1       |
| Phenol-d5 (Surr)            | 65        |           | 54 - 120 | 03/08/21 07:56 | 03/09/21 17:47 | 1       |
| p-Terphenyl-d14 (Surr)      | 95        |           | 79 - 130 | 03/08/21 07:56 | 03/09/21 17:47 | 1       |
| Nitrobenzene-d5 (Surr)      | 68        |           | 53 - 120 | 03/08/21 07:56 | 03/09/21 17:47 | 1       |

## Method: 6010C - Metals (ICP)

| Analyte  | Result | Qualifier | RL   | MDL   | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|----------|--------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Arsenic  | 29.0   |           | 3.9  | 0.77  | mg/Kg | ☆ | 03/08/21 15:02 | 03/09/21 18:27 | 1       |
| Barium   | 230    |           | 0.97 | 0.21  | mg/Kg | ☆ | 03/08/21 15:02 | 03/09/21 18:27 | 1       |
| Cadmium  | 0.40   |           | 0.39 | 0.058 | mg/Kg | ☆ | 03/08/21 15:02 | 03/09/21 18:27 | 1       |
| Chromium | 30.1   |           | 0.97 | 0.39  | mg/Kg | ☆ | 03/08/21 15:02 | 03/09/21 18:27 | 1       |
| Lead     | 11.7   |           | 1.9  | 0.46  | mg/Kg | ☆ | 03/08/21 15:02 | 03/09/21 18:27 | 1       |
| Selenium | 1.1 J  |           | 7.7  | 0.77  | mg/Kg | ☆ | 03/08/21 15:02 | 03/09/21 18:27 | 1       |
| Silver   | ND     |           | 1.2  | 0.39  | mg/Kg | ☆ | 03/08/21 15:02 | 03/09/21 18:27 | 1       |

## Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL    | MDL   | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------|--------|-----------|-------|-------|-------|---|----------------|----------------|---------|
| Mercury | 0.20   |           | 0.034 | 0.014 | mg/Kg | ☆ | 03/10/21 13:40 | 03/10/21 15:24 | 1       |

# Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Benchmark - Grand Island Blvd. site

Job ID: 480-181693-1

Client Sample ID: TP-16 0-2 ft

Lab Sample ID: 480-181693-8

Date Collected: 03/04/21 14:00

Matrix: Solid

Date Received: 03/05/21 15:45

Percent Solids: 72.2

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte                | Result | Qualifier | RL  | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|------------------------|--------|-----------|-----|-----|-------|---|----------------|----------------|---------|
| Acenaphthene           | ND     |           | 230 | 34  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 18:12 | 1       |
| Acenaphthylene         | ND     |           | 230 | 30  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 18:12 | 1       |
| Anthracene             | ND     |           | 230 | 58  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 18:12 | 1       |
| Benzo[a]anthracene     | ND     |           | 230 | 23  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 18:12 | 1       |
| Benzo[a]pyrene         | ND     |           | 230 | 34  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 18:12 | 1       |
| Benzo[b]fluoranthene   | ND     |           | 230 | 37  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 18:12 | 1       |
| Benzo[g,h,i]perylene   | ND     |           | 230 | 25  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 18:12 | 1       |
| Benzo[k]fluoranthene   | ND     |           | 230 | 30  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 18:12 | 1       |
| Chrysene               | ND     |           | 230 | 52  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 18:12 | 1       |
| Dibenz(a,h)anthracene  | ND     |           | 230 | 41  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 18:12 | 1       |
| Fluoranthene           | ND     |           | 230 | 25  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 18:12 | 1       |
| Fluorene               | ND     |           | 230 | 27  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 18:12 | 1       |
| Indeno[1,2,3-cd]pyrene | ND     |           | 230 | 29  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 18:12 | 1       |
| Naphthalene            | ND     |           | 230 | 30  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 18:12 | 1       |
| Pyrene                 | ND     |           | 230 | 27  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 18:12 | 1       |
| Phenanthrene           | ND     |           | 230 | 34  | ug/Kg | ☆ | 03/08/21 07:56 | 03/09/21 18:12 | 1       |

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2,4,6-Tribromophenol (Surr) | 102       |           | 54 - 120 | 03/08/21 07:56 | 03/09/21 18:12 | 1       |
| 2-Fluorobiphenyl            | 98        |           | 60 - 120 | 03/08/21 07:56 | 03/09/21 18:12 | 1       |
| 2-Fluorophenol (Surr)       | 75        |           | 52 - 120 | 03/08/21 07:56 | 03/09/21 18:12 | 1       |
| Phenol-d5 (Surr)            | 68        |           | 54 - 120 | 03/08/21 07:56 | 03/09/21 18:12 | 1       |
| p-Terphenyl-d14 (Surr)      | 109       |           | 79 - 130 | 03/08/21 07:56 | 03/09/21 18:12 | 1       |
| Nitrobenzene-d5 (Surr)      | 78        |           | 53 - 120 | 03/08/21 07:56 | 03/09/21 18:12 | 1       |

## Method: 6010C - Metals (ICP)

| Analyte  | Result | Qualifier | RL   | MDL   | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|----------|--------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Arsenic  | 30.2   |           | 2.8  | 0.56  | mg/Kg | ☆ | 03/08/21 15:02 | 03/09/21 18:30 | 1       |
| Barium   | 394    |           | 0.70 | 0.15  | mg/Kg | ☆ | 03/08/21 15:02 | 03/09/21 18:30 | 1       |
| Cadmium  | 0.28   |           | 0.28 | 0.042 | mg/Kg | ☆ | 03/08/21 15:02 | 03/09/21 18:30 | 1       |
| Chromium | 35.7   |           | 0.70 | 0.28  | mg/Kg | ☆ | 03/08/21 15:02 | 03/09/21 18:30 | 1       |
| Lead     | 10.8   |           | 1.4  | 0.34  | mg/Kg | ☆ | 03/08/21 15:02 | 03/09/21 18:30 | 1       |
| Selenium | 0.81 J |           | 5.6  | 0.56  | mg/Kg | ☆ | 03/08/21 15:02 | 03/09/21 18:30 | 1       |
| Silver   | ND     |           | 0.84 | 0.28  | mg/Kg | ☆ | 03/08/21 15:02 | 03/09/21 18:30 | 1       |

## Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL    | MDL   | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------|--------|-----------|-------|-------|-------|---|----------------|----------------|---------|
| Mercury | 0.077  |           | 0.026 | 0.010 | mg/Kg | ☆ | 03/10/21 13:40 | 03/10/21 15:25 | 1       |

# Surrogate Summary

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Benchmark - Grand Island Blvd. site

Job ID: 480-181693-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

| Lab Sample ID      | Client Sample ID   | Percent Surrogate Recovery (Acceptance Limits) |                 |                 |                 |                    |                 |
|--------------------|--------------------|------------------------------------------------|-----------------|-----------------|-----------------|--------------------|-----------------|
|                    |                    | TBP<br>(54-120)                                | FBP<br>(60-120) | 2FP<br>(52-120) | PHL<br>(54-120) | TPHd14<br>(79-130) | NBZ<br>(53-120) |
| 480-181693-1       | TP-9 0.5-1.5 ft    | 92                                             | 98              | 110             | 91              | 104                | 93              |
| 480-181693-2       | TP-10 0-2 ft       | 0 S1-                                          | 96              | 103             | 122 S1+         | 108                | 90              |
| 480-181693-4       | TP-12 0-1 ft       | 73                                             | 107             | 122 S1+         | 96              | 106                | 99              |
| 480-181693-6       | TP-14 3-3 ft       | 72                                             | 101             | 77              | 74              | 105                | 81              |
| 480-181693-7       | TP-15 2-3 ft       | 77                                             | 91              | 87              | 65              | 95                 | 68              |
| 480-181693-8       | TP-16 0-2 ft       | 102                                            | 98              | 75              | 68              | 109                | 78              |
| LCS 480-571616/2-A | Lab Control Sample | 103                                            | 101             | 91              | 89              | 105                | 92              |
| MB 480-571616/1-A  | Method Blank       | 88                                             | 90              | 78              | 79              | 99                 | 78              |

### Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)

FBP = 2-Fluorobiphenyl

2FP = 2-Fluorophenol (Surr)

PHL = Phenol-d5 (Surr)

TPHd14 = p-Terphenyl-d14 (Surr)

NBZ = Nitrobenzene-d5 (Surr)

# QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Benchmark - Grand Island Blvd. site

Job ID: 480-181693-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-571616/1-A

Matrix: Solid

Analysis Batch: 571655

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 571616

| Analyte                | MB Result | MB Qualifier | RL  | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|------------------------|-----------|--------------|-----|-----|-------|---|----------------|----------------|---------|
| Acenaphthene           | ND        |              | 170 | 25  | ug/Kg |   | 03/08/21 07:56 | 03/08/21 19:36 | 1       |
| Acenaphthylene         | ND        |              | 170 | 22  | ug/Kg |   | 03/08/21 07:56 | 03/08/21 19:36 | 1       |
| Anthracene             | ND        |              | 170 | 42  | ug/Kg |   | 03/08/21 07:56 | 03/08/21 19:36 | 1       |
| Benzo[a]anthracene     | ND        |              | 170 | 17  | ug/Kg |   | 03/08/21 07:56 | 03/08/21 19:36 | 1       |
| Benzo[a]pyrene         | ND        |              | 170 | 25  | ug/Kg |   | 03/08/21 07:56 | 03/08/21 19:36 | 1       |
| Benzo[b]fluoranthene   | ND        |              | 170 | 27  | ug/Kg |   | 03/08/21 07:56 | 03/08/21 19:36 | 1       |
| Benzo[g,h,i]perylene   | ND        |              | 170 | 18  | ug/Kg |   | 03/08/21 07:56 | 03/08/21 19:36 | 1       |
| Benzo[k]fluoranthene   | ND        |              | 170 | 22  | ug/Kg |   | 03/08/21 07:56 | 03/08/21 19:36 | 1       |
| Chrysene               | ND        |              | 170 | 38  | ug/Kg |   | 03/08/21 07:56 | 03/08/21 19:36 | 1       |
| Dibenz(a,h)anthracene  | ND        |              | 170 | 30  | ug/Kg |   | 03/08/21 07:56 | 03/08/21 19:36 | 1       |
| Fluoranthene           | ND        |              | 170 | 18  | ug/Kg |   | 03/08/21 07:56 | 03/08/21 19:36 | 1       |
| Fluorene               | ND        |              | 170 | 20  | ug/Kg |   | 03/08/21 07:56 | 03/08/21 19:36 | 1       |
| Indeno[1,2,3-cd]pyrene | ND        |              | 170 | 21  | ug/Kg |   | 03/08/21 07:56 | 03/08/21 19:36 | 1       |
| Naphthalene            | ND        |              | 170 | 22  | ug/Kg |   | 03/08/21 07:56 | 03/08/21 19:36 | 1       |
| Pyrene                 | ND        |              | 170 | 20  | ug/Kg |   | 03/08/21 07:56 | 03/08/21 19:36 | 1       |
| Phenanthrene           | ND        |              | 170 | 25  | ug/Kg |   | 03/08/21 07:56 | 03/08/21 19:36 | 1       |

| Surrogate                   | MB %Recovery | MB Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|--------------|--------------|----------|----------------|----------------|---------|
| 2,4,6-Tribromophenol (Surr) | 88           |              | 54 - 120 | 03/08/21 07:56 | 03/08/21 19:36 | 1       |
| 2-Fluorobiphenyl            | 90           |              | 60 - 120 | 03/08/21 07:56 | 03/08/21 19:36 | 1       |
| 2-Fluorophenol (Surr)       | 78           |              | 52 - 120 | 03/08/21 07:56 | 03/08/21 19:36 | 1       |
| Phenol-d5 (Surr)            | 79           |              | 54 - 120 | 03/08/21 07:56 | 03/08/21 19:36 | 1       |
| p-Terphenyl-d14 (Surr)      | 99           |              | 79 - 130 | 03/08/21 07:56 | 03/08/21 19:36 | 1       |
| Nitrobenzene-d5 (Surr)      | 78           |              | 53 - 120 | 03/08/21 07:56 | 03/08/21 19:36 | 1       |

Lab Sample ID: LCS 480-571616/2-A

Matrix: Solid

Analysis Batch: 571655

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 571616

| Analyte                | Spike Added | LCS Result | LCS Qualifier | Unit  | D | %Rec | %Rec. Limits |
|------------------------|-------------|------------|---------------|-------|---|------|--------------|
| Acenaphthene           | 1660        | 1630       |               | ug/Kg |   | 98   | 62 - 120     |
| Acenaphthylene         | 1660        | 1620       |               | ug/Kg |   | 97   | 58 - 121     |
| Anthracene             | 1660        | 1710       |               | ug/Kg |   | 103  | 62 - 120     |
| Benzo[a]anthracene     | 1660        | 1720       |               | ug/Kg |   | 104  | 65 - 120     |
| Benzo[a]pyrene         | 1660        | 1760       |               | ug/Kg |   | 105  | 64 - 120     |
| Benzo[b]fluoranthene   | 1660        | 1660       |               | ug/Kg |   | 100  | 64 - 120     |
| Benzo[g,h,i]perylene   | 1660        | 1980       |               | ug/Kg |   | 119  | 45 - 145     |
| Benzo[k]fluoranthene   | 1660        | 1630       |               | ug/Kg |   | 98   | 65 - 120     |
| Chrysene               | 1660        | 1790       |               | ug/Kg |   | 107  | 64 - 120     |
| Dibenz(a,h)anthracene  | 1660        | 2000       |               | ug/Kg |   | 120  | 54 - 132     |
| Fluoranthene           | 1660        | 1800       |               | ug/Kg |   | 108  | 62 - 120     |
| Fluorene               | 1660        | 1660       |               | ug/Kg |   | 100  | 63 - 120     |
| Indeno[1,2,3-cd]pyrene | 1660        | 2000       |               | ug/Kg |   | 120  | 56 - 134     |
| Naphthalene            | 1660        | 1510       |               | ug/Kg |   | 91   | 55 - 120     |
| Pyrene                 | 1660        | 1790       |               | ug/Kg |   | 108  | 61 - 133     |
| Phenanthrene           | 1660        | 1700       |               | ug/Kg |   | 102  | 60 - 120     |

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# QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Benchmark - Grand Island Blvd. site

Job ID: 480-181693-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-571616/2-A  
Matrix: Solid  
Analysis Batch: 571655

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 571616

| Surrogate                   | LCS<br>%Recovery | LCS<br>Qualifier | Limits   |
|-----------------------------|------------------|------------------|----------|
| 2,4,6-Tribromophenol (Surr) | 103              |                  | 54 - 120 |
| 2-Fluorobiphenyl            | 101              |                  | 60 - 120 |
| 2-Fluorophenol (Surr)       | 91               |                  | 52 - 120 |
| Phenol-d5 (Surr)            | 89               |                  | 54 - 120 |
| p-Terphenyl-d14 (Surr)      | 105              |                  | 79 - 130 |
| Nitrobenzene-d5 (Surr)      | 92               |                  | 53 - 120 |

## Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-571700/1-A  
Matrix: Solid  
Analysis Batch: 571945

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 571700

| Analyte  | MB<br>Result | MB<br>Qualifier | RL   | MDL   | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|----------|--------------|-----------------|------|-------|-------|---|----------------|----------------|---------|
| Arsenic  | ND           |                 | 1.9  | 0.38  | mg/Kg |   | 03/08/21 15:02 | 03/09/21 16:07 | 1       |
| Barium   | ND           |                 | 0.48 | 0.11  | mg/Kg |   | 03/08/21 15:02 | 03/09/21 16:07 | 1       |
| Cadmium  | ND           |                 | 0.19 | 0.029 | mg/Kg |   | 03/08/21 15:02 | 03/09/21 16:07 | 1       |
| Chromium | ND           |                 | 0.48 | 0.19  | mg/Kg |   | 03/08/21 15:02 | 03/09/21 16:07 | 1       |
| Lead     | ND           |                 | 0.96 | 0.23  | mg/Kg |   | 03/08/21 15:02 | 03/09/21 16:07 | 1       |
| Selenium | ND           |                 | 3.8  | 0.38  | mg/Kg |   | 03/08/21 15:02 | 03/09/21 16:07 | 1       |
| Silver   | ND           |                 | 0.58 | 0.19  | mg/Kg |   | 03/08/21 15:02 | 03/09/21 16:07 | 1       |

Lab Sample ID: LCSSRM 480-571700/2-A  
Matrix: Solid  
Analysis Batch: 571945

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 571700

| Analyte  | Spike<br>Added | LCSSRM<br>Result | LCSSRM<br>Qualifier | Unit  | D | %Rec  | %Rec.<br>Limits |
|----------|----------------|------------------|---------------------|-------|---|-------|-----------------|
| Arsenic  | 162            | 146.4            |                     | mg/Kg |   | 90.4  | 70.4 - 130.2    |
| Barium   | 138            | 126.8            |                     | mg/Kg |   | 91.8  | 74.6 - 124.6    |
| Cadmium  | 135            | 128.0            |                     | mg/Kg |   | 94.8  | 74.8 - 124.4    |
| Chromium | 117            | 102.7            |                     | mg/Kg |   | 87.8  | 70.1 - 129.9    |
| Lead     | 77.6           | 78.65            |                     | mg/Kg |   | 101.4 | 68.8 - 131.4    |
| Selenium | 172            | 159.5            |                     | mg/Kg |   | 92.7  | 68.0 - 132.6    |
| Silver   | 24.7           | 20.64            |                     | mg/Kg |   | 83.6  | 67.2 - 133.2    |

## Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 480-571885/1-A  
Matrix: Solid  
Analysis Batch: 572039

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 571885

| Analyte | MB<br>Result | MB<br>Qualifier | RL    | MDL    | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------|--------------|-----------------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | ND           |                 | 0.019 | 0.0079 | mg/Kg |   | 03/10/21 13:40 | 03/10/21 15:05 | 1       |

Eurofins TestAmerica, Buffalo

# QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Benchmark - Grand Island Blvd. site

Job ID: 480-181693-1

## Method: 7471B - Mercury (CVAA) (Continued)

Lab Sample ID: LCSSRM 480-571885/2-A ^10

Matrix: Solid

Analysis Batch: 572039

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 571885

| Analyte | Spike Added | LCSSRM Result | LCSSRM Qualifier | Unit  | D | %Rec  | %Rec. Limits |
|---------|-------------|---------------|------------------|-------|---|-------|--------------|
| Mercury | 27.2        | 29.05         |                  | mg/Kg |   | 106.8 | 59.9 - 140.1 |

Lab Sample ID: 480-181693-1 MS

Matrix: Solid

Analysis Batch: 572039

Client Sample ID: TP-9 0.5-1.5 ft

Prep Type: Total/NA

Prep Batch: 571885

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit  | D | %Rec | %Rec. Limits |
|---------|---------------|------------------|-------------|-----------|--------------|-------|---|------|--------------|
| Mercury | 0.11          |                  | 0.373       | 0.469     |              | mg/Kg | ✱ | 95   | 80 - 120     |

Lab Sample ID: 480-181693-1 MSD

Matrix: Solid

Analysis Batch: 572039

Client Sample ID: TP-9 0.5-1.5 ft

Prep Type: Total/NA

Prep Batch: 571885

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit  | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---------|---------------|------------------|-------------|------------|---------------|-------|---|------|--------------|-----|-----------|
| Mercury | 0.11          |                  | 0.424       | 0.495      |               | mg/Kg | ✱ | 90   | 80 - 120     | 5   | 20        |

# QC Association Summary

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Benchmark - Grand Island Blvd. site

Job ID: 480-181693-1

## GC/MS Semi VOA

### Prep Batch: 571616

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 480-181693-1       | TP-9 0.5-1.5 ft    | Total/NA  | Solid  | 3550C  |            |
| 480-181693-2       | TP-10 0-2 ft       | Total/NA  | Solid  | 3550C  |            |
| 480-181693-4       | TP-12 0-1 ft       | Total/NA  | Solid  | 3550C  |            |
| 480-181693-6       | TP-14 3-3 ft       | Total/NA  | Solid  | 3550C  |            |
| 480-181693-7       | TP-15 2-3 ft       | Total/NA  | Solid  | 3550C  |            |
| 480-181693-8       | TP-16 0-2 ft       | Total/NA  | Solid  | 3550C  |            |
| MB 480-571616/1-A  | Method Blank       | Total/NA  | Solid  | 3550C  |            |
| LCS 480-571616/2-A | Lab Control Sample | Total/NA  | Solid  | 3550C  |            |

### Analysis Batch: 571655

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| MB 480-571616/1-A  | Method Blank       | Total/NA  | Solid  | 8270D  | 571616     |
| LCS 480-571616/2-A | Lab Control Sample | Total/NA  | Solid  | 8270D  | 571616     |

### Analysis Batch: 571826

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|------------------|-----------|--------|--------|------------|
| 480-181693-1  | TP-9 0.5-1.5 ft  | Total/NA  | Solid  | 8270D  | 571616     |
| 480-181693-2  | TP-10 0-2 ft     | Total/NA  | Solid  | 8270D  | 571616     |
| 480-181693-4  | TP-12 0-1 ft     | Total/NA  | Solid  | 8270D  | 571616     |
| 480-181693-6  | TP-14 3-3 ft     | Total/NA  | Solid  | 8270D  | 571616     |
| 480-181693-7  | TP-15 2-3 ft     | Total/NA  | Solid  | 8270D  | 571616     |
| 480-181693-8  | TP-16 0-2 ft     | Total/NA  | Solid  | 8270D  | 571616     |

## Metals

### Prep Batch: 571700

| Lab Sample ID         | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|-----------------------|--------------------|-----------|--------|--------|------------|
| 480-181693-1          | TP-9 0.5-1.5 ft    | Total/NA  | Solid  | 3050B  |            |
| 480-181693-2          | TP-10 0-2 ft       | Total/NA  | Solid  | 3050B  |            |
| 480-181693-4          | TP-12 0-1 ft       | Total/NA  | Solid  | 3050B  |            |
| 480-181693-6          | TP-14 3-3 ft       | Total/NA  | Solid  | 3050B  |            |
| 480-181693-7          | TP-15 2-3 ft       | Total/NA  | Solid  | 3050B  |            |
| 480-181693-8          | TP-16 0-2 ft       | Total/NA  | Solid  | 3050B  |            |
| MB 480-571700/1-A     | Method Blank       | Total/NA  | Solid  | 3050B  |            |
| LCSSRM 480-571700/2-A | Lab Control Sample | Total/NA  | Solid  | 3050B  |            |

### Prep Batch: 571885

| Lab Sample ID            | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|--------------------------|--------------------|-----------|--------|--------|------------|
| 480-181693-1             | TP-9 0.5-1.5 ft    | Total/NA  | Solid  | 7471B  |            |
| 480-181693-2             | TP-10 0-2 ft       | Total/NA  | Solid  | 7471B  |            |
| 480-181693-4             | TP-12 0-1 ft       | Total/NA  | Solid  | 7471B  |            |
| 480-181693-6             | TP-14 3-3 ft       | Total/NA  | Solid  | 7471B  |            |
| 480-181693-7             | TP-15 2-3 ft       | Total/NA  | Solid  | 7471B  |            |
| 480-181693-8             | TP-16 0-2 ft       | Total/NA  | Solid  | 7471B  |            |
| MB 480-571885/1-A        | Method Blank       | Total/NA  | Solid  | 7471B  |            |
| LCSSRM 480-571885/2-A ^1 | Lab Control Sample | Total/NA  | Solid  | 7471B  |            |
| 480-181693-1 MS          | TP-9 0.5-1.5 ft    | Total/NA  | Solid  | 7471B  |            |
| 480-181693-1 MSD         | TP-9 0.5-1.5 ft    | Total/NA  | Solid  | 7471B  |            |

# QC Association Summary

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Benchmark - Grand Island Blvd. site

Job ID: 480-181693-1

## Metals

### Analysis Batch: 571945

| Lab Sample ID         | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|-----------------------|--------------------|-----------|--------|--------|------------|
| 480-181693-1          | TP-9 0.5-1.5 ft    | Total/NA  | Solid  | 6010C  | 571700     |
| 480-181693-2          | TP-10 0-2 ft       | Total/NA  | Solid  | 6010C  | 571700     |
| 480-181693-4          | TP-12 0-1 ft       | Total/NA  | Solid  | 6010C  | 571700     |
| 480-181693-6          | TP-14 3-3 ft       | Total/NA  | Solid  | 6010C  | 571700     |
| 480-181693-7          | TP-15 2-3 ft       | Total/NA  | Solid  | 6010C  | 571700     |
| 480-181693-8          | TP-16 0-2 ft       | Total/NA  | Solid  | 6010C  | 571700     |
| MB 480-571700/1-A     | Method Blank       | Total/NA  | Solid  | 6010C  | 571700     |
| LCSSRM 480-571700/2-A | Lab Control Sample | Total/NA  | Solid  | 6010C  | 571700     |

### Analysis Batch: 572039

| Lab Sample ID            | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|--------------------------|--------------------|-----------|--------|--------|------------|
| 480-181693-1             | TP-9 0.5-1.5 ft    | Total/NA  | Solid  | 7471B  | 571885     |
| 480-181693-2             | TP-10 0-2 ft       | Total/NA  | Solid  | 7471B  | 571885     |
| 480-181693-4             | TP-12 0-1 ft       | Total/NA  | Solid  | 7471B  | 571885     |
| 480-181693-6             | TP-14 3-3 ft       | Total/NA  | Solid  | 7471B  | 571885     |
| 480-181693-7             | TP-15 2-3 ft       | Total/NA  | Solid  | 7471B  | 571885     |
| 480-181693-8             | TP-16 0-2 ft       | Total/NA  | Solid  | 7471B  | 571885     |
| MB 480-571885/1-A        | Method Blank       | Total/NA  | Solid  | 7471B  | 571885     |
| LCSSRM 480-571885/2-A ^1 | Lab Control Sample | Total/NA  | Solid  | 7471B  | 571885     |
| 480-181693-1 MS          | TP-9 0.5-1.5 ft    | Total/NA  | Solid  | 7471B  | 571885     |
| 480-181693-1 MSD         | TP-9 0.5-1.5 ft    | Total/NA  | Solid  | 7471B  | 571885     |

### Analysis Batch: 572127

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|------------------|-----------|--------|--------|------------|
| 480-181693-2  | TP-10 0-2 ft     | Total/NA  | Solid  | 6010C  | 571700     |
| 480-181693-6  | TP-14 3-3 ft     | Total/NA  | Solid  | 6010C  | 571700     |

## General Chemistry

### Analysis Batch: 571532

| Lab Sample ID    | Client Sample ID | Prep Type | Matrix | Method   | Prep Batch |
|------------------|------------------|-----------|--------|----------|------------|
| 480-181693-1     | TP-9 0.5-1.5 ft  | Total/NA  | Solid  | Moisture |            |
| 480-181693-2     | TP-10 0-2 ft     | Total/NA  | Solid  | Moisture |            |
| 480-181693-4     | TP-12 0-1 ft     | Total/NA  | Solid  | Moisture |            |
| 480-181693-6     | TP-14 3-3 ft     | Total/NA  | Solid  | Moisture |            |
| 480-181693-7     | TP-15 2-3 ft     | Total/NA  | Solid  | Moisture |            |
| 480-181693-8     | TP-16 0-2 ft     | Total/NA  | Solid  | Moisture |            |
| 480-181693-8 MS  | TP-16 0-2 ft     | Total/NA  | Solid  | Moisture |            |
| 480-181693-8 MSD | TP-16 0-2 ft     | Total/NA  | Solid  | Moisture |            |

# Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Benchmark - Grand Island Blvd. site

Job ID: 480-181693-1

**Client Sample ID: TP-9 0.5-1.5 ft**

**Date Collected: 03/04/21 09:00**

**Date Received: 03/05/21 15:45**

**Lab Sample ID: 480-181693-1**

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Analysis   | Moisture     |     | 1               | 571532       | 03/05/21 14:40       | CLA     | TAL BUF |

**Client Sample ID: TP-9 0.5-1.5 ft**

**Date Collected: 03/04/21 09:00**

**Date Received: 03/05/21 15:45**

**Lab Sample ID: 480-181693-1**

**Matrix: Solid**

**Percent Solids: 78.7**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Prep       | 3550C        |     |                 | 571616       | 03/08/21 07:56       | VXF     | TAL BUF |
| Total/NA  | Analysis   | 8270D        |     | 1               | 571826       | 03/09/21 16:09       | JMM     | TAL BUF |
| Total/NA  | Prep       | 3050B        |     |                 | 571700       | 03/08/21 15:02       | ADM     | TAL BUF |
| Total/NA  | Analysis   | 6010C        |     | 1               | 571945       | 03/09/21 17:52       | AMH     | TAL BUF |
| Total/NA  | Prep       | 7471B        |     |                 | 571885       | 03/10/21 13:40       | BMB     | TAL BUF |
| Total/NA  | Analysis   | 7471B        |     | 1               | 572039       | 03/10/21 15:08       | BMB     | TAL BUF |

**Client Sample ID: TP-10 0-2 ft**

**Date Collected: 03/04/21 10:00**

**Date Received: 03/05/21 15:45**

**Lab Sample ID: 480-181693-2**

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Analysis   | Moisture     |     | 1               | 571532       | 03/05/21 14:40       | CLA     | TAL BUF |

**Client Sample ID: TP-10 0-2 ft**

**Date Collected: 03/04/21 10:00**

**Date Received: 03/05/21 15:45**

**Lab Sample ID: 480-181693-2**

**Matrix: Solid**

**Percent Solids: 70.9**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Prep       | 3550C        |     |                 | 571616       | 03/08/21 07:56       | VXF     | TAL BUF |
| Total/NA  | Analysis   | 8270D        |     | 20              | 571826       | 03/09/21 16:33       | JMM     | TAL BUF |
| Total/NA  | Prep       | 3050B        |     |                 | 571700       | 03/08/21 15:02       | ADM     | TAL BUF |
| Total/NA  | Analysis   | 6010C        |     | 1               | 571945       | 03/09/21 17:56       | AMH     | TAL BUF |
| Total/NA  | Prep       | 3050B        |     |                 | 571700       | 03/08/21 15:02       | ADM     | TAL BUF |
| Total/NA  | Analysis   | 6010C        |     | 5               | 572127       | 03/10/21 11:47       | AMH     | TAL BUF |
| Total/NA  | Prep       | 7471B        |     |                 | 571885       | 03/10/21 13:40       | BMB     | TAL BUF |
| Total/NA  | Analysis   | 7471B        |     | 5               | 572039       | 03/10/21 15:39       | BMB     | TAL BUF |

**Client Sample ID: TP-12 0-1 ft**

**Date Collected: 03/04/21 12:00**

**Date Received: 03/05/21 15:45**

**Lab Sample ID: 480-181693-4**

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Analysis   | Moisture     |     | 1               | 571532       | 03/05/21 14:40       | CLA     | TAL BUF |



# Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Benchmark - Grand Island Blvd. site

Job ID: 480-181693-1

**Client Sample ID: TP-12 0-1 ft**

**Lab Sample ID: 480-181693-4**

**Date Collected: 03/04/21 12:00**

**Matrix: Solid**

**Date Received: 03/05/21 15:45**

**Percent Solids: 73.9**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Prep       | 3550C        |     |                 | 571616       | 03/08/21 07:56       | VXF     | TAL BUF |
| Total/NA  | Analysis   | 8270D        |     | 1               | 571826       | 03/09/21 16:57       | JMM     | TAL BUF |
| Total/NA  | Prep       | 3050B        |     |                 | 571700       | 03/08/21 15:02       | ADM     | TAL BUF |
| Total/NA  | Analysis   | 6010C        |     | 1               | 571945       | 03/09/21 18:04       | AMH     | TAL BUF |
| Total/NA  | Prep       | 7471B        |     |                 | 571885       | 03/10/21 13:40       | BMB     | TAL BUF |
| Total/NA  | Analysis   | 7471B        |     | 1               | 572039       | 03/10/21 15:17       | BMB     | TAL BUF |

**Client Sample ID: TP-14 3-3 ft**

**Lab Sample ID: 480-181693-6**

**Date Collected: 03/04/21 13:00**

**Matrix: Solid**

**Date Received: 03/05/21 15:45**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Analysis   | Moisture     |     | 1               | 571532       | 03/05/21 14:40       | CLA     | TAL BUF |

**Client Sample ID: TP-14 3-3 ft**

**Lab Sample ID: 480-181693-6**

**Date Collected: 03/04/21 13:00**

**Matrix: Solid**

**Date Received: 03/05/21 15:45**

**Percent Solids: 75.9**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Prep       | 3550C        |     |                 | 571616       | 03/08/21 07:56       | VXF     | TAL BUF |
| Total/NA  | Analysis   | 8270D        |     | 1               | 571826       | 03/09/21 17:22       | JMM     | TAL BUF |
| Total/NA  | Prep       | 3050B        |     |                 | 571700       | 03/08/21 15:02       | ADM     | TAL BUF |
| Total/NA  | Analysis   | 6010C        |     | 1               | 571945       | 03/09/21 18:23       | AMH     | TAL BUF |
| Total/NA  | Prep       | 3050B        |     |                 | 571700       | 03/08/21 15:02       | ADM     | TAL BUF |
| Total/NA  | Analysis   | 6010C        |     | 2               | 572127       | 03/10/21 11:51       | AMH     | TAL BUF |
| Total/NA  | Prep       | 7471B        |     |                 | 571885       | 03/10/21 13:40       | BMB     | TAL BUF |
| Total/NA  | Analysis   | 7471B        |     | 1               | 572039       | 03/10/21 15:22       | BMB     | TAL BUF |

**Client Sample ID: TP-15 2-3 ft**

**Lab Sample ID: 480-181693-7**

**Date Collected: 03/04/21 13:30**

**Matrix: Solid**

**Date Received: 03/05/21 15:45**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Analysis   | Moisture     |     | 1               | 571532       | 03/05/21 14:40       | CLA     | TAL BUF |

**Client Sample ID: TP-15 2-3 ft**

**Lab Sample ID: 480-181693-7**

**Date Collected: 03/04/21 13:30**

**Matrix: Solid**

**Date Received: 03/05/21 15:45**

**Percent Solids: 54.5**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Prep       | 3550C        |     |                 | 571616       | 03/08/21 07:56       | VXF     | TAL BUF |
| Total/NA  | Analysis   | 8270D        |     | 1               | 571826       | 03/09/21 17:47       | JMM     | TAL BUF |
| Total/NA  | Prep       | 3050B        |     |                 | 571700       | 03/08/21 15:02       | ADM     | TAL BUF |
| Total/NA  | Analysis   | 6010C        |     | 1               | 571945       | 03/09/21 18:27       | AMH     | TAL BUF |
| Total/NA  | Prep       | 7471B        |     |                 | 571885       | 03/10/21 13:40       | BMB     | TAL BUF |
| Total/NA  | Analysis   | 7471B        |     | 1               | 572039       | 03/10/21 15:24       | BMB     | TAL BUF |

Eurofins TestAmerica, Buffalo

# Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Benchmark - Grand Island Blvd. site

Job ID: 480-181693-1

**Client Sample ID: TP-16 0-2 ft**

**Lab Sample ID: 480-181693-8**

**Date Collected: 03/04/21 14:00**

**Matrix: Solid**

**Date Received: 03/05/21 15:45**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Analysis   | Moisture     |     | 1               | 571532       | 03/05/21 14:40       | CLA     | TAL BUF |

**Client Sample ID: TP-16 0-2 ft**

**Lab Sample ID: 480-181693-8**

**Date Collected: 03/04/21 14:00**

**Matrix: Solid**

**Date Received: 03/05/21 15:45**

**Percent Solids: 72.2**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Prep       | 3550C        |     |                 | 571616       | 03/08/21 07:56       | VXF     | TAL BUF |
| Total/NA  | Analysis   | 8270D        |     | 1               | 571826       | 03/09/21 18:12       | JMM     | TAL BUF |
| Total/NA  | Prep       | 3050B        |     |                 | 571700       | 03/08/21 15:02       | ADM     | TAL BUF |
| Total/NA  | Analysis   | 6010C        |     | 1               | 571945       | 03/09/21 18:30       | AMH     | TAL BUF |
| Total/NA  | Prep       | 7471B        |     |                 | 571885       | 03/10/21 13:40       | BMB     | TAL BUF |
| Total/NA  | Analysis   | 7471B        |     | 1               | 572039       | 03/10/21 15:25       | BMB     | TAL BUF |

## Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

## Accreditation/Certification Summary

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Benchmark - Grand Island Blvd. site

Job ID: 480-181693-1

### Laboratory: Eurofins TestAmerica, Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority | Program | Identification Number | Expiration Date |
|-----------|---------|-----------------------|-----------------|
| New York  | NELAP   | 10026                 | 03-31-21        |

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

| Analysis Method | Prep Method | Matrix | Analyte          |
|-----------------|-------------|--------|------------------|
| Moisture        |             | Solid  | Percent Moisture |
| Moisture        |             | Solid  | Percent Solids   |

## Method Summary

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Benchmark - Grand Island Blvd. site

Job ID: 480-181693-1

| Method   | Method Description                     | Protocol | Laboratory |
|----------|----------------------------------------|----------|------------|
| 8270D    | Semivolatile Organic Compounds (GC/MS) | SW846    | TAL BUF    |
| 6010C    | Metals (ICP)                           | SW846    | TAL BUF    |
| 7471B    | Mercury (CVAA)                         | SW846    | TAL BUF    |
| Moisture | Percent Moisture                       | EPA      | TAL BUF    |
| 3050B    | Preparation, Metals                    | SW846    | TAL BUF    |
| 3550C    | Ultrasonic Extraction                  | SW846    | TAL BUF    |
| 7471B    | Preparation, Mercury                   | SW846    | TAL BUF    |

### Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

### Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

## Sample Summary

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Benchmark - Grand Island Blvd. site

Job ID: 480-181693-1

| Lab Sample ID | Client Sample ID | Matrix | Collected      | Received       | Asset ID |
|---------------|------------------|--------|----------------|----------------|----------|
| 480-181693-1  | TP-9 0.5-1.5 ft  | Solid  | 03/04/21 09:00 | 03/05/21 15:45 |          |
| 480-181693-2  | TP-10 0-2 ft     | Solid  | 03/04/21 10:00 | 03/05/21 15:45 |          |
| 480-181693-4  | TP-12 0-1 ft     | Solid  | 03/04/21 12:00 | 03/05/21 15:45 |          |
| 480-181693-6  | TP-14 3-3 ft     | Solid  | 03/04/21 13:00 | 03/05/21 15:45 |          |
| 480-181693-7  | TP-15 2-3 ft     | Solid  | 03/04/21 13:30 | 03/05/21 15:45 |          |
| 480-181693-8  | TP-16 0-2 ft     | Solid  | 03/04/21 14:00 | 03/05/21 15:45 |          |



# Chain of Custody Record

|                                                 |  |                                     |  |                             |  |                                                                    |  |                                                                                             |  |
|-------------------------------------------------|--|-------------------------------------|--|-----------------------------|--|--------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------|--|
| <b>Client Information</b>                       |  | Sampler: <i>Michelle Swan</i>       |  | Lab PM: <i>Brian Fisher</i> |  | Carrier Tracking No(s):                                            |  | COC No:                                                                                     |  |
| Client Contact: <i>Turnkey Env. Restoration</i> |  | Phone: <i>716-713-3837</i>          |  | E-Mail:                     |  | State of Origin:                                                   |  | Page:                                                                                       |  |
| Company: <i>2</i>                               |  |                                     |  |                             |  | Accreditations Required (See note):                                |  | Job #:                                                                                      |  |
| Address: <i>2558 Humboldt Pk</i>                |  | Due Date Requested: <i>Standard</i> |  | Analysis Requested:         |  | Preservation Codes:                                                |  |                                                                                             |  |
| City: <i>Buffalo</i>                            |  | TAT Requested (days):               |  |                             |  | A - HCL<br>B - NaOH<br>C - AsNaO2<br>D - Nitric Acid<br>E - NaHSO4 |  | M - Hexane<br>N - None<br>O - AsNaO2<br>P - Na2O4S<br>Q - Na2SO3<br>R - Na2SO3<br>S - H2SO4 |  |
| State, Zip: <i>NY 14212</i>                     |  | PO # <i>70345-021-001</i>           |  |                             |  | Acid                                                               |  | T - TSP Dodecahydrate<br>U - Acetone<br>V - MCAA<br>W - pH 4-5<br>Z - other (specify)       |  |
| Phone: <i>716-713-3837</i>                      |  | WO #:                               |  |                             |  |                                                                    |  |                                                                                             |  |
| Email: <i>Bmaybacc@BM-Tie.com</i>               |  | Project #:                          |  |                             |  |                                                                    |  |                                                                                             |  |
| Project Name: <i>Legacy Grand Island</i>        |  | SSOW#:                              |  |                             |  |                                                                    |  |                                                                                             |  |
| Site:                                           |  |                                     |  |                             |  |                                                                    |  |                                                                                             |  |

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=oil, A=air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | Analysis Requested | Preservation Codes | Special Instructions/Note: |
|-----------------------|-------------|-------------|------------------------------|-----------------------------------------|-----------------------------------|----------------------------|--------------------|--------------------|----------------------------|
| TP-905 0.5-1.5 Ft.    | 3/4/21      | 9:00        | G                            | S                                       | X                                 | X                          |                    |                    |                            |
| TP-10 0-2 Ft.         |             | 10:00       | G                            | S                                       | X                                 | X                          |                    |                    | on hold                    |
| TP-11 0-2 Ft.         |             | 11:00       | G                            | S                                       | X                                 | X                          |                    |                    | on hold                    |
| TP-12 0-1 Ft.         |             | 12:00       | G                            | S                                       | X                                 | X                          |                    |                    | on hold                    |
| TP-1300.5 - 2 Ft.     |             | 12:30       | G                            | S                                       | X                                 | X                          |                    |                    |                            |
| TP-14 310.3 Ft.       |             | 13:00       | G                            | S                                       | X                                 | X                          |                    |                    |                            |
| TP-15 2.3 Ft.         |             | 13:30       | G                            | S                                       | X                                 | X                          |                    |                    |                            |
| TP-16 0-2 Ft.         |             | 14:00       | G                            | S                                       | X                                 | X                          |                    |                    |                            |

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis of the matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.

|                                                                                |  |                                                                                                                                                                                                                        |  |
|--------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>Possible Hazard Identification</b>                                          |  | <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological |  |
| Deliverable Requested: I, II, III, IV, Other (specify)                         |  | Special Instructions/QC Requirements:                                                                                                                                                                                  |  |
| Empty Kit Relinquished by:                                                     |  | Method of Shipment:                                                                                                                                                                                                    |  |
| Relinquished by: <i>[Signature]</i>                                            |  | Received by: <i>[Signature]</i>                                                                                                                                                                                        |  |
| Date/Time: <i>3/4/21 15:45</i>                                                 |  | Date/Time: <i>3/4/21 15:45</i>                                                                                                                                                                                         |  |
| Company: <i>BM-Tie</i>                                                         |  | Company: <i>BM-Tie</i>                                                                                                                                                                                                 |  |
| Relinquished by:                                                               |  | Received by:                                                                                                                                                                                                           |  |
| Date/Time:                                                                     |  | Date/Time:                                                                                                                                                                                                             |  |
| Relinquished by:                                                               |  | Received by:                                                                                                                                                                                                           |  |
| Date/Time:                                                                     |  | Date/Time:                                                                                                                                                                                                             |  |
| Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No |  | Custody Seal No.:                                                                                                                                                                                                      |  |
| Cooler Temperature(s) °C and Other Remarks: <i>3.2 #1</i>                      |  | Ver. 09/20/2016                                                                                                                                                                                                        |  |

## Login Sample Receipt Checklist

Client: Benchmark Env. Eng. & Science, PLLC

Job Number: 480-181693-1

Login Number: 181693

List Number: 1

Creator: Stopa, Erik S

List Source: Eurofins TestAmerica, Buffalo

| Question                                                                         | Answer | Comment |
|----------------------------------------------------------------------------------|--------|---------|
| Radioactivity either was not measured or, if measured, is at or below background | True   |         |
| The cooler's custody seal, if present, is intact.                                | True   |         |
| The cooler or samples do not appear to have been compromised or tampered with.   | True   |         |
| Samples were received on ice.                                                    | True   |         |
| Cooler Temperature is acceptable.                                                | True   |         |
| Cooler Temperature is recorded.                                                  | True   |         |
| COC is present.                                                                  | True   |         |
| COC is filled out in ink and legible.                                            | True   |         |
| COC is filled out with all pertinent information.                                | True   |         |
| Is the Field Sampler's name present on COC?                                      | True   |         |
| There are no discrepancies between the sample IDs on the containers and the COC. | True   |         |
| Samples are received within Holding Time (Excluding tests with immediate HTs)..  | True   |         |
| Sample containers have legible labels.                                           | True   |         |
| Containers are not broken or leaking.                                            | True   |         |
| Sample collection date/times are provided.                                       | True   |         |
| Appropriate sample containers are used.                                          | True   |         |
| Sample bottles are completely filled.                                            | True   |         |
| Sample Preservation Verified                                                     | True   |         |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True   |         |
| VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.     | True   |         |
| If necessary, staff have been informed of any short hold time or quick TAT needs | True   |         |
| Multiphasic samples are not present.                                             | True   |         |
| Samples do not require splitting or compositing.                                 | True   |         |
| Sampling Company provided.                                                       | True   | BMTK    |
| Samples received within 48 hours of sampling.                                    | True   |         |
| Samples requiring field filtration have been filtered in the field.              | N/A    |         |
| Chlorine Residual checked.                                                       | N/A    |         |