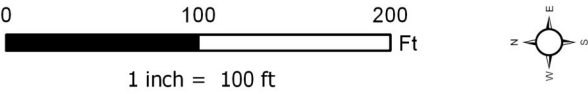


**Legend**  
● Origin   ● Soil Sample Location   — Spill Path   ▨ Spill Areas



|                     |  |  |  |        |
|---------------------|--|--|--|--------|
| Project No: 018-065 | Fee 40 Spill<br>Chevron USA, Inc.<br>Rio Blanco County, Colorado<br>NW/4 SE/4 Sec 28 T2S R102W |  <b>ENTRADA</b><br>CONSULTING GROUP | 330 Grand Avenue, Unit C<br>Grand Junction, CO 81501<br>970-549-1015 | Figure |
| Map By: NDB         |  |  |  | 1      |
| Date: 3-27-2018     |  |  |  |        |



**Table 1**  
**Fee 40 Spill**  
**Soil Data Summary**

| SAMPLE SUMMARY       |              |
|----------------------|--------------|
| Location Description | Fee 40 Spill |
| Sample Type          | Soil         |

| LABORATORY DATA SUMMARY            |           |           |           |           |           |           |           |  |          |
|------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--|----------|
| Sample ID                          | FEE40-SS1 | FEE40-SS2 | FEE40-SS3 | FEE40-SS4 | FEE40-SS5 | FEE40-BG1 | FEE40-BG2 | COGCC TABLE 910-1<br>CONCENTRATION<br>LEVELS | UNITS    |
| Depth                              | 0-6"      | 0-6"      | 0-6"      | 0-6"      | 0-6"      | 0-6"      | 0-6"      |  |          |
| Sample Date                        | 10/6/2017 | 10/6/2017 | 10/6/2017 | 10/6/2017 | 10/6/2017 | 10/6/2017 | 10/6/2017 |  |          |
| Analytical Parameters              |           |           |           |           |           |           |           |  |          |
| TPH                                |           |           |           |           |           |           |           |  |          |
| TPH Gasoline Range Organics        | <2.8      | 7.2       | <2.9      | 20        | <3.1      | NT        | NT        | 500  | mg/kg    |
| TPH Diesel Range Organics          | 35        | 5.4       | <3.3      | 13        | 5.6       | NT        | NT        |  |          |
| BTEX                               |           |           |           |           |           |           |           |  |          |
| Benzene                            | <0.0068   | <0.0069   | <0.0071   | <0.069    | <0.0077   | NT        | NT        | 0.17   | mg/kg    |
| Toluene                            | <0.011    | <0.011    | <0.011    | <0.011    | <0.012    | NT        | NT        | 85   | mg/kg    |
| Ethylbenzene                       | <0.0084   | <0.0086   | <0.0087   | <0.0086   | <0.0095   | NT        | NT        | 100  | mg/kg    |
| Total Xylene                       | <0.034    | <0.035    | <0.036    | <0.035    | <0.039    | NT        | NT        | 175  | mg/kg    |
| Metals                             |           |           |           |           |           |           |           |  |          |
| Arsenic                            | 8.8       | 9.0       | 9.1       | 9.7       | 9.3       | 9.8       | 9.9       | 0.39   | mg/kg    |
| Barium                             | 220       | 290       | 210       | 180       | 170       | 180       | NT        | 15,000                                       | mg/kg    |
| Cadmium                            | 0.66 J    | 0.74 J    | 0.71      | 0.72      | 0.84 J    | 0.79      | NT        | 70   | mg/kg    |
| Chromium                           | 8.6       | 14        | 14        | 12        | 13        | 13        | NT        | NA   | mg/kg    |
| Copper                             | 15        | 20        | 19        | 16        | 18        | 19        | NT        | 3,100  | mg/kg    |
| Lead                               | 16        | 21        | 18        | 16        | 20        | 21        | NT        | 400  | mg/kg    |
| Mercury                            | 0.018     | 0.027     | 0.019     | 0.021     | 0.063     | 0.034     | NT        | 23   | mg/kg    |
| Nickel                             | 17        | 24        | 23        | 21        | 22        | 24        | NT        | 1,600  | mg/kg    |
| Selenium                           | 2.8       | 3.9       | 2.9       | 3.0       | 2.8       | 2.9       | NT        | 390  | mg/kg    |
| Silver                             | <0.53     | <0.049    | <0.47     | <0.50     | <0.057    | <0.054    | NT        | 390  | mg/kg    |
| Zinc                               | 100       | 120       | 110       | 96        | 100       | 120       | NT        | 23,000                                       | mg/kg    |
| SAR Metals Analysis                |           |           |           |           |           |           |           |  |          |
| Calcium                            | 690       | 1,500     | 35        | 83        | 280       | 380       | NT        | NA   | mg/L     |
| Magnesium                          | 82        | 110       | 4.9       | 17        | 62        | 29        | NT        | NA   | mg/L     |
| Sodium                             | 2,900     | 1,800     | 360       | 1,200     | 620       | 36        | NT        | NA   | mg/L     |
| Sodium Adsorption Ratio            | 28        | 12        | 15        | 31        | 8.8       | 0.48      | NT        | <12  | ratio    |
| Polynuclear Aromatic Hyrdrocarbons |           |           |           |           |           |           |           |  |          |
| Acenaphthene                       | <0.0033   | <0.0034   | <0.0034   | <0.0034   | <0.0037   | NT        | NT        | 1,000  | mg/kg    |
| Anthracene                         | 0.052     | <0.0018   | <0.0018   | <0.0017   | <0.0019   | NT        | NT        | 1,000  | mg/kg    |
| Benzo(a)anthracene                 | <0.0029   | <0.0030   | <0.003    | <0.0029   | <0.0032   | NT        | NT        | 0.22   | mg/kg    |
| Benzo(a)pyrene                     | <0.0012   | <0.0012   | <0.0012   | <0.0012   | <0.0013   | NT        | NT        | 0.022  | mg/kg    |
| Benzo(b)fluoranthene               | <0.0018   | <0.0019   | <0.0018   | <0.0018   | <0.0020   | NT        | NT        | 0.22   | mg/kg    |
| Benzo(k)fluoranthene               | <0.0024   | <0.0025   | <0.0025   | <0.0025   | <0.0027   | NT        | NT        | 2.2  | mg/kg    |
| Chrysene                           | <0.0018   | <0.0019   | <0.0018   | <0.0018   | <0.0020   | NT        | NT        | 22   | mg/kg    |
| Dibenzo(a,h)anthracene             | <0.0015   | <0.0016   | <0.0016   | <0.0015   | <0.0017   | NT        | NT        | 0.022  | mg/kg    |
| Fluoranthene                       | <0.0013   | <0.0014   | <0.0014   | <0.0014   | <0.0015   | NT        | NT        | 1,000  | mg/kg    |
| Fluorene                           | <0.0015   | <0.0016   | <0.0016   | <0.0015   | <0.0017   | NT        | NT        | 1,000  | mg/kg    |
| Indeno(1,2,3-cd)pyrene             | <0.0014   | <0.0015   | <0.0015   | <0.0015   | <0.0016   | NT        | NT        | 0.22   | mg/kg    |
| Napthalene                         | <0.0088   | 0.05      | <0.0091   | <0.0089   | <0.0097   | NT        | NT        | 23   | mg/kg    |
| Pyrene                             | <0.0017   | <0.0018   | <0.0018   | <0.0017   | <0.0019   | NT        | NT        | 1,000  | mg/kg    |
| General Chemistry                  |           |           |           |           |           |           |           |  |          |
| Chromium, Hexavalent               | <0.36     | <0.36     | <0.37     | <0.36     | <0.38     | <0.34     | NT        | 23   | mg/kg    |
| Chromium, Trivalent                | 8.6       | 14        | 14        | 12        | 13        | 13        | NT        | 120,000                                      | mg/kg    |
| Specific Conductivity              | 21        | 21        | 3.3       | 7.7       | 5.9       | 2.9       | NT        | <4 or 2 x the background                     | mmhos/cm |
| pH                                 | 8.16      | 8.22      | 10.1      | 9.73      | 9.03      | 8.08      | NT        | 6-9  | su       |

mg/kg - milligrams per kilogram  
mg/L - milligrams per liter  
J - indicates an estimated value  
mmhos/cm - millimhos per centimeter  
mv - millivolts  
su - standard units  
NA - not applicable  
NT - parameter was not tested

Over COGCC Table 910-1 concentration levels but under BACKGROUND level.

Over COGCC Table 910-1 concentration levels and not within BACKGROUND level.

Over COGCC Table 910-1 concentration levels



23-Oct-2017

Tim Dobransky  
Olsson Associates  
760 Horizon Drive  
Suite 102  
Grand Junction, CO 81506

Re: **Fee 40**

Work Order: **1710613**

Dear Tim,

ALS Environmental received 7 samples on 10-Oct-2017 09:30 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

Sample results are compliant with industry accepted practices and Quality Control results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 34.

If you have any questions regarding this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Chad Whelton".

Electronically approved by: Chad Whelton

Chad Whelton  
Project Manager

Certificate No: MN 998501

### Report of Laboratory Analysis

ADDRESS 3352 128th Ave Holland, Michigan 49424 | PHONE (616) 399-6070 | FAX (616) 399-6185

ALS GROUP USA, CORP Part of the ALS Laboratory Group A Campbell Brothers Limited Company

Environmental 

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RIGHT SOLUTIONS RIGHT PARTNER

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**Client:** Olsson Associates  
**Project:** Fee 40  
**Work Order:** 1710613

**Work Order Sample Summary**

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| <u>Lab Samp ID</u> | <u>Client Sample ID</u> | <u>Matrix</u> | <u>Tag Number</u> | <u>Collection Date</u> | <u>Date Received</u> | <u>Hold</u>              |
|--------------------|-------------------------|---------------|-------------------|------------------------|----------------------|--------------------------|
| 1710613-01         | FEE40-SS1               | Soil          |                   | 10/6/2017 10:40        | 10/10/2017 09:30     | <input type="checkbox"/> |
| 1710613-02         | FEE40-BG1               | Soil          |                   | 10/6/2017 10:45        | 10/10/2017 09:30     | <input type="checkbox"/> |
| 1710613-03         | FEE40-SS2               | Soil          |                   | 10/6/2017 11:00        | 10/10/2017 09:30     | <input type="checkbox"/> |
| 1710613-04         | FEE40-SS3               | Soil          |                   | 10/6/2017 11:10        | 10/10/2017 09:30     | <input type="checkbox"/> |
| 1710613-05         | FEE40-BG2               | Soil          |                   | 10/6/2017 11:20        | 10/10/2017 09:30     | <input type="checkbox"/> |
| 1710613-06         | FEE40-SS4               | Soil          |                   | 10/6/2017 11:35        | 10/10/2017 09:30     | <input type="checkbox"/> |
| 1710613-07         | FEE40-SS5               | Soil          |                   | 10/6/2017 11:45        | 10/10/2017 09:30     | <input type="checkbox"/> |

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**Client:** Olsson Associates**Project:** Fee 40**Work Order:** 1710613**Case Narrative**

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Batch 108930, Method CR6\_7196\_S, Sample 1710613-02A MS/MSD: The MS/MSD recovery was below the lower control limit for Hexavalent Chromium. The corresponding result in the parent sample may be biased low.

| <b><u>Qualifier</u></b> | <b><u>Description</u></b>   |
|-------------------------|---|
| *                       | Value exceeds Regulatory Limit  |
| **                      | Estimated Value   |
| a                       | Analyte is non-accredited   |
| B                       | Analyte detected in the associated Method Blank above the Reporting Limit   |
| E                       | Value above quantitation range  |
| H                       | Analyzed outside of Holding Time  |
| J                       | Analyte is present at an estimated concentration between the MDL and Report Limit   |
| ND                      | Not Detected at the Reporting Limit   |
| O                       | Sample amount is > 4 times amount spiked  |
| P                       | Dual Column results percent difference > 40%  |
| R                       | RPD above laboratory control limit  |
| S                       | Spike Recovery outside laboratory control limits  |
| U                       | Analyzed but not detected above the MDL   |
| X                       | Analyte was detected in the Method Blank between the MDL and Reporting Limit, sample results may exhibit background or reagent contamination at the observed level. |

| <b><u>Acronym</u></b> | <b><u>Description</u></b>           |
|-----------------------|-------------------------------------|
| DUP                   | Method Duplicate                    |
| LCS                   | Laboratory Control Sample           |
| LCSD                  | Laboratory Control Sample Duplicate |
| LOD                   | Limit of Detection (see MDL)        |
| LOQ                   | Limit of Quantitation (see PQL)     |
| MBLK                  | Method Blank                        |
| MDL                   | Method Detection Limit              |
| MS                    | Matrix Spike                        |
| MSD                   | Matrix Spike Duplicate              |
| PQL                   | Practical Quantitation Limit        |
| RPD                   | Relative Percent Difference         |
| TDL                   | Target Detection Limit              |
| TNTC                  | Too Numerous To Count               |
| A                     | APHA Standard Methods               |
| D                     | ASTM                                |
| E                     | EPA                                 |
| SW                    | SW-846 Update III                   |

| <b><u>Units Reported</u></b> | <b><u>Description</u></b>                  |
|------------------------------|--|
| % of sample                  | Percent of Sample                          |
| mg/Kg                        | Milligrams per Kilogram                    |
| mg/Kg-dry                    | Milligrams per Kilogram Dry Weight         |
| mg/L                         | Milligrams per Liter                       |
| mmhos/cm @25°C               | Millimhos-Centimeter at 25 Degrees Celcius |
| none                         |  |
| s.u.                         | Standard Units                             |

# ALS Group, USA

Date: 23-Oct-17

**Client:** Olsson Associates  
**Project:** Fee 40  
**Sample ID:** FEE40-SS1  
**Collection Date:** 10/6/2017 10:40 AM

**Work Order:** 1710613  
**Lab ID:** 1710613-01  
**Matrix:** SOIL

| Analyses                                 | Result       | Qual     | MDL                              | Report Limit | Units                            | Dilution Factor | Date Analyzed       |
|--|--------------|----------|----------------------------------|--------------|----------------------------------|-----------------|---------------------|
| <b>DIESEL RANGE ORGANICS BY GC-FID</b>   |              |          |                                  |              |                                  |                 |                     |
|  |              |          | Method: <b>SW8015C</b>           |              | Prep: SW3546 / 10/12/17          |                 | Analyst: <b>KB</b>  |
| <b>DRO (C10-C28)</b>                     | <b>35</b>    |          | <b>3.2</b>                       | <b>5.6</b>   | <b>mg/Kg-dry</b>                 | 1               | 10/13/2017 05:37    |
| Surr: 4-Terphenyl-d14                    | 50.6         |          |                                  | 34-130       | %REC                             | 1               | 10/13/2017 05:37    |
| <b>GASOLINE RANGE ORGANICS BY GC-FID</b> |              |          |                                  |              |                                  |                 |                     |
|  |              |          | Method: <b>SW8015D</b>           |              | Prep: SW5035 / 10/13/17          |                 | Analyst: <b>KB</b>  |
| <b>GRO (C6-C10)</b>                      | <b>U</b>     |          | <b>2.8</b>                       | <b>6.6</b>   | <b>mg/Kg</b>                     | 1               | 10/14/2017 11:26    |
| Surr: Toluene-d8                         | 95.8         |          |                                  | 71-123       | %REC                             | 1               | 10/14/2017 11:26    |
| <b>MERCURY BY CVAA</b>                   |              |          |                                  |              |                                  |                 |                     |
|  |              |          | Method: <b>SW7471B</b>           |              | Prep: SW7471 / 10/14/17          |                 | Analyst: <b>RSB</b> |
| <b>Mercury</b>                           | <b>0.018</b> | <b>J</b> | <b>0.0037</b>                    | <b>0.023</b> | <b>mg/Kg-dry</b>                 | 1               | 10/16/2017 17:02    |
| <b>METALS ANALYSIS BY ICP</b>            |              |          |                                  |              |                                  |                 |                     |
|  |              |          | Method: <b>SW846 6010C</b>       |              | Prep: SW3050B / 10/12/17         |                 | Analyst: <b>HBA</b> |
| <b>Arsenic</b>                           | <b>8.8</b>   |          | <b>0.11</b>                      | <b>0.42</b>  | <b>mg/Kg-dry</b>                 | 1               | 10/17/2017 02:45    |
| <b>Barium</b>                            | <b>220</b>   |          | <b>0.17</b>                      | <b>0.42</b>  | <b>mg/Kg-dry</b>                 | 1               | 10/17/2017 02:45    |
| <b>Cadmium</b>                           | <b>0.66</b>  | <b>J</b> | <b>0.041</b>                     | <b>0.85</b>  | <b>mg/Kg-dry</b>                 | 1               | 10/17/2017 02:45    |
| <b>Chromium</b>                          | <b>8.6</b>   |          | <b>0.024</b>                     | <b>0.42</b>  | <b>mg/Kg-dry</b>                 | 1               | 10/17/2017 02:45    |
| <b>Copper</b>                            | <b>15</b>    |          | <b>0.19</b>                      | <b>0.85</b>  | <b>mg/Kg-dry</b>                 | 1               | 10/17/2017 02:45    |
| <b>Lead</b>                              | <b>16</b>    |          | <b>0.090</b>                     | <b>0.42</b>  | <b>mg/Kg-dry</b>                 | 1               | 10/17/2017 02:45    |
| <b>Nickel</b>                            | <b>17</b>    |          | <b>0.17</b>                      | <b>0.42</b>  | <b>mg/Kg-dry</b>                 | 1               | 10/17/2017 02:45    |
| <b>Selenium</b>                          | <b>2.8</b>   |          | <b>0.24</b>                      | <b>0.85</b>  | <b>mg/Kg-dry</b>                 | 1               | 10/17/2017 02:45    |
| Silver                                   | U            |          | 0.053                            | 0.42         | mg/Kg-dry                        | 1               | 10/17/2017 02:45    |
| <b>Zinc</b>                              | <b>100</b>   |          | <b>0.068</b>                     | <b>0.85</b>  | <b>mg/Kg-dry</b>                 | 1               | 10/17/2017 02:45    |
| <b>SODIUM ADSORPTION RATIO</b>           |              |          |                                  |              |                                  |                 |                     |
|  |              |          | Method: <b>USDA H60 METHOD 2</b> |              | Prep: USDA Method 20B / 10/13/17 |                 | Analyst: <b>RH</b>  |
| <b>Sodium Adsorption Ratio</b>           | <b>28</b>    |          | <b>0.010</b>                     | <b>0.010</b> | <b>none</b>                      | 1               | 10/16/2017          |
| <b>SOLUBLE CATIONS FOR SAR</b>           |              |          |                                  |              |                                  |                 |                     |
|  |              |          | Method: <b>SW6020A</b>           |              | Prep: USDA Method 20B / 10/13/17 |                 | Analyst: <b>JF</b>  |
| <b>Calcium</b>                           | <b>690</b>   |          | <b>8.6</b>                       | <b>50</b>    | <b>mg/L</b>                      | 100             | 10/17/2017 19:15    |
| <b>Magnesium</b>                         | <b>82</b>    |          | <b>0.68</b>                      | <b>20</b>    | <b>mg/L</b>                      | 100             | 10/17/2017 19:15    |
| <b>Sodium</b>                            | <b>2,900</b> |          | <b>3.4</b>                       | <b>20</b>    | <b>mg/L</b>                      | 100             | 10/17/2017 19:15    |
| <b>SEMI-VOLATILE ORGANIC COMPOUNDS</b>   |              |          |                                  |              |                                  |                 |                     |
|  |              |          | Method: <b>SW846 8270D</b>       |              | Prep: SW3546 / 10/12/17          |                 | Analyst: <b>RM</b>  |
| Acenaphthene                             | U            |          | 0.0033                           | 0.047        | mg/Kg-dry                        | 1               | 10/15/2017 22:31    |
| <b>Anthracene</b>                        | <b>0.052</b> |          | <b>0.0017</b>                    | <b>0.047</b> | <b>mg/Kg-dry</b>                 | 1               | 10/15/2017 22:31    |
| Benzo(a)anthracene                       | U            |          | 0.0029                           | 0.047        | mg/Kg-dry                        | 1               | 10/15/2017 22:31    |
| Benzo(a)pyrene                           | U            |          | 0.0012                           | 0.047        | mg/Kg-dry                        | 1               | 10/15/2017 22:31    |
| Benzo(b)fluoranthene                     | U            |          | 0.0018                           | 0.047        | mg/Kg-dry                        | 1               | 10/15/2017 22:31    |
| Benzo(k)fluoranthene                     | U            |          | 0.0024                           | 0.047        | mg/Kg-dry                        | 1               | 10/15/2017 22:31    |
| Chrysene                                 | U            |          | 0.0018                           | 0.047        | mg/Kg-dry                        | 1               | 10/15/2017 22:31    |
| Dibenzo(a,h)anthracene                   | U            |          | 0.0015                           | 0.047        | mg/Kg-dry                        | 1               | 10/15/2017 22:31    |
| Fluoranthene                             | U            |          | 0.0013                           | 0.047        | mg/Kg-dry                        | 1               | 10/15/2017 22:31    |

**Note:** See Qualifiers page for a list of qualifiers and their definitions.

# ALS Group, USA

Date: 23-Oct-17

**Client:** Olsson Associates  
**Project:** Fee 40  
**Sample ID:** FEE40-SS1  
**Collection Date:** 10/6/2017 10:40 AM

**Work Order:** 1710613  
**Lab ID:** 1710613-01  
**Matrix:** SOIL

| Analyses                             | Result | Qual | MDL                              | Report Limit | Units                            | Dilution Factor | Date Analyzed       |
|--------------------------------------|--------|------|----------------------------------|--------------|----------------------------------|-----------------|---------------------|
| Fluorene                             | U      |      | 0.0015                           | 0.047        | mg/Kg-dry                        | 1               | 10/15/2017 22:31    |
| Indeno(1,2,3-cd)pyrene               | U      |      | 0.0014                           | 0.047        | mg/Kg-dry                        | 1               | 10/15/2017 22:31    |
| Naphthalene                          | U      |      | 0.0088                           | 0.047        | mg/Kg-dry                        | 1               | 10/15/2017 22:31    |
| Pyrene                               | U      |      | 0.0017                           | 0.047        | mg/Kg-dry                        | 1               | 10/15/2017 22:31    |
| Surr: 2-Fluorobiphenyl               | 73.4   |      |                                  | 20-140       | %REC                             | 1               | 10/15/2017 22:31    |
| Surr: 4-Terphenyl-d14                | 91.4   |      |                                  | 22-172       | %REC                             | 1               | 10/15/2017 22:31    |
| Surr: Nitrobenzene-d5                | 58.4   |      |                                  | 28-140       | %REC                             | 1               | 10/15/2017 22:31    |
| <b>VOLATILE ORGANIC COMPOUNDS</b>    |        |      | Method: <b>SW8260B</b>           |              | Prep: SW5035 / 10/13/17          |                 | Analyst: <b>BG</b>  |
| Benzene                              | U      |      | 0.0068                           | 0.040        | mg/Kg                            | 1               | 10/13/2017 16:03    |
| Ethylbenzene                         | U      |      | 0.0084                           | 0.040        | mg/Kg                            | 1               | 10/13/2017 16:03    |
| m,p-Xylene                           | U      |      | 0.019                            | 0.080        | mg/Kg                            | 1               | 10/13/2017 16:03    |
| o-Xylene                             | U      |      | 0.015                            | 0.040        | mg/Kg                            | 1               | 10/13/2017 16:03    |
| Toluene                              | U      |      | 0.011                            | 0.040        | mg/Kg                            | 1               | 10/13/2017 16:03    |
| Xylenes, Total                       | U      |      | 0.034                            | 0.12         | mg/Kg                            | 1               | 10/13/2017 16:03    |
| Surr: 1,2-Dichloroethane-d4          | 96.8   |      |                                  | 70-130       | %REC                             | 1               | 10/13/2017 16:03    |
| Surr: 4-Bromofluorobenzene           | 94.4   |      |                                  | 70-130       | %REC                             | 1               | 10/13/2017 16:03    |
| Surr: Dibromofluoromethane           | 97.3   |      |                                  | 70-130       | %REC                             | 1               | 10/13/2017 16:03    |
| Surr: Toluene-d8                     | 97.4   |      |                                  | 70-130       | %REC                             | 1               | 10/13/2017 16:03    |
| <b>ELECTRICAL CONDUCTIVITY (SAR)</b> |        |      | Method: <b>USDA H60 METHOD 2</b> |              | Prep: USDA Method 20B / 10/13/17 |                 | Analyst: <b>JB</b>  |
| Electrical Conductivity @ Saturation | 21     |      | 0.028                            | 0.25         | mmhos/cm @25°                    | 50              | 10/16/2017 12:30    |
| <b>CHROMIUM, TRIVALENT</b>           |        |      | Method: <b>CALCULATION</b>       |              |                                  |                 | Analyst: <b>JJG</b> |
| Chromium, Trivalent                  | 8.6    |      | 0.36                             | 1.2          | mg/Kg-dry                        | 1               | 10/17/2017 16:06    |
| <b>CHROMIUM, HEXAVALENT</b>          |        |      | Method: <b>SW7196A</b>           |              | Prep: SW3060A / 10/11/17         |                 | Analyst: <b>RP</b>  |
| Chromium, Hexavalent                 | U      |      | 0.36                             | 1.2          | mg/Kg-dry                        | 1               | 10/16/2017 16:30    |
| <b>MOISTURE</b>                      |        |      | Method: <b>SW3550C</b>           |              |                                  |                 | Analyst: <b>NW</b>  |
| Moisture                             | 14     |      | 0.025                            | 0.050        | % of sample                      | 1               | 10/13/2017 13:40    |
| <b>PH</b>                            |        |      | Method: <b>SW9045D</b>           |              | Prep: EXTRACT / 10/13/17         |                 | Analyst: <b>JB</b>  |
| pH                                   | 8.16   |      | 0.10                             | 0.100        | s.u.                             | 1               | 10/13/2017 12:00    |

**Note:** See Qualifiers page for a list of qualifiers and their definitions.



# ALS Group, USA

Date: 23-Oct-17

Client: Olsson Associates  
Project: Fee 40  
Sample ID: FEE40-BG1  
Collection Date: 10/6/2017 10:45 AM

Work Order: 1710613  
Lab ID: 1710613-02  
Matrix: SOIL

| Analyses                             | Result | Qual | MDL                                | Report Limit | Units         | Dilution Factor | Date Analyzed   |
|--------------------------------------|--------|------|------------------------------------|--------------|---------------|-----------------|---|
| <b>MERCURY BY CVAA</b>               |        |      |                                    |              |               |                 |   |
| Mercury                              | 0.034  |      | Method: SW7471B<br>0.0031          | 0.019        | mg/Kg-dry     | 1               | Prep: SW7471 / 10/14/17<br>Analyst: RSH<br>10/16/2017 17:05         |
| <b>METALS ANALYSIS BY ICP</b>        |        |      |                                    |              |               |                 |   |
| Arsenic                              | 9.8    |      | Method: SW846 6010C<br>0.11        | 0.43         | mg/Kg-dry     | 1               | Prep: SW3050B / 10/12/17<br>Analyst: HBA<br>10/17/2017 02:51        |
| Barium                               | 180    |      | 0.17                               | 0.43         | mg/Kg-dry     | 1               | 10/17/2017 02:51  |
| Cadmium                              | 0.79   | J    | 0.042                              | 0.87         | mg/Kg-dry     | 1               | 10/17/2017 02:51  |
| Chromium                             | 13     |      | 0.024                              | 0.43         | mg/Kg-dry     | 1               | 10/17/2017 02:51  |
| Copper                               | 19     |      | 0.19                               | 0.87         | mg/Kg-dry     | 1               | 10/17/2017 02:51  |
| Lead                                 | 21     |      | 0.092                              | 0.43         | mg/Kg-dry     | 1               | 10/17/2017 02:51  |
| Nickel                               | 24     |      | 0.17                               | 0.43         | mg/Kg-dry     | 1               | 10/17/2017 02:51  |
| Selenium                             | 2.9    |      | 0.24                               | 0.87         | mg/Kg-dry     | 1               | 10/17/2017 02:51  |
| Silver                               | U      |      | 0.054                              | 0.43         | mg/Kg-dry     | 1               | 10/17/2017 02:51  |
| Zinc                                 | 120    |      | 0.069                              | 0.87         | mg/Kg-dry     | 1               | 10/17/2017 02:51  |
| <b>SODIUM ADSORPTION RATIO</b>       |        |      |                                    |              |               |                 |   |
| Sodium Adsorption Ratio              | 0.48   |      | Method: USDA H60 METHOD 2<br>0.010 | 0.010        | none          | 1               | Prep: USDA Method 20B / 10/13/17<br>Analyst: RH<br>10/16/2017       |
| <b>SOLUBLE CATIONS FOR SAR</b>       |        |      |                                    |              |               |                 |   |
| Calcium                              | 380    |      | Method: SW6020A<br>8.6             | 50           | mg/L          | 100             | Prep: USDA Method 20B / 10/13/17<br>Analyst: JF<br>10/19/2017 09:36 |
| Magnesium                            | 29     |      | 0.68                               | 20           | mg/L          | 100             | 10/19/2017 09:36  |
| Sodium                               | 36     |      | 3.4                                | 20           | mg/L          | 100             | 10/19/2017 09:36  |
| <b>ELECTRICAL CONDUCTIVITY (SAR)</b> |        |      |                                    |              |               |                 |   |
| Electrical Conductivity @ Saturation | 2.9    |      | Method: USDA H60 METHOD 2<br>0.028 | 0.25         | mmhos/cm @25° | 50              | Prep: USDA Method 20B / 10/13/17<br>Analyst: JB<br>10/16/2017 12:30 |
| <b>CHROMIUM, TRIVALENT</b>           |        |      |                                    |              |               |                 |   |
| Chromium, Trivalent                  | 13     |      | Method: CALCULATION<br>0.34        | 1.1          | mg/Kg-dry     | 1               | Analyst: JJG<br>10/17/2017 16:06                                    |
| <b>CHROMIUM, HEXAVALENT</b>          |        |      |                                    |              |               |                 |   |
| Chromium, Hexavalent                 | U      |      | Method: SW7196A<br>0.34            | 1.1          | mg/Kg-dry     | 1               | Prep: SW3060A / 10/11/17<br>Analyst: RP<br>10/16/2017 16:30         |
| <b>MOISTURE</b>                      |        |      |                                    |              |               |                 |   |
| Moisture                             | 8.9    |      | Method: SW3550C<br>0.025           | 0.050        | % of sample   | 1               | Analyst: MT<br>10/12/2017 12:25                                     |
| <b>PH</b>                            |        |      |                                    |              |               |                 |   |
| pH                                   | 8.08   |      | Method: SW9045D<br>0.10            | 0.100        | s.u.          | 1               | Prep: EXTRACT / 10/13/17<br>Analyst: JB<br>10/13/2017 12:00         |

Note: See Qualifiers page for a list of qualifiers and their definitions.

# ALS Group, USA

Date: 23-Oct-17

**Client:** Olsson Associates  
**Project:** Fee 40  
**Sample ID:** FEE40-SS2  
**Collection Date:** 10/6/2017 11:00 AM

**Work Order:** 1710613  
**Lab ID:** 1710613-03  
**Matrix:** SOIL

| Analyses                                 | Result       | Qual | MDL                              | Report Limit | Units                            | Dilution Factor | Date Analyzed       |
|--|--------------|------|----------------------------------|--------------|----------------------------------|-----------------|---------------------|
| <b>DIESEL RANGE ORGANICS BY GC-FID</b>   |              |      |                                  |              |                                  |                 |                     |
|  |              |      | Method: <b>SW8015C</b>           |              | Prep: SW3546 / 10/12/17          |                 | Analyst: <b>KB</b>  |
| <b>DRO (C10-C28)</b>                     | <b>5.4</b>   | J    | <b>3.4</b>                       | <b>5.8</b>   | <b>mg/Kg-dry</b>                 | 1               | 10/13/2017 06:06    |
| Surr: 4-Terphenyl-d14                    | 75.6         |      |                                  | 34-130       | %REC                             | 1               | 10/13/2017 06:06    |
| <b>GASOLINE RANGE ORGANICS BY GC-FID</b> |              |      |                                  |              |                                  |                 |                     |
|  |              |      | Method: <b>SW8015D</b>           |              | Prep: SW5035 / 10/13/17          |                 | Analyst: <b>KB</b>  |
| <b>GRO (C6-C10)</b>                      | <b>7.2</b>   |      | <b>2.8</b>                       | <b>6.8</b>   | <b>mg/Kg</b>                     | 1               | 10/14/2017 12:56    |
| Surr: Toluene-d8                         | 95.9         |      |                                  | 71-123       | %REC                             | 1               | 10/14/2017 12:56    |
| <b>MERCURY BY CVAA</b>                   |              |      |                                  |              |                                  |                 |                     |
|  |              |      | Method: <b>SW7471B</b>           |              | Prep: SW7471 / 10/14/17          |                 | Analyst: <b>RSB</b> |
| <b>Mercury</b>                           | <b>0.027</b> |      | <b>0.0031</b>                    | <b>0.019</b> | <b>mg/Kg-dry</b>                 | 1               | 10/16/2017 17:08    |
| <b>METALS ANALYSIS BY ICP</b>            |              |      |                                  |              |                                  |                 |                     |
|  |              |      | Method: <b>SW846 6010C</b>       |              | Prep: SW3050B / 10/12/17         |                 | Analyst: <b>HBA</b> |
| <b>Arsenic</b>                           | <b>9.0</b>   |      | <b>0.10</b>                      | <b>0.40</b>  | <b>mg/Kg-dry</b>                 | 1               | 10/17/2017 02:57    |
| <b>Barium</b>                            | <b>290</b>   |      | <b>0.16</b>                      | <b>0.40</b>  | <b>mg/Kg-dry</b>                 | 1               | 10/17/2017 02:57    |
| <b>Cadmium</b>                           | <b>0.74</b>  | J    | <b>0.038</b>                     | <b>0.79</b>  | <b>mg/Kg-dry</b>                 | 1               | 10/17/2017 02:57    |
| <b>Chromium</b>                          | <b>14</b>    |      | <b>0.022</b>                     | <b>0.40</b>  | <b>mg/Kg-dry</b>                 | 1               | 10/17/2017 02:57    |
| <b>Copper</b>                            | <b>20</b>    |      | <b>0.17</b>                      | <b>0.79</b>  | <b>mg/Kg-dry</b>                 | 1               | 10/17/2017 02:57    |
| <b>Lead</b>                              | <b>21</b>    |      | <b>0.084</b>                     | <b>0.40</b>  | <b>mg/Kg-dry</b>                 | 1               | 10/17/2017 02:57    |
| <b>Nickel</b>                            | <b>24</b>    |      | <b>0.16</b>                      | <b>0.40</b>  | <b>mg/Kg-dry</b>                 | 1               | 10/17/2017 02:57    |
| <b>Selenium</b>                          | <b>3.9</b>   |      | <b>0.22</b>                      | <b>0.79</b>  | <b>mg/Kg-dry</b>                 | 1               | 10/17/2017 02:57    |
| Silver                                   | U            |      | 0.049                            | 0.40         | mg/Kg-dry                        | 1               | 10/17/2017 02:57    |
| <b>Zinc</b>                              | <b>120</b>   |      | <b>0.063</b>                     | <b>0.79</b>  | <b>mg/Kg-dry</b>                 | 1               | 10/17/2017 02:57    |
| <b>SODIUM ADSORPTION RATIO</b>           |              |      |                                  |              |                                  |                 |                     |
|  |              |      | Method: <b>USDA H60 METHOD 2</b> |              | Prep: USDA Method 20B / 10/13/17 |                 | Analyst: <b>RH</b>  |
| <b>Sodium Adsorption Ratio</b>           | <b>12</b>    |      | <b>0.010</b>                     | <b>0.010</b> | <b>none</b>                      | 1               | 10/16/2017          |
| <b>SOLUBLE CATIONS FOR SAR</b>           |              |      |                                  |              |                                  |                 |                     |
|  |              |      | Method: <b>SW6020A</b>           |              | Prep: USDA Method 20B / 10/13/17 |                 | Analyst: <b>JF</b>  |
| <b>Calcium</b>                           | <b>1,500</b> |      | <b>0.86</b>                      | <b>5.0</b>   | <b>mg/L</b>                      | 10              | 10/17/2017 19:18    |
| <b>Magnesium</b>                         | <b>110</b>   |      | <b>0.068</b>                     | <b>2.0</b>   | <b>mg/L</b>                      | 10              | 10/17/2017 19:18    |
| <b>Sodium</b>                            | <b>1,800</b> |      | <b>0.34</b>                      | <b>2.0</b>   | <b>mg/L</b>                      | 10              | 10/17/2017 19:18    |
| <b>SEMI-VOLATILE ORGANIC COMPOUNDS</b>   |              |      |                                  |              |                                  |                 |                     |
|  |              |      | Method: <b>SW846 8270D</b>       |              | Prep: SW3546 / 10/12/17          |                 | Analyst: <b>RM</b>  |
| Acenaphthene                             | U            |      | 0.0034                           | 0.049        | mg/Kg-dry                        | 1               | 10/15/2017 22:45    |
| Anthracene                               | U            |      | 0.0018                           | 0.049        | mg/Kg-dry                        | 1               | 10/15/2017 22:45    |
| Benzo(a)anthracene                       | U            |      | 0.0030                           | 0.049        | mg/Kg-dry                        | 1               | 10/15/2017 22:45    |
| Benzo(a)pyrene                           | U            |      | 0.0012                           | 0.049        | mg/Kg-dry                        | 1               | 10/15/2017 22:45    |
| Benzo(b)fluoranthene                     | U            |      | 0.0019                           | 0.049        | mg/Kg-dry                        | 1               | 10/15/2017 22:45    |
| Benzo(k)fluoranthene                     | U            |      | 0.0025                           | 0.049        | mg/Kg-dry                        | 1               | 10/15/2017 22:45    |
| Chrysene                                 | U            |      | 0.0019                           | 0.049        | mg/Kg-dry                        | 1               | 10/15/2017 22:45    |
| Dibenzo(a,h)anthracene                   | U            |      | 0.0016                           | 0.049        | mg/Kg-dry                        | 1               | 10/15/2017 22:45    |
| Fluoranthene                             | U            |      | 0.0014                           | 0.049        | mg/Kg-dry                        | 1               | 10/15/2017 22:45    |

**Note:** See Qualifiers page for a list of qualifiers and their definitions.

# ALS Group, USA

Date: 23-Oct-17

**Client:** Olsson Associates  
**Project:** Fee 40  
**Sample ID:** FEE40-SS2  
**Collection Date:** 10/6/2017 11:00 AM

**Work Order:** 1710613  
**Lab ID:** 1710613-03  
**Matrix:** SOIL

| Analyses                             | Result       | Qual | MDL                              | Report Limit | Units                            | Dilution Factor | Date Analyzed       |
|--------------------------------------|--------------|------|----------------------------------|--------------|----------------------------------|-----------------|---------------------|
| Fluorene                             | U            |      | 0.0016                           | 0.049        | mg/Kg-dry                        | 1               | 10/15/2017 22:45    |
| Indeno(1,2,3-cd)pyrene               | U            |      | 0.0015                           | 0.049        | mg/Kg-dry                        | 1               | 10/15/2017 22:45    |
| <b>Naphthalene</b>                   | <b>0.050</b> |      | <b>0.0091</b>                    | <b>0.049</b> | <b>mg/Kg-dry</b>                 | 1               | 10/15/2017 22:45    |
| Pyrene                               | U            |      | 0.0018                           | 0.049        | mg/Kg-dry                        | 1               | 10/15/2017 22:45    |
| Surr: 2-Fluorobiphenyl               | 103          |      |                                  | 20-140       | %REC                             | 1               | 10/15/2017 22:45    |
| Surr: 4-Terphenyl-d14                | 129          |      |                                  | 22-172       | %REC                             | 1               | 10/15/2017 22:45    |
| Surr: Nitrobenzene-d5                | 90.2         |      |                                  | 28-140       | %REC                             | 1               | 10/15/2017 22:45    |
| <b>VOLATILE ORGANIC COMPOUNDS</b>    |              |      | Method: <b>SW8260B</b>           |              | Prep: SW5035 / 10/13/17          |                 | Analyst: <b>BG</b>  |
| Benzene                              | U            |      | 0.0069                           | 0.041        | mg/Kg                            | 1               | 10/13/2017 22:54    |
| Ethylbenzene                         | U            |      | 0.0086                           | 0.041        | mg/Kg                            | 1               | 10/13/2017 22:54    |
| m,p-Xylene                           | U            |      | 0.019                            | 0.081        | mg/Kg                            | 1               | 10/13/2017 22:54    |
| o-Xylene                             | U            |      | 0.016                            | 0.041        | mg/Kg                            | 1               | 10/13/2017 22:54    |
| Toluene                              | U            |      | 0.011                            | 0.041        | mg/Kg                            | 1               | 10/13/2017 22:54    |
| Xylenes, Total                       | U            |      | 0.035                            | 0.12         | mg/Kg                            | 1               | 10/13/2017 22:54    |
| Surr: 1,2-Dichloroethane-d4          | 90.8         |      |                                  | 70-130       | %REC                             | 1               | 10/13/2017 22:54    |
| Surr: 4-Bromofluorobenzene           | 97.9         |      |                                  | 70-130       | %REC                             | 1               | 10/13/2017 22:54    |
| Surr: Dibromofluoromethane           | 94.1         |      |                                  | 70-130       | %REC                             | 1               | 10/13/2017 22:54    |
| Surr: Toluene-d8                     | 97.6         |      |                                  | 70-130       | %REC                             | 1               | 10/13/2017 22:54    |
| <b>ELECTRICAL CONDUCTIVITY (SAR)</b> |              |      | Method: <b>USDA H60 METHOD 2</b> |              | Prep: USDA Method 20B / 10/13/17 |                 | Analyst: <b>JB</b>  |
| Electrical Conductivity @ Saturation | 21           |      | 0.028                            | 0.25         | mmhos/cm @25°                    | 50              | 10/16/2017 12:30    |
| <b>CHROMIUM, TRIVALENT</b>           |              |      | Method: <b>CALCULATION</b>       |              |                                  |                 | Analyst: <b>JJG</b> |
| Chromium, Trivalent                  | 14           |      | 0.36                             | 1.2          | mg/Kg-dry                        | 1               | 10/17/2017 16:06    |
| <b>CHROMIUM, HEXAVALENT</b>          |              |      | Method: <b>SW7196A</b>           |              | Prep: SW3060A / 10/11/17         |                 | Analyst: <b>RP</b>  |
| Chromium, Hexavalent                 | U            |      | 0.36                             | 1.2          | mg/Kg-dry                        | 1               | 10/16/2017 16:30    |
| <b>MOISTURE</b>                      |              |      | Method: <b>SW3550C</b>           |              |                                  |                 | Analyst: <b>NW</b>  |
| Moisture                             | 15           |      | 0.025                            | 0.050        | % of sample                      | 1               | 10/13/2017 13:40    |
| <b>PH</b>                            |              |      | Method: <b>SW9045D</b>           |              | Prep: EXTRACT / 10/13/17         |                 | Analyst: <b>JB</b>  |
| pH                                   | 8.22         |      | 0.10                             | 0.100        | s.u.                             | 1               | 10/13/2017 12:00    |

**Note:** See Qualifiers page for a list of qualifiers and their definitions.

# ALS Group, USA

Date: 23-Oct-17

**Client:** Olsson Associates  
**Project:** Fee 40  
**Sample ID:** FEE40-SS3  
**Collection Date:** 10/6/2017 11:10 AM

**Work Order:** 1710613  
**Lab ID:** 1710613-04  
**Matrix:** SOIL

| Analyses                                 | Result | Qual | MDL                              | Report Limit | Units                            | Dilution Factor | Date Analyzed       |
|--|--------|------|----------------------------------|--------------|----------------------------------|-----------------|---------------------|
| <b>DIESEL RANGE ORGANICS BY GC-FID</b>   |        |      |                                  |              |                                  |                 |                     |
|  |        |      | Method: <b>SW8015C</b>           |              | Prep: SW3546 / 10/12/17          |                 | Analyst: <b>KB</b>  |
| DRO (C10-C28)                            | U      |      | 3.3                              | 5.8          | mg/Kg-dry                        | 1               | 10/13/2017 06:35    |
| Surr: 4-Terphenyl-d14                    | 72.1   |      |                                  | 34-130       | %REC                             | 1               | 10/13/2017 06:35    |
| <b>GASOLINE RANGE ORGANICS BY GC-FID</b> |        |      |                                  |              |                                  |                 |                     |
|  |        |      | Method: <b>SW8015D</b>           |              | Prep: SW5035 / 10/13/17          |                 | Analyst: <b>KB</b>  |
| GRO (C6-C10)                             | U      |      | 2.9                              | 6.9          | mg/Kg                            | 1               | 10/14/2017 13:26    |
| Surr: Toluene-d8                         | 93.4   |      |                                  | 71-123       | %REC                             | 1               | 10/14/2017 13:26    |
| <b>MERCURY BY CVAA</b>                   |        |      |                                  |              |                                  |                 |                     |
|  |        |      | Method: <b>SW7471B</b>           |              | Prep: SW7471 / 10/14/17          |                 | Analyst: <b>RSB</b> |
| Mercury                                  | 0.019  | J    | 0.0037                           | 0.023        | mg/Kg-dry                        | 1               | 10/16/2017 17:10    |
| <b>METALS ANALYSIS BY ICP</b>            |        |      |                                  |              |                                  |                 |                     |
|  |        |      | Method: <b>SW846 6010C</b>       |              | Prep: SW3050B / 10/12/17         |                 | Analyst: <b>HBA</b> |
| Arsenic                                  | 9.1    |      | 0.099                            | 0.38         | mg/Kg-dry                        | 1               | 10/17/2017 03:04    |
| Barium                                   | 210    |      | 0.15                             | 0.38         | mg/Kg-dry                        | 1               | 10/17/2017 03:04    |
| Cadmium                                  | 0.71   | J    | 0.036                            | 0.76         | mg/Kg-dry                        | 1               | 10/17/2017 03:04    |
| Chromium                                 | 14     |      | 0.021                            | 0.38         | mg/Kg-dry                        | 1               | 10/17/2017 03:04    |
| Copper                                   | 19     |      | 0.17                             | 0.76         | mg/Kg-dry                        | 1               | 10/17/2017 03:04    |
| Lead                                     | 18     |      | 0.081                            | 0.38         | mg/Kg-dry                        | 1               | 10/17/2017 03:04    |
| Nickel                                   | 23     |      | 0.15                             | 0.38         | mg/Kg-dry                        | 1               | 10/17/2017 03:04    |
| Selenium                                 | 2.9    |      | 0.21                             | 0.76         | mg/Kg-dry                        | 1               | 10/17/2017 03:04    |
| Silver                                   | U      |      | 0.047                            | 0.38         | mg/Kg-dry                        | 1               | 10/17/2017 03:04    |
| Zinc                                     | 110    |      | 0.061                            | 0.76         | mg/Kg-dry                        | 1               | 10/17/2017 03:04    |
| <b>SODIUM ADSORPTION RATIO</b>           |        |      |                                  |              |                                  |                 |                     |
|  |        |      | Method: <b>USDA H60 METHOD 2</b> |              | Prep: USDA Method 20B / 10/13/17 |                 | Analyst: <b>RH</b>  |
| Sodium Adsorption Ratio                  | 15     |      | 0.010                            | 0.010        | none                             | 1               | 10/16/2017          |
| <b>SOLUBLE CATIONS FOR SAR</b>           |        |      |                                  |              |                                  |                 |                     |
|  |        |      | Method: <b>SW6020A</b>           |              | Prep: USDA Method 20B / 10/13/17 |                 | Analyst: <b>JF</b>  |
| Calcium                                  | 35     |      | 0.86                             | 5.0          | mg/L                             | 10              | 10/17/2017 19:19    |
| Magnesium                                | 4.9    |      | 0.068                            | 2.0          | mg/L                             | 10              | 10/17/2017 19:19    |
| Sodium                                   | 360    |      | 0.34                             | 2.0          | mg/L                             | 10              | 10/17/2017 19:19    |
| <b>SEMI-VOLATILE ORGANIC COMPOUNDS</b>   |        |      |                                  |              |                                  |                 |                     |
|  |        |      | Method: <b>SW846 8270D</b>       |              | Prep: SW3546 / 10/12/17          |                 | Analyst: <b>RM</b>  |
| Acenaphthene                             | U      |      | 0.0034                           | 0.048        | mg/Kg-dry                        | 1               | 10/15/2017 22:59    |
| Anthracene                               | U      |      | 0.0018                           | 0.048        | mg/Kg-dry                        | 1               | 10/15/2017 22:59    |
| Benzo(a)anthracene                       | U      |      | 0.0030                           | 0.048        | mg/Kg-dry                        | 1               | 10/15/2017 22:59    |
| Benzo(a)pyrene                           | U      |      | 0.0012                           | 0.048        | mg/Kg-dry                        | 1               | 10/15/2017 22:59    |
| Benzo(b)fluoranthene                     | U      |      | 0.0018                           | 0.048        | mg/Kg-dry                        | 1               | 10/15/2017 22:59    |
| Benzo(k)fluoranthene                     | U      |      | 0.0025                           | 0.048        | mg/Kg-dry                        | 1               | 10/15/2017 22:59    |
| Chrysene                                 | U      |      | 0.0018                           | 0.048        | mg/Kg-dry                        | 1               | 10/15/2017 22:59    |
| Dibenzo(a,h)anthracene                   | U      |      | 0.0016                           | 0.048        | mg/Kg-dry                        | 1               | 10/15/2017 22:59    |
| Fluoranthene                             | U      |      | 0.0014                           | 0.048        | mg/Kg-dry                        | 1               | 10/15/2017 22:59    |

**Note:** See Qualifiers page for a list of qualifiers and their definitions.

# ALS Group, USA

Date: 23-Oct-17

**Client:** Olsson Associates  
**Project:** Fee 40  
**Sample ID:** FEE40-SS3  
**Collection Date:** 10/6/2017 11:10 AM

**Work Order:** 1710613  
**Lab ID:** 1710613-04  
**Matrix:** SOIL

| Analyses                             | Result | Qual | MDL                              | Report Limit | Units                            | Dilution Factor | Date Analyzed       |
|--------------------------------------|--------|------|----------------------------------|--------------|----------------------------------|-----------------|---------------------|
| Fluorene                             | U      |      | 0.0016                           | 0.048        | mg/Kg-dry                        | 1               | 10/15/2017 22:59    |
| Indeno(1,2,3-cd)pyrene               | U      |      | 0.0015                           | 0.048        | mg/Kg-dry                        | 1               | 10/15/2017 22:59    |
| Naphthalene                          | U      |      | 0.0091                           | 0.048        | mg/Kg-dry                        | 1               | 10/15/2017 22:59    |
| Pyrene                               | U      |      | 0.0018                           | 0.048        | mg/Kg-dry                        | 1               | 10/15/2017 22:59    |
| Surr: 2-Fluorobiphenyl               | 108    |      |                                  | 20-140       | %REC                             | 1               | 10/15/2017 22:59    |
| Surr: 4-Terphenyl-d14                | 134    |      |                                  | 22-172       | %REC                             | 1               | 10/15/2017 22:59    |
| Surr: Nitrobenzene-d5                | 95.7   |      |                                  | 28-140       | %REC                             | 1               | 10/15/2017 22:59    |
| <b>VOLATILE ORGANIC COMPOUNDS</b>    |        |      | Method: <b>SW8260B</b>           |              | Prep: SW5035 / 10/13/17          |                 | Analyst: <b>BG</b>  |
| Benzene                              | U      |      | 0.0071                           | 0.041        | mg/Kg                            | 1               | 10/13/2017 23:19    |
| Ethylbenzene                         | U      |      | 0.0087                           | 0.041        | mg/Kg                            | 1               | 10/13/2017 23:19    |
| m,p-Xylene                           | U      |      | 0.020                            | 0.083        | mg/Kg                            | 1               | 10/13/2017 23:19    |
| o-Xylene                             | U      |      | 0.016                            | 0.041        | mg/Kg                            | 1               | 10/13/2017 23:19    |
| Toluene                              | U      |      | 0.011                            | 0.041        | mg/Kg                            | 1               | 10/13/2017 23:19    |
| Xylenes, Total                       | U      |      | 0.036                            | 0.12         | mg/Kg                            | 1               | 10/13/2017 23:19    |
| Surr: 1,2-Dichloroethane-d4          | 89.4   |      |                                  | 70-130       | %REC                             | 1               | 10/13/2017 23:19    |
| Surr: 4-Bromofluorobenzene           | 92.4   |      |                                  | 70-130       | %REC                             | 1               | 10/13/2017 23:19    |
| Surr: Dibromofluoromethane           | 93.0   |      |                                  | 70-130       | %REC                             | 1               | 10/13/2017 23:19    |
| Surr: Toluene-d8                     | 96.6   |      |                                  | 70-130       | %REC                             | 1               | 10/13/2017 23:19    |
| <b>ELECTRICAL CONDUCTIVITY (SAR)</b> |        |      | Method: <b>USDA H60 METHOD 2</b> |              | Prep: USDA Method 20B / 10/13/17 |                 | Analyst: <b>JB</b>  |
| Electrical Conductivity @ Saturation | 3.3    |      | 0.028                            | 0.25         | mmhos/cm @25°                    | 50              | 10/16/2017 12:30    |
| <b>CHROMIUM, TRIVALENT</b>           |        |      | Method: <b>CALCULATION</b>       |              |                                  |                 | Analyst: <b>JJG</b> |
| Chromium, Trivalent                  | 14     |      | 0.37                             | 1.2          | mg/Kg-dry                        | 1               | 10/17/2017 16:06    |
| <b>CHROMIUM, HEXAVALENT</b>          |        |      | Method: <b>SW7196A</b>           |              | Prep: SW3060A / 10/11/17         |                 | Analyst: <b>RP</b>  |
| Chromium, Hexavalent                 | U      |      | 0.37                             | 1.2          | mg/Kg-dry                        | 1               | 10/16/2017 16:30    |
| <b>MOISTURE</b>                      |        |      | Method: <b>SW3550C</b>           |              |                                  |                 | Analyst: <b>NW</b>  |
| Moisture                             | 16     |      | 0.025                            | 0.050        | % of sample                      | 1               | 10/13/2017 13:40    |
| <b>PH</b>                            |        |      | Method: <b>SW9045D</b>           |              | Prep: EXTRACT / 10/13/17         |                 | Analyst: <b>JB</b>  |
| pH                                   | 10.1   |      | 0.10                             | 0.100        | s.u.                             | 1               | 10/13/2017 12:00    |

**Note:** See Qualifiers page for a list of qualifiers and their definitions.

**ALS Group, USA****Date:** 23-Oct-17

**Client:** Olsson Associates  
**Project:** Fee 40  
**Sample ID:** FEE40-BG2  
**Collection Date:** 10/6/2017 11:20 AM

**Work Order:** 1710613  
**Lab ID:** 1710613-05  
**Matrix:** SOIL

| Analyses                      | Result | Qual | MDL   | Report<br>Limit | Units       | Dilution<br>Factor | Date Analyzed    |
|-------------------------------|--------|------|-------|-----------------|-------------|--------------------|------------------|
| <b>METALS ANALYSIS BY ICP</b> |        |      |       |                 |             |                    |                  |
| Arsenic                       | 9.9    |      | 0.12  | 0.45            | mg/Kg-dry   | 1                  | 10/17/2017 03:10 |
| <b>MOISTURE</b>               |        |      |       |                 |             |                    |                  |
| Moisture                      | 10     |      | 0.025 | 0.050           | % of sample | 1                  | 10/12/2017 12:25 |

**Note:** See Qualifiers page for a list of qualifiers and their definitions.



# ALS Group, USA

Date: 23-Oct-17

**Client:** Olsson Associates  
**Project:** Fee 40  
**Sample ID:** FEE40-SS4  
**Collection Date:** 10/6/2017 11:35 AM

**Work Order:** 1710613  
**Lab ID:** 1710613-06  
**Matrix:** SOIL

| Analyses                                 | Result       | Qual     | MDL                              | Report Limit | Units                            | Dilution Factor | Date Analyzed       |
|--|--------------|----------|----------------------------------|--------------|----------------------------------|-----------------|---------------------|
| <b>DIESEL RANGE ORGANICS BY GC-FID</b>   |              |          |                                  |              |                                  |                 |                     |
|  |              |          | Method: <b>SW8015C</b>           |              | Prep: SW3546 / 10/12/17          |                 | Analyst: <b>KB</b>  |
| <b>DRO (C10-C28)</b>                     | <b>13</b>    |          | <b>3.3</b>                       | <b>5.7</b>   | <b>mg/Kg-dry</b>                 | <b>1</b>        | 10/13/2017 07:04    |
| Surr: 4-Terphenyl-d14                    | 70.1         |          |                                  | 34-130       | %REC                             | 1               | 10/13/2017 07:04    |
| <b>GASOLINE RANGE ORGANICS BY GC-FID</b> |              |          |                                  |              |                                  |                 |                     |
|  |              |          | Method: <b>SW8015D</b>           |              | Prep: SW5035 / 10/13/17          |                 | Analyst: <b>KB</b>  |
| <b>GRO (C6-C10)</b>                      | <b>20</b>    |          | <b>2.8</b>                       | <b>6.8</b>   | <b>mg/Kg</b>                     | <b>1</b>        | 10/14/2017 13:55    |
| Surr: Toluene-d8                         | 98.6         |          |                                  | 71-123       | %REC                             | 1               | 10/14/2017 13:55    |
| <b>MERCURY BY CVAA</b>                   |              |          |                                  |              |                                  |                 |                     |
|  |              |          | Method: <b>SW7471B</b>           |              | Prep: SW7471 / 10/14/17          |                 | Analyst: <b>RSB</b> |
| <b>Mercury</b>                           | <b>0.021</b> | <b>J</b> | <b>0.0037</b>                    | <b>0.023</b> | <b>mg/Kg-dry</b>                 | <b>1</b>        | 10/16/2017 17:13    |
| <b>METALS ANALYSIS BY ICP</b>            |              |          |                                  |              |                                  |                 |                     |
|  |              |          | Method: <b>SW846 6010C</b>       |              | Prep: SW3050B / 10/12/17         |                 | Analyst: <b>HBA</b> |
| <b>Arsenic</b>                           | <b>9.7</b>   |          | <b>0.11</b>                      | <b>0.41</b>  | <b>mg/Kg-dry</b>                 | <b>1</b>        | 10/17/2017 03:16    |
| <b>Barium</b>                            | <b>180</b>   |          | <b>0.16</b>                      | <b>0.41</b>  | <b>mg/Kg-dry</b>                 | <b>1</b>        | 10/17/2017 03:16    |
| <b>Cadmium</b>                           | <b>0.72</b>  | <b>J</b> | <b>0.039</b>                     | <b>0.81</b>  | <b>mg/Kg-dry</b>                 | <b>1</b>        | 10/17/2017 03:16    |
| <b>Chromium</b>                          | <b>12</b>    |          | <b>0.023</b>                     | <b>0.41</b>  | <b>mg/Kg-dry</b>                 | <b>1</b>        | 10/17/2017 03:16    |
| <b>Copper</b>                            | <b>16</b>    |          | <b>0.18</b>                      | <b>0.81</b>  | <b>mg/Kg-dry</b>                 | <b>1</b>        | 10/17/2017 03:16    |
| <b>Lead</b>                              | <b>16</b>    |          | <b>0.086</b>                     | <b>0.41</b>  | <b>mg/Kg-dry</b>                 | <b>1</b>        | 10/17/2017 03:16    |
| <b>Nickel</b>                            | <b>21</b>    |          | <b>0.16</b>                      | <b>0.41</b>  | <b>mg/Kg-dry</b>                 | <b>1</b>        | 10/17/2017 03:16    |
| <b>Selenium</b>                          | <b>3.0</b>   |          | <b>0.23</b>                      | <b>0.81</b>  | <b>mg/Kg-dry</b>                 | <b>1</b>        | 10/17/2017 03:16    |
| Silver                                   | U            |          | 0.050                            | 0.41         | mg/Kg-dry                        | 1               | 10/17/2017 03:16    |
| <b>Zinc</b>                              | <b>96</b>    |          | <b>0.065</b>                     | <b>0.81</b>  | <b>mg/Kg-dry</b>                 | <b>1</b>        | 10/17/2017 03:16    |
| <b>SODIUM ADSORPTION RATIO</b>           |              |          |                                  |              |                                  |                 |                     |
|  |              |          | Method: <b>USDA H60 METHOD 2</b> |              | Prep: USDA Method 20B / 10/13/17 |                 | Analyst: <b>RH</b>  |
| <b>Sodium Adsorption Ratio</b>           | <b>31</b>    |          | <b>0.010</b>                     | <b>0.010</b> | <b>none</b>                      | <b>1</b>        | 10/16/2017          |
| <b>SOLUBLE CATIONS FOR SAR</b>           |              |          |                                  |              |                                  |                 |                     |
|  |              |          | Method: <b>SW6020A</b>           |              | Prep: USDA Method 20B / 10/13/17 |                 | Analyst: <b>JF</b>  |
| <b>Calcium</b>                           | <b>83</b>    |          | <b>8.6</b>                       | <b>50</b>    | <b>mg/L</b>                      | <b>100</b>      | 10/19/2017 09:37    |
| <b>Magnesium</b>                         | <b>17</b>    | <b>J</b> | <b>0.68</b>                      | <b>20</b>    | <b>mg/L</b>                      | <b>100</b>      | 10/19/2017 09:37    |
| <b>Sodium</b>                            | <b>1,200</b> |          | <b>3.4</b>                       | <b>20</b>    | <b>mg/L</b>                      | <b>100</b>      | 10/19/2017 09:37    |
| <b>SEMI-VOLATILE ORGANIC COMPOUNDS</b>   |              |          |                                  |              |                                  |                 |                     |
|  |              |          | Method: <b>SW846 8270D</b>       |              | Prep: SW3546 / 10/12/17          |                 | Analyst: <b>RM</b>  |
| Acenaphthene                             | U            |          | 0.0034                           | 0.048        | mg/Kg-dry                        | 1               | 10/15/2017 23:13    |
| Anthracene                               | U            |          | 0.0017                           | 0.048        | mg/Kg-dry                        | 1               | 10/15/2017 23:13    |
| Benzo(a)anthracene                       | U            |          | 0.0029                           | 0.048        | mg/Kg-dry                        | 1               | 10/15/2017 23:13    |
| Benzo(a)pyrene                           | U            |          | 0.0012                           | 0.048        | mg/Kg-dry                        | 1               | 10/15/2017 23:13    |
| Benzo(b)fluoranthene                     | U            |          | 0.0018                           | 0.048        | mg/Kg-dry                        | 1               | 10/15/2017 23:13    |
| Benzo(k)fluoranthene                     | U            |          | 0.0025                           | 0.048        | mg/Kg-dry                        | 1               | 10/15/2017 23:13    |
| Chrysene                                 | U            |          | 0.0018                           | 0.048        | mg/Kg-dry                        | 1               | 10/15/2017 23:13    |
| Dibenzo(a,h)anthracene                   | U            |          | 0.0015                           | 0.048        | mg/Kg-dry                        | 1               | 10/15/2017 23:13    |
| Fluoranthene                             | U            |          | 0.0014                           | 0.048        | mg/Kg-dry                        | 1               | 10/15/2017 23:13    |

**Note:** See Qualifiers page for a list of qualifiers and their definitions.

# ALS Group, USA

Date: 23-Oct-17

**Client:** Olsson Associates  
**Project:** Fee 40  
**Sample ID:** FEE40-SS4  
**Collection Date:** 10/6/2017 11:35 AM

**Work Order:** 1710613  
**Lab ID:** 1710613-06  
**Matrix:** SOIL

| Analyses                             | Result | Qual | MDL                              | Report Limit | Units                            | Dilution Factor | Date Analyzed       |
|--------------------------------------|--------|------|----------------------------------|--------------|----------------------------------|-----------------|---------------------|
| Fluorene                             | U      |      | 0.0015                           | 0.048        | mg/Kg-dry                        | 1               | 10/15/2017 23:13    |
| Indeno(1,2,3-cd)pyrene               | U      |      | 0.0015                           | 0.048        | mg/Kg-dry                        | 1               | 10/15/2017 23:13    |
| Naphthalene                          | U      |      | 0.0089                           | 0.048        | mg/Kg-dry                        | 1               | 10/15/2017 23:13    |
| Pyrene                               | U      |      | 0.0017                           | 0.048        | mg/Kg-dry                        | 1               | 10/15/2017 23:13    |
| Surr: 2-Fluorobiphenyl               | 103    |      |                                  | 20-140       | %REC                             | 1               | 10/15/2017 23:13    |
| Surr: 4-Terphenyl-d14                | 126    |      |                                  | 22-172       | %REC                             | 1               | 10/15/2017 23:13    |
| Surr: Nitrobenzene-d5                | 92.8   |      |                                  | 28-140       | %REC                             | 1               | 10/15/2017 23:13    |
| <b>VOLATILE ORGANIC COMPOUNDS</b>    |        |      | Method: <b>SW8260B</b>           |              | Prep: SW5035 / 10/13/17          |                 | Analyst: <b>BG</b>  |
| Benzene                              | U      |      | 0.0069                           | 0.041        | mg/Kg                            | 1               | 10/13/2017 23:45    |
| Ethylbenzene                         | U      |      | 0.0086                           | 0.041        | mg/Kg                            | 1               | 10/13/2017 23:45    |
| m,p-Xylene                           | U      |      | 0.019                            | 0.081        | mg/Kg                            | 1               | 10/13/2017 23:45    |
| o-Xylene                             | U      |      | 0.016                            | 0.041        | mg/Kg                            | 1               | 10/13/2017 23:45    |
| Toluene                              | U      |      | 0.011                            | 0.041        | mg/Kg                            | 1               | 10/13/2017 23:45    |
| Xylenes, Total                       | U      |      | 0.035                            | 0.12         | mg/Kg                            | 1               | 10/13/2017 23:45    |
| Surr: 1,2-Dichloroethane-d4          | 91.5   |      |                                  | 70-130       | %REC                             | 1               | 10/13/2017 23:45    |
| Surr: 4-Bromofluorobenzene           | 104    |      |                                  | 70-130       | %REC                             | 1               | 10/13/2017 23:45    |
| Surr: Dibromofluoromethane           | 93.8   |      |                                  | 70-130       | %REC                             | 1               | 10/13/2017 23:45    |
| Surr: Toluene-d8                     | 98.5   |      |                                  | 70-130       | %REC                             | 1               | 10/13/2017 23:45    |
| <b>ELECTRICAL CONDUCTIVITY (SAR)</b> |        |      | Method: <b>USDA H60 METHOD 2</b> |              | Prep: USDA Method 20B / 10/13/17 |                 | Analyst: <b>JB</b>  |
| Electrical Conductivity @ Saturation | 7.7    |      | 0.028                            | 0.25         | mmhos/cm @25°                    | 50              | 10/16/2017 12:30    |
| <b>CHROMIUM, TRIVALENT</b>           |        |      | Method: <b>CALCULATION</b>       |              |                                  |                 | Analyst: <b>JJG</b> |
| Chromium, Trivalent                  | 12     |      | 0.36                             | 1.2          | mg/Kg-dry                        | 1               | 10/17/2017 16:06    |
| <b>CHROMIUM, HEXAVALENT</b>          |        |      | Method: <b>SW7196A</b>           |              | Prep: SW3060A / 10/11/17         |                 | Analyst: <b>RP</b>  |
| Chromium, Hexavalent                 | U      |      | 0.36                             | 1.1          | mg/Kg-dry                        | 1               | 10/16/2017 16:30    |
| <b>MOISTURE</b>                      |        |      | Method: <b>SW3550C</b>           |              |                                  |                 | Analyst: <b>NW</b>  |
| Moisture                             | 15     |      | 0.025                            | 0.050        | % of sample                      | 1               | 10/13/2017 13:40    |
| <b>PH</b>                            |        |      | Method: <b>SW9045D</b>           |              | Prep: EXTRACT / 10/13/17         |                 | Analyst: <b>JB</b>  |
| pH                                   | 9.73   |      | 0.10                             | 0.100        | s.u.                             | 1               | 10/13/2017 12:00    |

**Note:** See Qualifiers page for a list of qualifiers and their definitions.

# ALS Group, USA

Date: 23-Oct-17

**Client:** Olsson Associates  
**Project:** Fee 40  
**Sample ID:** FEE40-SS5  
**Collection Date:** 10/6/2017 11:45 AM

**Work Order:** 1710613  
**Lab ID:** 1710613-07  
**Matrix:** SOIL

| Analyses                                 | Result       | Qual | MDL                              | Report Limit | Units                            | Dilution Factor | Date Analyzed       |
|--|--------------|------|----------------------------------|--------------|----------------------------------|-----------------|---------------------|
| <b>DIESEL RANGE ORGANICS BY GC-FID</b>   |              |      |                                  |              |                                  |                 |                     |
|  |              |      | Method: <b>SW8015C</b>           |              | Prep: SW3546 / 10/12/17          |                 | Analyst: <b>KB</b>  |
| <b>DRO (C10-C28)</b>                     | <b>5.6</b>   | J    | <b>3.6</b>                       | <b>6.2</b>   | <b>mg/Kg-dry</b>                 | 1               | 10/13/2017 07:33    |
| Surr: 4-Terphenyl-d14                    | 73.1         |      |                                  | 34-130       | %REC                             | 1               | 10/13/2017 07:33    |
| <b>GASOLINE RANGE ORGANICS BY GC-FID</b> |              |      |                                  |              |                                  |                 |                     |
|  |              |      | Method: <b>SW8015D</b>           |              | Prep: SW5035 / 10/13/17          |                 | Analyst: <b>KB</b>  |
| <b>GRO (C6-C10)</b>                      | <b>U</b>     |      | <b>3.1</b>                       | <b>7.5</b>   | <b>mg/Kg</b>                     | 1               | 10/14/2017 14:25    |
| Surr: Toluene-d8                         | 94.6         |      |                                  | 71-123       | %REC                             | 1               | 10/14/2017 14:25    |
| <b>MERCURY BY CVAA</b>                   |              |      |                                  |              |                                  |                 |                     |
|  |              |      | Method: <b>SW7471B</b>           |              | Prep: SW7471 / 10/14/17          |                 | Analyst: <b>RSB</b> |
| <b>Mercury</b>                           | <b>0.063</b> |      | <b>0.0039</b>                    | <b>0.023</b> | <b>mg/Kg-dry</b>                 | 1               | 10/16/2017 17:15    |
| <b>METALS ANALYSIS BY ICP</b>            |              |      |                                  |              |                                  |                 |                     |
|  |              |      | Method: <b>SW846 6010C</b>       |              | Prep: SW3050B / 10/12/17         |                 | Analyst: <b>HBA</b> |
| <b>Arsenic</b>                           | <b>9.3</b>   |      | <b>0.12</b>                      | <b>0.46</b>  | <b>mg/Kg-dry</b>                 | 1               | 10/17/2017 03:22    |
| <b>Barium</b>                            | <b>170</b>   |      | <b>0.18</b>                      | <b>0.46</b>  | <b>mg/Kg-dry</b>                 | 1               | 10/17/2017 03:22    |
| <b>Cadmium</b>                           | <b>0.84</b>  | J    | <b>0.044</b>                     | <b>0.92</b>  | <b>mg/Kg-dry</b>                 | 1               | 10/17/2017 03:22    |
| <b>Chromium</b>                          | <b>13</b>    |      | <b>0.026</b>                     | <b>0.46</b>  | <b>mg/Kg-dry</b>                 | 1               | 10/17/2017 03:22    |
| <b>Copper</b>                            | <b>18</b>    |      | <b>0.20</b>                      | <b>0.92</b>  | <b>mg/Kg-dry</b>                 | 1               | 10/17/2017 03:22    |
| <b>Lead</b>                              | <b>20</b>    |      | <b>0.097</b>                     | <b>0.46</b>  | <b>mg/Kg-dry</b>                 | 1               | 10/17/2017 03:22    |
| <b>Nickel</b>                            | <b>22</b>    |      | <b>0.18</b>                      | <b>0.46</b>  | <b>mg/Kg-dry</b>                 | 1               | 10/17/2017 03:22    |
| <b>Selenium</b>                          | <b>2.8</b>   |      | <b>0.26</b>                      | <b>0.92</b>  | <b>mg/Kg-dry</b>                 | 1               | 10/17/2017 03:22    |
| Silver                                   | U            |      | 0.057                            | 0.46         | mg/Kg-dry                        | 1               | 10/17/2017 03:22    |
| <b>Zinc</b>                              | <b>100</b>   |      | <b>0.073</b>                     | <b>0.92</b>  | <b>mg/Kg-dry</b>                 | 1               | 10/17/2017 03:22    |
| <b>SODIUM ADSORPTION RATIO</b>           |              |      |                                  |              |                                  |                 |                     |
|  |              |      | Method: <b>USDA H60 METHOD 2</b> |              | Prep: USDA Method 20B / 10/13/17 |                 | Analyst: <b>RH</b>  |
| <b>Sodium Adsorption Ratio</b>           | <b>8.8</b>   |      | <b>0.010</b>                     | <b>0.010</b> | <b>none</b>                      | 1               | 10/16/2017          |
| <b>SOLUBLE CATIONS FOR SAR</b>           |              |      |                                  |              |                                  |                 |                     |
|  |              |      | Method: <b>SW6020A</b>           |              | Prep: USDA Method 20B / 10/13/17 |                 | Analyst: <b>JF</b>  |
| <b>Calcium</b>                           | <b>280</b>   |      | <b>0.86</b>                      | <b>5.0</b>   | <b>mg/L</b>                      | 10              | 10/19/2017 09:39    |
| <b>Magnesium</b>                         | <b>62</b>    |      | <b>0.068</b>                     | <b>2.0</b>   | <b>mg/L</b>                      | 10              | 10/19/2017 09:39    |
| <b>Sodium</b>                            | <b>620</b>   |      | <b>0.34</b>                      | <b>2.0</b>   | <b>mg/L</b>                      | 10              | 10/19/2017 09:39    |
| <b>SEMI-VOLATILE ORGANIC COMPOUNDS</b>   |              |      |                                  |              |                                  |                 |                     |
|  |              |      | Method: <b>SW846 8270D</b>       |              | Prep: SW3546 / 10/12/17          |                 | Analyst: <b>RM</b>  |
| Acenaphthene                             | U            |      | 0.0037                           | 0.052        | mg/Kg-dry                        | 1               | 10/15/2017 23:27    |
| Anthracene                               | U            |      | 0.0019                           | 0.052        | mg/Kg-dry                        | 1               | 10/15/2017 23:27    |
| Benzo(a)anthracene                       | U            |      | 0.0032                           | 0.052        | mg/Kg-dry                        | 1               | 10/15/2017 23:27    |
| Benzo(a)pyrene                           | U            |      | 0.0013                           | 0.052        | mg/Kg-dry                        | 1               | 10/15/2017 23:27    |
| Benzo(b)fluoranthene                     | U            |      | 0.0020                           | 0.052        | mg/Kg-dry                        | 1               | 10/15/2017 23:27    |
| Benzo(k)fluoranthene                     | U            |      | 0.0027                           | 0.052        | mg/Kg-dry                        | 1               | 10/15/2017 23:27    |
| Chrysene                                 | U            |      | 0.0020                           | 0.052        | mg/Kg-dry                        | 1               | 10/15/2017 23:27    |
| Dibenzo(a,h)anthracene                   | U            |      | 0.0017                           | 0.052        | mg/Kg-dry                        | 1               | 10/15/2017 23:27    |
| Fluoranthene                             | U            |      | 0.0015                           | 0.052        | mg/Kg-dry                        | 1               | 10/15/2017 23:27    |

**Note:** See Qualifiers page for a list of qualifiers and their definitions.

# ALS Group, USA

Date: 23-Oct-17

**Client:** Olsson Associates  
**Project:** Fee 40  
**Sample ID:** FEE40-SS5  
**Collection Date:** 10/6/2017 11:45 AM

**Work Order:** 1710613  
**Lab ID:** 1710613-07  
**Matrix:** SOIL

| Analyses                             | Result | Qual | MDL                              | Report Limit | Units                            | Dilution Factor | Date Analyzed       |
|--------------------------------------|--------|------|----------------------------------|--------------|----------------------------------|-----------------|---------------------|
| Fluorene                             | U      |      | 0.0017                           | 0.052        | mg/Kg-dry                        | 1               | 10/15/2017 23:27    |
| Indeno(1,2,3-cd)pyrene               | U      |      | 0.0016                           | 0.052        | mg/Kg-dry                        | 1               | 10/15/2017 23:27    |
| Naphthalene                          | U      |      | 0.0097                           | 0.052        | mg/Kg-dry                        | 1               | 10/15/2017 23:27    |
| Pyrene                               | U      |      | 0.0019                           | 0.052        | mg/Kg-dry                        | 1               | 10/15/2017 23:27    |
| Surr: 2-Fluorobiphenyl               | 94.9   |      |                                  | 20-140       | %REC                             | 1               | 10/15/2017 23:27    |
| Surr: 4-Terphenyl-d14                | 118    |      |                                  | 22-172       | %REC                             | 1               | 10/15/2017 23:27    |
| Surr: Nitrobenzene-d5                | 79.3   |      |                                  | 28-140       | %REC                             | 1               | 10/15/2017 23:27    |
| <b>VOLATILE ORGANIC COMPOUNDS</b>    |        |      | Method: <b>SW8260B</b>           |              | Prep: SW5035 / 10/13/17          |                 | Analyst: <b>AK</b>  |
| Benzene                              | U      |      | 0.0077                           | 0.045        | mg/Kg                            | 1               | 10/18/2017 05:15    |
| Ethylbenzene                         | U      |      | 0.0095                           | 0.045        | mg/Kg                            | 1               | 10/18/2017 05:15    |
| m,p-Xylene                           | U      |      | 0.021                            | 0.090        | mg/Kg                            | 1               | 10/18/2017 05:15    |
| o-Xylene                             | U      |      | 0.017                            | 0.045        | mg/Kg                            | 1               | 10/18/2017 05:15    |
| Toluene                              | U      |      | 0.012                            | 0.045        | mg/Kg                            | 1               | 10/18/2017 05:15    |
| Xylenes, Total                       | U      |      | 0.039                            | 0.14         | mg/Kg                            | 1               | 10/18/2017 05:15    |
| Surr: 1,2-Dichloroethane-d4          | 96.4   |      |                                  | 70-130       | %REC                             | 1               | 10/18/2017 05:15    |
| Surr: 4-Bromofluorobenzene           | 101    |      |                                  | 70-130       | %REC                             | 1               | 10/18/2017 05:15    |
| Surr: Dibromofluoromethane           | 94.1   |      |                                  | 70-130       | %REC                             | 1               | 10/18/2017 05:15    |
| Surr: Toluene-d8                     | 88.0   |      |                                  | 70-130       | %REC                             | 1               | 10/18/2017 05:15    |
| <b>ELECTRICAL CONDUCTIVITY (SAR)</b> |        |      | Method: <b>USDA H60 METHOD 2</b> |              | Prep: USDA Method 20B / 10/13/17 |                 | Analyst: <b>JB</b>  |
| Electrical Conductivity @ Saturation | 5.9    |      | 0.028                            | 0.25         | mmhos/cm @25°                    | 50              | 10/16/2017 12:30    |
| <b>CHROMIUM, TRIVALENT</b>           |        |      | Method: <b>CALCULATION</b>       |              |                                  |                 | Analyst: <b>JJG</b> |
| Chromium, Trivalent                  | 13     |      | 0.39                             | 1.3          | mg/Kg-dry                        | 1               | 10/17/2017 16:06    |
| <b>CHROMIUM, HEXAVALENT</b>          |        |      | Method: <b>SW7196A</b>           |              | Prep: SW3060A / 10/11/17         |                 | Analyst: <b>RP</b>  |
| Chromium, Hexavalent                 | U      |      | 0.38                             | 1.2          | mg/Kg-dry                        | 1               | 10/16/2017 16:30    |
| <b>MOISTURE</b>                      |        |      | Method: <b>SW3550C</b>           |              |                                  |                 | Analyst: <b>NW</b>  |
| Moisture                             | 20     |      | 0.025                            | 0.050        | % of sample                      | 1               | 10/13/2017 13:40    |
| <b>PH</b>                            |        |      | Method: <b>SW9045D</b>           |              | Prep: EXTRACT / 10/13/17         |                 | Analyst: <b>JB</b>  |
| pH                                   | 9.03   |      | 0.10                             | 0.100        | s.u.                             | 1               | 10/13/2017 12:00    |

**Note:** See Qualifiers page for a list of qualifiers and their definitions.

Client: Olsson Associates  
 Work Order: 1710613  
 Project: Fee 40

**QC BATCH REPORT**

Batch ID: **108894** Instrument ID **GC8** Method: **SW8015C**

|             |        |  |         |               |      |                       |               |   |           |              |
|-------------|--------|--|---------|---------------|------|-----------------------|---------------|---|-----------|--------------|
| <b>MBLK</b> |        | Sample ID: <b>DBLKS1-108894-108894</b> |         |               |      | Units: <b>mg/Kg</b>   |               | Analysis Date: <b>10/12/2017 10:22 PM</b> |           |              |
| Client ID:  |        | Run ID: <b>GC8_171012B</b>             |         |               |      | SeqNo: <b>4698721</b> |               | Prep Date: <b>10/12/2017</b>              |           | DF: <b>1</b> |
| Analyte     | Result | PQL                                    | SPK Val | SPK Ref Value | %REC | Control Limit         | RPD Ref Value | %RPD                                      | RPD Limit | Qual         |

|                       |       |     |      |   |      |        |   |  |  |  |
|-----------------------|-------|-----|------|---|------|--------|---|--|--|--|
| DRO (C10-C28)         | U     | 5.0 |      |   |      |        |   |  |  |  |
| Surr: 4-Terphenyl-d14 | 2.267 | 0   | 3.33 | 0 | 68.1 | 34-130 | 0 |  |  |  |

|            |        |  |         |               |      |                       |               |   |           |              |
|------------|--------|--|---------|---------------|------|-----------------------|---------------|---|-----------|--------------|
| <b>LCS</b> |        | Sample ID: <b>DLCSS1-108894-108894</b> |         |               |      | Units: <b>mg/Kg</b>   |               | Analysis Date: <b>10/12/2017 11:20 PM</b> |           |              |
| Client ID: |        | Run ID: <b>GC8_171012B</b>             |         |               |      | SeqNo: <b>4698722</b> |               | Prep Date: <b>10/12/2017</b>              |           | DF: <b>1</b> |
| Analyte    | Result | PQL                                    | SPK Val | SPK Ref Value | %REC | Control Limit         | RPD Ref Value | %RPD                                      | RPD Limit | Qual         |

|                       |       |     |      |   |      |        |   |  |  |  |
|-----------------------|-------|-----|------|---|------|--------|---|--|--|--|
| DRO (C10-C28)         | 312   | 5.0 | 333  | 0 | 93.7 | 65-122 | 0 |  |  |  |
| Surr: 4-Terphenyl-d14 | 2.517 | 0   | 3.33 | 0 | 75.6 | 34-130 | 0 |  |  |  |

|            |        |                                  |         |               |      |                       |               |   |           |              |
|------------|--------|----------------------------------|---------|---------------|------|-----------------------|---------------|---|-----------|--------------|
| <b>MS</b>  |        | Sample ID: <b>1710541-09A MS</b> |         |               |      | Units: <b>mg/Kg</b>   |               | Analysis Date: <b>10/13/2017 12:18 PM</b> |           |              |
| Client ID: |        | Run ID: <b>GC8_171012B</b>       |         |               |      | SeqNo: <b>4698745</b> |               | Prep Date: <b>10/12/2017</b>              |           | DF: <b>1</b> |
| Analyte    | Result | PQL                              | SPK Val | SPK Ref Value | %REC | Control Limit         | RPD Ref Value | %RPD                                      | RPD Limit | Qual         |

|                       |       |     |       |   |      |        |   |  |  |  |
|-----------------------|-------|-----|-------|---|------|--------|---|--|--|--|
| DRO (C10-C28)         | 323.1 | 4.9 | 326.2 | 0 | 99   | 65-122 | 0 |  |  |  |
| Surr: 4-Terphenyl-d14 | 2.661 | 0   | 3.262 | 0 | 81.6 | 34-130 | 0 |  |  |  |

|            |        |                                   |         |               |      |                       |               |   |           |              |
|------------|--------|-----------------------------------|---------|---------------|------|-----------------------|---------------|---|-----------|--------------|
| <b>MSD</b> |        | Sample ID: <b>1710541-09A MSD</b> |         |               |      | Units: <b>mg/Kg</b>   |               | Analysis Date: <b>10/13/2017 12:47 PM</b> |           |              |
| Client ID: |        | Run ID: <b>GC8_171012B</b>        |         |               |      | SeqNo: <b>4698747</b> |               | Prep Date: <b>10/12/2017</b>              |           | DF: <b>1</b> |
| Analyte    | Result | PQL                               | SPK Val | SPK Ref Value | %REC | Control Limit         | RPD Ref Value | %RPD                                      | RPD Limit | Qual         |

|                       |       |     |       |   |      |        |       |      |    |  |
|-----------------------|-------|-----|-------|---|------|--------|-------|------|----|--|
| DRO (C10-C28)         | 327.8 | 4.9 | 324.7 | 0 | 101  | 65-122 | 323.1 | 1.45 | 30 |  |
| Surr: 4-Terphenyl-d14 | 2.551 | 0   | 3.247 | 0 | 78.6 | 34-130 | 2.661 | 4.21 | 30 |  |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 1710613-01A | 1710613-03A | 1710613-04A |
| 1710613-06A | 1710613-07A |             |

Client: Olsson Associates  
 Work Order: 1710613  
 Project: Fee 40

# QC BATCH REPORT

Batch ID: **109009** Instrument ID **GC9** Method: **SW8015D**

| <b>MBLK</b> |        | Sample ID: <b>MBLK-109009-109009</b> |         |               |      | Units: <b>µg/Kg-dry</b> |               | Analysis Date: <b>10/14/2017 03:35 A</b> |           |              |
|-------------|--------|--------------------------------------|---------|---------------|------|-------------------------|---------------|--|-----------|--------------|
| Client ID:  |        | Run ID: <b>GC9_171013A</b>           |         |               |      | SeqNo: <b>4700510</b>   |               | Prep Date: <b>10/13/2017</b>             |           | DF: <b>1</b> |
| Analyte     | Result | PQL                                  | SPK Val | SPK Ref Value | %REC | Control Limit           | RPD Ref Value | %RPD                                     | RPD Limit | Qual         |

|                  |      |       |      |   |      |        |   |  |  |  |
|------------------|------|-------|------|---|------|--------|---|--|--|--|
| GRO (C6-C10)     | U    | 5,000 |      |   |      |        |   |  |  |  |
| Surr: Toluene-d8 | 4754 | 0     | 5000 | 0 | 95.1 | 71-123 | 0 |  |  |  |

| <b>LCS</b> |        | Sample ID: <b>LCS-109009-109009</b> |         |               |      | Units: <b>µg/Kg-dry</b> |               | Analysis Date: <b>10/14/2017 02:07 A</b> |           |              |
|------------|--------|-------------------------------------|---------|---------------|------|-------------------------|---------------|--|-----------|--------------|
| Client ID: |        | Run ID: <b>GC9_171013A</b>          |         |               |      | SeqNo: <b>4700508</b>   |               | Prep Date: <b>10/13/2017</b>             |           | DF: <b>1</b> |
| Analyte    | Result | PQL                                 | SPK Val | SPK Ref Value | %REC | Control Limit           | RPD Ref Value | %RPD                                     | RPD Limit | Qual         |

|                  |        |       |        |   |      |        |   |  |  |  |
|------------------|--------|-------|--------|---|------|--------|---|--|--|--|
| GRO (C6-C10)     | 428000 | 5,000 | 500000 | 0 | 85.6 | 71-123 | 0 |  |  |  |
| Surr: Toluene-d8 | 5814   | 0     | 5000   | 0 | 116  | 71-123 | 0 |  |  |  |

| <b>MS</b>                   |        | Sample ID: <b>1710613-01A MS</b> |         |               |      | Units: <b>µg/Kg-dry</b> |               | Analysis Date: <b>10/15/2017 03:09 A</b> |           |              |
|-----------------------------|--------|----------------------------------|---------|---------------|------|-------------------------|---------------|--|-----------|--------------|
| Client ID: <b>FEE40-SS1</b> |        | Run ID: <b>GC9_171013A</b>       |         |               |      | SeqNo: <b>4700551</b>   |               | Prep Date: <b>10/13/2017</b>             |           | DF: <b>1</b> |
| Analyte                     | Result | PQL                              | SPK Val | SPK Ref Value | %REC | Control Limit           | RPD Ref Value | %RPD                                     | RPD Limit | Qual         |

|                  |        |       |        |   |      |        |   |  |  |  |
|------------------|--------|-------|--------|---|------|--------|---|--|--|--|
| GRO (C6-C10)     | 580200 | 6,600 | 662800 | 0 | 87.5 | 71-123 | 0 |  |  |  |
| Surr: Toluene-d8 | 7374   | 0     | 6628   | 0 | 111  | 71-123 | 0 |  |  |  |

| <b>MSD</b>                  |        | Sample ID: <b>1710613-01A MSD</b> |         |               |      | Units: <b>µg/Kg-dry</b> |               | Analysis Date: <b>10/15/2017 03:38 A</b> |           |              |
|-----------------------------|--------|-----------------------------------|---------|---------------|------|-------------------------|---------------|--|-----------|--------------|
| Client ID: <b>FEE40-SS1</b> |        | Run ID: <b>GC9_171013A</b>        |         |               |      | SeqNo: <b>4700552</b>   |               | Prep Date: <b>10/13/2017</b>             |           | DF: <b>1</b> |
| Analyte                     | Result | PQL                               | SPK Val | SPK Ref Value | %REC | Control Limit           | RPD Ref Value | %RPD                                     | RPD Limit | Qual         |

|                  |        |       |        |   |      |        |        |       |    |  |
|------------------|--------|-------|--------|---|------|--------|--------|-------|----|--|
| GRO (C6-C10)     | 591400 | 6,600 | 662800 | 0 | 89.2 | 71-123 | 580200 | 1.92  | 30 |  |
| Surr: Toluene-d8 | 7417   | 0     | 6628   | 0 | 112  | 71-123 | 7374   | 0.574 | 30 |  |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 1710613-01A | 1710613-03A | 1710613-04A |
| 1710613-06A | 1710613-07A |             |

Note: See Qualifiers Page for a list of Qualifiers and their explanation.



**Client:** Olsson Associates  
**Work Order:** 1710613  
**Project:** Fee 40

## QC BATCH REPORT

Batch ID: **109029** Instrument ID **HG1** Method: **SW7471B**

|             |        |                                      |         |               |      |                       |               |   |           |              |
|-------------|--------|--------------------------------------|---------|---------------|------|-----------------------|---------------|---|-----------|--------------|
| <b>MBLK</b> |        | Sample ID: <b>MBLK-109029-109029</b> |         |               |      | Units: <b>mg/Kg</b>   |               | Analysis Date: <b>10/16/2017 04:06 PM</b> |           |              |
| Client ID:  |        | Run ID: <b>HG1_171016B</b>           |         |               |      | SeqNo: <b>4703513</b> |               | Prep Date: <b>10/14/2017</b>              |           | DF: <b>1</b> |
| Analyte     | Result | PQL                                  | SPK Val | SPK Ref Value | %REC | Control Limit         | RPD Ref Value | %RPD                                      | RPD Limit | Qual         |

Mercury U 0.020

|            |        |                                     |         |               |      |                       |               |   |           |              |
|------------|--------|-------------------------------------|---------|---------------|------|-----------------------|---------------|---|-----------|--------------|
| <b>LCS</b> |        | Sample ID: <b>LCS-109029-109029</b> |         |               |      | Units: <b>mg/Kg</b>   |               | Analysis Date: <b>10/16/2017 04:09 PM</b> |           |              |
| Client ID: |        | Run ID: <b>HG1_171016B</b>          |         |               |      | SeqNo: <b>4703514</b> |               | Prep Date: <b>10/14/2017</b>              |           | DF: <b>1</b> |
| Analyte    | Result | PQL                                 | SPK Val | SPK Ref Value | %REC | Control Limit         | RPD Ref Value | %RPD                                      | RPD Limit | Qual         |

Mercury 0.1833 0.020 0.1665 0 110 80-120 0

|            |        |                                 |         |               |      |                       |               |   |           |              |
|------------|--------|---------------------------------|---------|---------------|------|-----------------------|---------------|---|-----------|--------------|
| <b>MS</b>  |        | Sample ID: <b>1710607-01AMS</b> |         |               |      | Units: <b>mg/Kg</b>   |               | Analysis Date: <b>10/16/2017 04:42 PM</b> |           |              |
| Client ID: |        | Run ID: <b>HG1_171016B</b>      |         |               |      | SeqNo: <b>4703527</b> |               | Prep Date: <b>10/14/2017</b>              |           | DF: <b>1</b> |
| Analyte    | Result | PQL                             | SPK Val | SPK Ref Value | %REC | Control Limit         | RPD Ref Value | %RPD                                      | RPD Limit | Qual         |

Mercury 0.1743 0.018 0.1482 0.02541 100 75-125 0

|            |        |                                  |         |               |      |                       |               |   |           |              |
|------------|--------|----------------------------------|---------|---------------|------|-----------------------|---------------|---|-----------|--------------|
| <b>MSD</b> |        | Sample ID: <b>1710607-01AMSD</b> |         |               |      | Units: <b>mg/Kg</b>   |               | Analysis Date: <b>10/16/2017 04:44 PM</b> |           |              |
| Client ID: |        | Run ID: <b>HG1_171016B</b>       |         |               |      | SeqNo: <b>4703528</b> |               | Prep Date: <b>10/14/2017</b>              |           | DF: <b>1</b> |
| Analyte    | Result | PQL                              | SPK Val | SPK Ref Value | %REC | Control Limit         | RPD Ref Value | %RPD                                      | RPD Limit | Qual         |

Mercury 0.1669 0.018 0.1496 0.02541 94.6 75-125 0.1743 4.35 35

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 1710613-01A | 1710613-02A | 1710613-03A |
| 1710613-04A | 1710613-06A | 1710613-07A |

**Note:** See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Olsson Associates  
 Work Order: 1710613  
 Project: Fee 40

# QC BATCH REPORT

Batch ID: **108938** Instrument ID **ICP2** Method: **SW846 6010C**

| <b>MBLK</b> |        | Sample ID: <b>MBLK-108938-108938</b> |         |               |      | Units: <b>mg/Kg</b>   |               | Analysis Date: <b>10/17/2017 12:51 A</b> |           |              |
|-------------|--------|--------------------------------------|---------|---------------|------|-----------------------|---------------|--|-----------|--------------|
| Client ID:  |        | Run ID: <b>ICP2_171016A</b>          |         |               |      | SeqNo: <b>4703447</b> |               | Prep Date: <b>10/12/2017</b>             |           | DF: <b>1</b> |
| Analyte     | Result | PQL                                  | SPK Val | SPK Ref Value | %REC | Control Limit         | RPD Ref Value | %RPD                                     | RPD Limit | Qual         |
| Arsenic     | U      | 0.25                                 |         |               |      |                       |               |  |           |              |
| Barium      | U      | 0.25                                 |         |               |      |                       |               |  |           |              |
| Cadmium     | 0.1135 | 0.50                                 |         |               |      |                       |               |  |           | J            |
| Chromium    | 0.0565 | 0.25                                 |         |               |      |                       |               |  |           | J            |
| Copper      | U      | 0.50                                 |         |               |      |                       |               |  |           |              |
| Lead        | U      | 0.25                                 |         |               |      |                       |               |  |           |              |
| Nickel      | U      | 0.25                                 |         |               |      |                       |               |  |           |              |
| Selenium    | U      | 0.50                                 |         |               |      |                       |               |  |           |              |
| Silver      | U      | 0.25                                 |         |               |      |                       |               |  |           |              |
| Zinc        | 0.1855 | 0.50                                 |         |               |      |                       |               |  |           | J            |

| <b>LCS</b> |        | Sample ID: <b>LCS-108938-108938</b> |         |               |      | Units: <b>mg/Kg</b>   |               | Analysis Date: <b>10/17/2017 12:58 A</b> |           |              |
|------------|--------|-------------------------------------|---------|---------------|------|-----------------------|---------------|--|-----------|--------------|
| Client ID: |        | Run ID: <b>ICP2_171016A</b>         |         |               |      | SeqNo: <b>4703448</b> |               | Prep Date: <b>10/12/2017</b>             |           | DF: <b>1</b> |
| Analyte    | Result | PQL                                 | SPK Val | SPK Ref Value | %REC | Control Limit         | RPD Ref Value | %RPD                                     | RPD Limit | Qual         |
| Arsenic    | 5.194  | 0.25                                | 5       | 0             | 104  | 80-120                | 0             |  |           |              |
| Barium     | 5.66   | 0.25                                | 5       | 0             | 113  | 80-120                | 0             |  |           |              |
| Cadmium    | 5.455  | 0.50                                | 5       | 0             | 109  | 80-120                | 0             |  |           |              |
| Chromium   | 5.443  | 0.25                                | 5       | 0             | 109  | 80-120                | 0             |  |           |              |
| Copper     | 5.144  | 0.50                                | 5       | 0             | 103  | 80-120                | 0             |  |           |              |
| Lead       | 5.188  | 0.25                                | 5       | 0             | 104  | 80-120                | 0             |  |           |              |
| Nickel     | 5.629  | 0.25                                | 5       | 0             | 113  | 80-120                | 0             |  |           |              |
| Selenium   | 4.845  | 0.50                                | 5       | 0             | 96.9 | 80-120                | 0             |  |           |              |
| Silver     | 5.132  | 0.25                                | 5       | 0             | 103  | 80-120                | 0             |  |           |              |

| <b>LCS</b> |        | Sample ID: <b>LCS-108938-108938</b> |         |               |      | Units: <b>mg/Kg</b>   |               | Analysis Date: <b>10/17/2017 08:24 A</b> |           |              |
|------------|--------|-------------------------------------|---------|---------------|------|-----------------------|---------------|--|-----------|--------------|
| Client ID: |        | Run ID: <b>ICP2_171016A</b>         |         |               |      | SeqNo: <b>4704105</b> |               | Prep Date: <b>10/12/2017</b>             |           | DF: <b>1</b> |
| Analyte    | Result | PQL                                 | SPK Val | SPK Ref Value | %REC | Control Limit         | RPD Ref Value | %RPD                                     | RPD Limit | Qual         |
| Zinc       | 5.536  | 0.50                                | 5       | 0             | 111  | 80-120                | 0             |  |           |              |

**Note:** See Qualifiers Page for a list of Qualifiers and their explanation.

**Client:** Olsson Associates  
**Work Order:** 1710613  
**Project:** Fee 40

# QC BATCH REPORT

Batch ID: **108938** Instrument ID **ICP2** Method: **SW846 6010C**

| MS         |        |      |                      | Sample ID: 1710607-02AMS |      |                | Units: mg/Kg  |                       | Analysis Date: 10/17/2017 01:55 A |       |  |
|------------|--------|------|----------------------|--------------------------|------|----------------|---------------|-----------------------|-----------------------------------|-------|--|
| Client ID: |        |      | Run ID: ICP2_171016A |                          |      | SeqNo: 4703457 |               | Prep Date: 10/12/2017 |                                   | DF: 1 |  |
| Analyte    | Result | PQL  | SPK Val              | SPK Ref Value            | %REC | Control Limit  | RPD Ref Value | %RPD                  | RPD Limit                         | Qual  |  |
| Arsenic    | 15.93  | 0.40 | 8.013                | 9.023                    | 86.2 | 75-125         | 0             |                       |                                   |       |  |
| Barium     | 170.5  | 0.40 | 8.013                | 153.9                    | 207  | 75-125         | 0             |                       |                                   | SO    |  |
| Cadmium    | 10.24  | 0.80 | 8.013                | 3.515                    | 83.9 | 75-125         | 0             |                       |                                   |       |  |
| Chromium   | 23.89  | 0.40 | 8.013                | 15.18                    | 109  | 75-125         | 0             |                       |                                   |       |  |
| Copper     | 23.96  | 0.80 | 8.013                | 17.88                    | 75.9 | 75-125         | 0             |                       |                                   |       |  |
| Lead       | 23.62  | 0.40 | 8.013                | 17.22                    | 79.8 | 75-125         | 0             |                       |                                   |       |  |
| Nickel     | 29.25  | 0.40 | 8.013                | 22.83                    | 80.2 | 75-125         | 0             |                       |                                   |       |  |
| Selenium   | 11.28  | 0.80 | 8.013                | 5.233                    | 75.5 | 75-125         | 0             |                       |                                   |       |  |
| Silver     | 8.876  | 0.40 | 8.013                | 2.56                     | 78.8 | 75-125         | 0             |                       |                                   |       |  |
| Zinc       | 105.9  | 0.80 | 8.013                | 97.3                     | 107  | 75-125         | 0             |                       |                                   | O     |  |

| MSD        |        |      |                      | Sample ID: 1710607-02AMSD |      |                | Units: mg/Kg  |                       | Analysis Date: 10/17/2017 02:01 A |       |  |
|------------|--------|------|----------------------|---------------------------|------|----------------|---------------|-----------------------|-----------------------------------|-------|--|
| Client ID: |        |      | Run ID: ICP2_171016A |                           |      | SeqNo: 4703458 |               | Prep Date: 10/12/2017 |                                   | DF: 1 |  |
| Analyte    | Result | PQL  | SPK Val              | SPK Ref Value             | %REC | Control Limit  | RPD Ref Value | %RPD                  | RPD Limit                         | Qual  |  |
| Arsenic    | 15.17  | 0.40 | 8.026                | 9.023                     | 76.5 | 75-125         | 15.93         | 4.92                  | 20                                |       |  |
| Barium     | 202.8  | 0.40 | 8.026                | 153.9                     | 610  | 75-125         | 170.5         | 17.3                  | 20                                | SO    |  |
| Cadmium    | 8.724  | 0.80 | 8.026                | 3.515                     | 64.9 | 75-125         | 10.24         | 16                    | 20                                | S     |  |
| Chromium   | 22.08  | 0.40 | 8.026                | 15.18                     | 86   | 75-125         | 23.89         | 7.84                  | 20                                |       |  |
| Copper     | 23.35  | 0.80 | 8.026                | 17.88                     | 68.1 | 75-125         | 23.96         | 2.6                   | 20                                | S     |  |
| Lead       | 23.65  | 0.40 | 8.026                | 17.22                     | 80.2 | 75-125         | 23.62         | 0.157                 | 20                                |       |  |
| Nickel     | 28.73  | 0.40 | 8.026                | 22.83                     | 73.6 | 75-125         | 29.25         | 1.78                  | 20                                | S     |  |
| Selenium   | 9.843  | 0.80 | 8.026                | 5.233                     | 57.4 | 75-125         | 11.28         | 13.6                  | 20                                | S     |  |
| Silver     | 7.4    | 0.40 | 8.026                | 2.56                      | 60.3 | 75-125         | 8.876         | 18.1                  | 20                                | S     |  |
| Zinc       | 111.8  | 0.80 | 8.026                | 97.3                      | 180  | 75-125         | 105.9         | 5.41                  | 20                                | SO    |  |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 1710613-01A | 1710613-02A | 1710613-03A |
| 1710613-04A | 1710613-05A | 1710613-06A |
| 1710613-07A |             |             |

**Note:** See Qualifiers Page for a list of Qualifiers and their explanation.

**Client:** Olsson Associates  
**Work Order:** 1710613  
**Project:** Fee 40

## QC BATCH REPORT

Batch ID: **108993** Instrument ID **SAR** Method: **USDA H60 Metho**

|                         |        |                                  |         |               |      |                       |               |                                  |           |              |
|-------------------------|--------|----------------------------------|---------|---------------|------|-----------------------|---------------|----------------------------------|-----------|--------------|
| <b>DUP</b>              |        | Sample ID: <b>1710598-01ADUP</b> |         |               |      | Units: <b>none</b>    |               | Analysis Date: <b>10/16/2017</b> |           |              |
| Client ID:              |        | Run ID: <b>SAR_171016C</b>       |         |               |      | SeqNo: <b>4707940</b> |               | Prep Date: <b>10/13/2017</b>     |           | DF: <b>1</b> |
| Analyte                 | Result | PQL                              | SPK Val | SPK Ref Value | %REC | Control Limit         | RPD Ref Value | %RPD                             | RPD Limit | Qual         |
| Sodium Adsorption Ratio | 3.271  | 0.010                            | 0       | 0             | 0    |                       | 2.919         | 11.4                             | 50        |              |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 1710613-01B | 1710613-02B | 1710613-03B |
| 1710613-04B | 1710613-06B | 1710613-07B |

Batch ID: **108993** Instrument ID **ICPMS3** Method: **SW6020A**

|            |        |                                  |         |               |      |                       |               |   |           |               |
|------------|--------|----------------------------------|---------|---------------|------|-----------------------|---------------|---|-----------|---------------|
| <b>DUP</b> |        | Sample ID: <b>1710598-01ADUP</b> |         |               |      | Units: <b>mg/L</b>    |               | Analysis Date: <b>10/17/2017 07:01 PM</b> |           |               |
| Client ID: |        | Run ID: <b>ICPMS3_171017A</b>    |         |               |      | SeqNo: <b>4706738</b> |               | Prep Date: <b>10/13/2017</b>              |           | DF: <b>10</b> |
| Analyte    | Result | PQL                              | SPK Val | SPK Ref Value | %REC | Control Limit         | RPD Ref Value | %RPD                                      | RPD Limit | Qual          |
| Calcium    | 123.8  | 5.0                              | 0       | 0             | 0    | 0-0                   | 123.9         | 0.034                                     |           |               |
| Magnesium  | 18.46  | 2.0                              | 0       | 0             | 0    | 0-0                   | 19.12         | 3.52                                      |           |               |
| Sodium     | 147.5  | 2.0                              | 0       | 0             | 0    | 0-0                   | 132.1         | 11  |           |               |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 1710613-01B | 1710613-02B | 1710613-03B |
| 1710613-04B | 1710613-06B | 1710613-07B |

**Note:** See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Olsson Associates  
 Work Order: 1710613  
 Project: Fee 40

## QC BATCH REPORT

Batch ID: **108893** Instrument ID **SVMS6** Method: **SW846 8270D**

| MBLK                   |        | Sample ID: <b>SBLKS1-108893-108893</b> |         |               |      | Units: <b>µg/Kg</b>   |               | Analysis Date: <b>10/12/2017 07:26 PM</b> |           |              |
|------------------------|--------|--|---------|---------------|------|-----------------------|---------------|---|-----------|--------------|
| Client ID:             |        | Run ID: <b>SVMS6_171012A</b>           |         |               |      | SeqNo: <b>4697902</b> |               | Prep Date: <b>10/12/2017</b>              |           | DF: <b>1</b> |
| Analyte                | Result | PQL                                    | SPK Val | SPK Ref Value | %REC | Control Limit         | RPD Ref Value | %RPD                                      | RPD Limit | Qual         |
| Acenaphthene           | U      | 42                                     |         |               |      |                       |               |   |           |              |
| Anthracene             | U      | 42                                     |         |               |      |                       |               |   |           |              |
| Benzo(a)anthracene     | U      | 42                                     |         |               |      |                       |               |   |           |              |
| Benzo(a)pyrene         | U      | 42                                     |         |               |      |                       |               |   |           |              |
| Benzo(b)fluoranthene   | U      | 42                                     |         |               |      |                       |               |   |           |              |
| Benzo(k)fluoranthene   | U      | 42                                     |         |               |      |                       |               |   |           |              |
| Chrysene               | U      | 42                                     |         |               |      |                       |               |   |           |              |
| Dibenzo(a,h)anthracene | U      | 42                                     |         |               |      |                       |               |   |           |              |
| Fluoranthene           | U      | 42                                     |         |               |      |                       |               |   |           |              |
| Fluorene               | U      | 42                                     |         |               |      |                       |               |   |           |              |
| Indeno(1,2,3-cd)pyrene | U      | 42                                     |         |               |      |                       |               |   |           |              |
| Naphthalene            | U      | 42                                     |         |               |      |                       |               |   |           |              |
| Pyrene                 | U      | 42                                     |         |               |      |                       |               |   |           |              |
| Surr: 2-Fluorobiphenyl | 3394   | 0                                      | 3333    | 0             | 102  | 20-140                | 0             |   |           |              |
| Surr: 4-Terphenyl-d14  | 3876   | 0                                      | 3333    | 0             | 116  | 22-172                | 0             |   |           |              |
| Surr: Nitrobenzene-d5  | 2127   | 0                                      | 3333    | 0             | 63.8 | 28-140                | 0             |   |           |              |

| LCS                    |        | Sample ID: <b>SLCSS1-108893-108893</b> |         |               |      | Units: <b>µg/Kg</b>   |               | Analysis Date: <b>10/12/2017 07:40 PM</b> |           |              |
|------------------------|--------|--|---------|---------------|------|-----------------------|---------------|---|-----------|--------------|
| Client ID:             |        | Run ID: <b>SVMS6_171012A</b>           |         |               |      | SeqNo: <b>4697903</b> |               | Prep Date: <b>10/12/2017</b>              |           | DF: <b>1</b> |
| Analyte                | Result | PQL                                    | SPK Val | SPK Ref Value | %REC | Control Limit         | RPD Ref Value | %RPD                                      | RPD Limit | Qual         |
| Acenaphthene           | 1457   | 42                                     | 1333    | 0             | 109  | 40-140                | 0             |   |           |              |
| Anthracene             | 1628   | 42                                     | 1333    | 0             | 122  | 40-140                | 0             |   |           |              |
| Benzo(a)anthracene     | 1540   | 42                                     | 1333    | 0             | 116  | 40-140                | 0             |   |           |              |
| Benzo(a)pyrene         | 1647   | 42                                     | 1333    | 0             | 124  | 40-140                | 0             |   |           |              |
| Benzo(b)fluoranthene   | 1715   | 42                                     | 1333    | 0             | 129  | 40-140                | 0             |   |           |              |
| Benzo(k)fluoranthene   | 1862   | 42                                     | 1333    | 0             | 140  | 40-140                | 0             |   |           |              |
| Chrysene               | 1659   | 42                                     | 1333    | 0             | 124  | 40-140                | 0             |   |           |              |
| Dibenzo(a,h)anthracene | 1542   | 42                                     | 1333    | 0             | 116  | 40-140                | 0             |   |           |              |
| Fluoranthene           | 1136   | 42                                     | 1333    | 0             | 85.2 | 40-140                | 0             |   |           |              |
| Fluorene               | 1535   | 42                                     | 1333    | 0             | 115  | 40-140                | 0             |   |           |              |
| Indeno(1,2,3-cd)pyrene | 1588   | 42                                     | 1333    | 0             | 119  | 40-140                | 0             |   |           |              |
| Naphthalene            | 1426   | 42                                     | 1333    | 0             | 107  | 40-140                | 0             |   |           |              |
| Pyrene                 | 1250   | 42                                     | 1333    | 0             | 93.8 | 40-140                | 0             |   |           |              |
| Surr: 2-Fluorobiphenyl | 3526   | 0                                      | 3333    | 0             | 106  | 20-140                | 0             |   |           |              |
| Surr: 4-Terphenyl-d14  | 3832   | 0                                      | 3333    | 0             | 115  | 22-172                | 0             |   |           |              |
| Surr: Nitrobenzene-d5  | 2350   | 0                                      | 3333    | 0             | 70.5 | 28-140                | 0             |   |           |              |

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Olsson Associates  
 Work Order: 1710613  
 Project: Fee 40

# QC BATCH REPORT

Batch ID: 108893 Instrument ID SVMS6 Method: SW846 8270D

| MS                     |        |     |                       | Sample ID: 1710565-10B MS |      |                |               | Units: µg/Kg          |           | Analysis Date: 10/12/2017 07:54 PM |  |
|------------------------|--------|-----|-----------------------|---------------------------|------|----------------|---------------|-----------------------|-----------|------------------------------------|--|
| Client ID:             |        |     | Run ID: SVMS6_171012A |                           |      | SeqNo: 4697904 |               | Prep Date: 10/12/2017 |           | DF: 1                              |  |
| Analyte                | Result | PQL | SPK Val               | SPK Ref Value             | %REC | Control Limit  | RPD Ref Value | %RPD                  | RPD Limit | Qual                               |  |
| Acenaphthene           | 1583   | 40  | 1279                  | 0                         | 124  | 40-140         | 0             |                       |           |                                    |  |
| Anthracene             | 1578   | 40  | 1279                  | 0                         | 123  | 40-140         | 0             |                       |           |                                    |  |
| Benzo(a)anthracene     | 1650   | 40  | 1279                  | 0                         | 129  | 40-140         | 0             |                       |           |                                    |  |
| Benzo(a)pyrene         | 1510   | 40  | 1279                  | 0                         | 118  | 40-140         | 0             |                       |           |                                    |  |
| Benzo(b)fluoranthene   | 1467   | 40  | 1279                  | 0                         | 115  | 40-140         | 0             |                       |           |                                    |  |
| Benzo(k)fluoranthene   | 1510   | 40  | 1279                  | 0                         | 118  | 40-140         | 0             |                       |           |                                    |  |
| Chrysene               | 1565   | 40  | 1279                  | 0                         | 122  | 40-140         | 0             |                       |           |                                    |  |
| Dibenzo(a,h)anthracene | 1336   | 40  | 1279                  | 0                         | 104  | 40-140         | 0             |                       |           |                                    |  |
| Fluoranthene           | 1343   | 40  | 1279                  | 0                         | 105  | 40-140         | 0             |                       |           |                                    |  |
| Fluorene               | 1833   | 40  | 1279                  | 0                         | 143  | 40-140         | 0             |                       |           | S                                  |  |
| Indeno(1,2,3-cd)pyrene | 1323   | 40  | 1279                  | 0                         | 103  | 40-140         | 0             |                       |           |                                    |  |
| Naphthalene            | 1484   | 40  | 1279                  | 0                         | 116  | 40-140         | 0             |                       |           |                                    |  |
| Pyrene                 | 1329   | 40  | 1279                  | 0                         | 104  | 40-140         | 0             |                       |           |                                    |  |
| Surr: 2-Fluorobiphenyl | 4134   | 0   | 3199                  | 0                         | 129  | 20-140         | 0             |                       |           |                                    |  |
| Surr: 4-Terphenyl-d14  | 3853   | 0   | 3199                  | 0                         | 120  | 22-172         | 0             |                       |           |                                    |  |
| Surr: Nitrobenzene-d5  | 2341   | 0   | 3199                  | 0                         | 73.2 | 28-140         | 0             |                       |           |                                    |  |

| MSD                    |        |     |                       | Sample ID: 1710565-10B MSD |      |                |               | Units: µg/Kg          |           | Analysis Date: 10/12/2017 08:08 PM |  |
|------------------------|--------|-----|-----------------------|----------------------------|------|----------------|---------------|-----------------------|-----------|------------------------------------|--|
| Client ID:             |        |     | Run ID: SVMS6_171012A |                            |      | SeqNo: 4697905 |               | Prep Date: 10/12/2017 |           | DF: 1                              |  |
| Analyte                | Result | PQL | SPK Val               | SPK Ref Value              | %REC | Control Limit  | RPD Ref Value | %RPD                  | RPD Limit | Qual                               |  |
| Acenaphthene           | 1790   | 41  | 1300                  | 0                          | 138  | 40-140         | 1583          | 12.3                  | 30        |                                    |  |
| Anthracene             | 1723   | 41  | 1300                  | 0                          | 133  | 40-140         | 1578          | 8.83                  | 30        |                                    |  |
| Benzo(a)anthracene     | 1829   | 41  | 1300                  | 0                          | 141  | 40-140         | 1650          | 10.3                  | 30        | S                                  |  |
| Benzo(a)pyrene         | 1838   | 41  | 1300                  | 0                          | 141  | 40-140         | 1510          | 19.6                  | 30        | S                                  |  |
| Benzo(b)fluoranthene   | 1751   | 41  | 1300                  | 0                          | 135  | 40-140         | 1467          | 17.7                  | 30        |                                    |  |
| Benzo(k)fluoranthene   | 1799   | 41  | 1300                  | 0                          | 138  | 40-140         | 1510          | 17.4                  | 30        |                                    |  |
| Chrysene               | 1650   | 41  | 1300                  | 0                          | 127  | 40-140         | 1565          | 5.26                  | 30        |                                    |  |
| Dibenzo(a,h)anthracene | 1694   | 41  | 1300                  | 0                          | 130  | 40-140         | 1336          | 23.6                  | 30        |                                    |  |
| Fluoranthene           | 1580   | 41  | 1300                  | 0                          | 122  | 40-140         | 1343          | 16.2                  | 30        |                                    |  |
| Fluorene               | 1949   | 41  | 1300                  | 0                          | 150  | 40-140         | 1833          | 6.16                  | 30        | S                                  |  |
| Indeno(1,2,3-cd)pyrene | 1698   | 41  | 1300                  | 0                          | 131  | 40-140         | 1323          | 24.8                  | 30        |                                    |  |
| Naphthalene            | 1743   | 41  | 1300                  | 0                          | 134  | 40-140         | 1484          | 16.1                  | 30        |                                    |  |
| Pyrene                 | 1419   | 41  | 1300                  | 0                          | 109  | 40-140         | 1329          | 6.55                  | 30        |                                    |  |
| Surr: 2-Fluorobiphenyl | 4118   | 0   | 3250                  | 0                          | 127  | 20-140         | 4134          | 0.376                 | 0         |                                    |  |
| Surr: 4-Terphenyl-d14  | 4308   | 0   | 3250                  | 0                          | 133  | 22-172         | 3853          | 11.1                  | 0         |                                    |  |
| Surr: Nitrobenzene-d5  | 3140   | 0   | 3250                  | 0                          | 96.6 | 28-140         | 2341          | 29.1                  | 0         |                                    |  |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 1710613-01A | 1710613-03A | 1710613-04A |
| 1710613-06A | 1710613-07A |             |

Note: See Qualifiers Page for a list of Qualifiers and their explanation.



Client: Olsson Associates  
 Work Order: 1710613  
 Project: Fee 40

# QC BATCH REPORT

Batch ID: **109008** Instrument ID **VMS5** Method: **SW8260B**

| MBLK Sample ID: <b>MBLK-109008-109008</b> |        |                             |         | Units: <b>µg/Kg-dry</b> |      |                              | Analysis Date: <b>10/13/2017 03:37 PM</b> |              |           |      |
|---|--------|-----------------------------|---------|-------------------------|------|------------------------------|---|--------------|-----------|------|
| Client ID:                                |        | Run ID: <b>VMS5_171013A</b> |         | SeqNo: <b>4700057</b>   |      | Prep Date: <b>10/13/2017</b> |   | DF: <b>1</b> |           |      |
| Analyte                                   | Result | PQL                         | SPK Val | SPK Ref Value           | %REC | Control Limit                | RPD Ref Value                             | %RPD         | RPD Limit | Qual |
| Benzene                                   | U      | 30                          | 0       | 0                       | 0    | 0-0                          | 0   |              |           |      |
| Ethylbenzene                              | U      | 30                          | 0       | 0                       | 0    | 0-0                          | 0   |              |           |      |
| m,p-Xylene                                | U      | 60                          | 0       | 0                       | 0    | 0-0                          | 0   |              |           |      |
| o-Xylene                                  | U      | 30                          | 0       | 0                       | 0    | 0-0                          | 0   |              |           |      |
| Toluene                                   | U      | 30                          | 0       | 0                       | 0    | 0-0                          | 0   |              |           |      |
| Xylenes, Total                            | U      | 90                          | 0       | 0                       | 0    | 0-0                          | 0   |              |           |      |
| Surr: 1,2-Dichloroethane-d4               | 975    | 0                           | 1000    | 0                       | 97.5 | 70-130                       | 0   |              |           |      |
| Surr: 4-Bromofluorobenzene                | 950    | 0                           | 1000    | 0                       | 95   | 70-130                       | 0   |              |           |      |
| Surr: Dibromofluoromethane                | 991    | 0                           | 1000    | 0                       | 99.1 | 70-130                       | 0   |              |           |      |
| Surr: Toluene-d8                          | 946.5  | 0                           | 1000    | 0                       | 94.6 | 70-130                       | 0   |              |           |      |

| LCS Sample ID: <b>LCS-109008-109008</b> |        |                             |         | Units: <b>µg/Kg-dry</b> |      |                              | Analysis Date: <b>10/13/2017 02:20 PM</b> |              |           |      |
|---|--------|-----------------------------|---------|-------------------------|------|------------------------------|---|--------------|-----------|------|
| Client ID:                              |        | Run ID: <b>VMS5_171013A</b> |         | SeqNo: <b>4700056</b>   |      | Prep Date: <b>10/13/2017</b> |   | DF: <b>1</b> |           |      |
| Analyte                                 | Result | PQL                         | SPK Val | SPK Ref Value           | %REC | Control Limit                | RPD Ref Value                             | %RPD         | RPD Limit | Qual |
| Benzene                                 | 959.5  | 30                          | 1000    | 0                       | 96   | 75-125                       | 0   |              |           |      |
| Ethylbenzene                            | 1002   | 30                          | 1000    | 0                       | 100  | 75-125                       | 0   |              |           |      |
| m,p-Xylene                              | 2059   | 60                          | 2000    | 0                       | 103  | 80-125                       | 0   |              |           |      |
| o-Xylene                                | 1008   | 30                          | 1000    | 0                       | 101  | 75-125                       | 0   |              |           |      |
| Toluene                                 | 962.5  | 30                          | 1000    | 0                       | 96.2 | 70-125                       | 0   |              |           |      |
| Xylenes, Total                          | 3068   | 90                          | 3000    | 0                       | 102  | 75-125                       | 0   |              |           |      |
| Surr: 1,2-Dichloroethane-d4             | 939    | 0                           | 1000    | 0                       | 93.9 | 70-130                       | 0   |              |           |      |
| Surr: 4-Bromofluorobenzene              | 1014   | 0                           | 1000    | 0                       | 101  | 70-130                       | 0   |              |           |      |
| Surr: Dibromofluoromethane              | 976    | 0                           | 1000    | 0                       | 97.6 | 70-130                       | 0   |              |           |      |
| Surr: Toluene-d8                        | 980    | 0                           | 1000    | 0                       | 98   | 70-130                       | 0   |              |           |      |

| MS Sample ID: <b>1710613-01A MS</b> |        |                             |         | Units: <b>µg/Kg-dry</b> |      |                              | Analysis Date: <b>10/14/2017 12:10 PM</b> |              |           |      |
|-------------------------------------|--------|-----------------------------|---------|-------------------------|------|------------------------------|---|--------------|-----------|------|
| Client ID: <b>FEE40-SS1</b>         |        | Run ID: <b>VMS5_171013A</b> |         | SeqNo: <b>4700077</b>   |      | Prep Date: <b>10/13/2017</b> |   | DF: <b>1</b> |           |      |
| Analyte                             | Result | PQL                         | SPK Val | SPK Ref Value           | %REC | Control Limit                | RPD Ref Value                             | %RPD         | RPD Limit | Qual |
| Benzene                             | 1164   | 40                          | 1326    | 0                       | 87.8 | 75-125                       | 0   |              |           |      |
| Ethylbenzene                        | 1204   | 40                          | 1326    | 0                       | 90.8 | 75-125                       | 0   |              |           |      |
| m,p-Xylene                          | 2468   | 80                          | 2651    | 0                       | 93.1 | 80-125                       | 0   |              |           |      |
| o-Xylene                            | 1187   | 40                          | 1326    | 0                       | 89.6 | 75-125                       | 0   |              |           |      |
| Toluene                             | 1129   | 40                          | 1326    | 0                       | 85.2 | 70-125                       | 0   |              |           |      |
| Xylenes, Total                      | 3655   | 120                         | 3977    | 0                       | 91.9 | 75-125                       | 0   |              |           |      |
| Surr: 1,2-Dichloroethane-d4         | 1194   | 0                           | 1326    | 0                       | 90.1 | 70-130                       | 0   |              |           |      |
| Surr: 4-Bromofluorobenzene          | 1358   | 0                           | 1326    | 0                       | 102  | 70-130                       | 0   |              |           |      |
| Surr: Dibromofluoromethane          | 1303   | 0                           | 1326    | 0                       | 98.3 | 70-130                       | 0   |              |           |      |
| Surr: Toluene-d8                    | 1292   | 0                           | 1326    | 0                       | 97.4 | 70-130                       | 0   |              |           |      |

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Olsson Associates  
 Work Order: 1710613  
 Project: Fee 40

## QC BATCH REPORT

Batch ID: **109008** Instrument ID **VMS5** Method: **SW8260B**

| MSD                         |        |     |                      | Sample ID: 1710613-01A MSD |      |                | Units: µg/Kg-dry |                       | Analysis Date: 10/14/2017 12:36 PM |       |
|-----------------------------|--------|-----|----------------------|----------------------------|------|----------------|------------------|-----------------------|------------------------------------|-------|
| Client ID: FEE40-SS1        |        |     | Run ID: VMS5_171013A |                            |      | SeqNo: 4700078 |                  | Prep Date: 10/13/2017 |                                    | DF: 1 |
| Analyte                     | Result | PQL | SPK Val              | SPK Ref Value              | %REC | Control Limit  | RPD Ref Value    | %RPD                  | RPD Limit                          | Qual  |
| Benzene                     | 1332   | 40  | 1326                 | 0                          | 100  | 75-125         | 1164             | 13.4                  | 30                                 |       |
| Ethylbenzene                | 1381   | 40  | 1326                 | 0                          | 104  | 75-125         | 1204             | 13.7                  | 30                                 |       |
| m,p-Xylene                  | 2865   | 80  | 2651                 | 0                          | 108  | 80-125         | 2468             | 14.9                  | 30                                 |       |
| o-Xylene                    | 1417   | 40  | 1326                 | 0                          | 107  | 75-125         | 1187             | 17.7                  | 30                                 |       |
| Toluene                     | 1343   | 40  | 1326                 | 0                          | 101  | 70-125         | 1129             | 17.3                  | 30                                 |       |
| Xylenes, Total              | 4282   | 120 | 3977                 | 0                          | 108  | 75-125         | 3655             | 15.8                  | 30                                 |       |
| Surr: 1,2-Dichloroethane-d4 | 1238   | 0   | 1326                 | 0                          | 93.4 | 70-130         | 1194             | 3.6                   | 30                                 |       |
| Surr: 4-Bromofluorobenzene  | 1300   | 0   | 1326                 | 0                          | 98.1 | 70-130         | 1358             | 4.34                  | 30                                 |       |
| Surr: Dibromofluoromethane  | 1269   | 0   | 1326                 | 0                          | 95.7 | 70-130         | 1303             | 2.68                  | 30                                 |       |
| Surr: Toluene-d8            | 1296   | 0   | 1326                 | 0                          | 97.8 | 70-130         | 1292             | 0.307                 | 30                                 |       |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 1710613-01A | 1710613-03A | 1710613-04A |
| 1710613-06A | 1710613-07A |             |

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

**Client:** Olsson Associates  
**Work Order:** 1710613  
**Project:** Fee 40

# QC BATCH REPORT

Batch ID: **108930**      Instrument ID **WETCHEM**      Method: **SW7196A**

|             |        |                                      |         |               |      |                       |               |   |           |              |
|-------------|--------|--------------------------------------|---------|---------------|------|-----------------------|---------------|---|-----------|--------------|
| <b>MBLK</b> |        | Sample ID: <b>MBLK-108930-108930</b> |         |               |      | Units: <b>mg/Kg</b>   |               | Analysis Date: <b>10/16/2017 04:30 PM</b> |           |              |
| Client ID:  |        | Run ID: <b>WETCHEM_1710160</b>       |         |               |      | SeqNo: <b>4703127</b> |               | Prep Date: <b>10/11/2017</b>              |           | DF: <b>1</b> |
| Analyte     | Result | PQL                                  | SPK Val | SPK Ref Value | %REC | Control Limit         | RPD Ref Value | %RPD                                      | RPD Limit | Qual         |

Chromium, Hexavalent      U      1.0

|            |        |                                     |         |               |      |                       |               |   |           |              |
|------------|--------|-------------------------------------|---------|---------------|------|-----------------------|---------------|---|-----------|--------------|
| <b>LCS</b> |        | Sample ID: <b>LCS-108930-108930</b> |         |               |      | Units: <b>mg/Kg</b>   |               | Analysis Date: <b>10/16/2017 04:30 PM</b> |           |              |
| Client ID: |        | Run ID: <b>WETCHEM_1710160</b>      |         |               |      | SeqNo: <b>4703128</b> |               | Prep Date: <b>10/11/2017</b>              |           | DF: <b>1</b> |
| Analyte    | Result | PQL                                 | SPK Val | SPK Ref Value | %REC | Control Limit         | RPD Ref Value | %RPD                                      | RPD Limit | Qual         |

Chromium, Hexavalent      4.81      1.0      5      0      96.2      80-120      0

|                             |        |                                  |         |               |      |                       |               |   |           |              |
|-----------------------------|--------|----------------------------------|---------|---------------|------|-----------------------|---------------|---|-----------|--------------|
| <b>MS</b>                   |        | Sample ID: <b>1710613-02A MS</b> |         |               |      | Units: <b>mg/Kg</b>   |               | Analysis Date: <b>10/16/2017 04:30 PM</b> |           |              |
| Client ID: <b>FEE40-BG1</b> |        | Run ID: <b>WETCHEM_1710160</b>   |         |               |      | SeqNo: <b>4703138</b> |               | Prep Date: <b>10/11/2017</b>              |           | DF: <b>1</b> |
| Analyte                     | Result | PQL                              | SPK Val | SPK Ref Value | %REC | Control Limit         | RPD Ref Value | %RPD                                      | RPD Limit | Qual         |

Chromium, Hexavalent      3.46      1.0      5      -0.09      71      75-125      0      S

|                             |        |                                   |         |               |      |                       |               |   |           |                |
|-----------------------------|--------|-----------------------------------|---------|---------------|------|-----------------------|---------------|---|-----------|----------------|
| <b>MS</b>                   |        | Sample ID: <b>1710613-02A MSI</b> |         |               |      | Units: <b>mg/Kg</b>   |               | Analysis Date: <b>10/16/2017 04:30 PM</b> |           |                |
| Client ID: <b>FEE40-BG1</b> |        | Run ID: <b>WETCHEM_1710160</b>    |         |               |      | SeqNo: <b>4703140</b> |               | Prep Date: <b>10/11/2017</b>              |           | DF: <b>100</b> |
| Analyte                     | Result | PQL                               | SPK Val | SPK Ref Value | %REC | Control Limit         | RPD Ref Value | %RPD                                      | RPD Limit | Qual           |

Chromium, Hexavalent      1789      100      1705      -0.09      105      75-125      0

|            |        |                                  |         |               |      |                       |               |   |           |              |
|------------|--------|----------------------------------|---------|---------------|------|-----------------------|---------------|---|-----------|--------------|
| <b>MS</b>  |        | Sample ID: <b>1710688-03A MS</b> |         |               |      | Units: <b>mg/Kg</b>   |               | Analysis Date: <b>10/16/2017 04:30 PM</b> |           |              |
| Client ID: |        | Run ID: <b>WETCHEM_1710160</b>   |         |               |      | SeqNo: <b>4703151</b> |               | Prep Date: <b>10/11/2017</b>              |           | DF: <b>1</b> |
| Analyte    | Result | PQL                              | SPK Val | SPK Ref Value | %REC | Control Limit         | RPD Ref Value | %RPD                                      | RPD Limit | Qual         |

Chromium, Hexavalent      2.559      0.98      4.902      -0.09      54      75-125      0      S

|            |        |                                   |         |               |      |                       |               |   |           |                |
|------------|--------|-----------------------------------|---------|---------------|------|-----------------------|---------------|---|-----------|----------------|
| <b>MS</b>  |        | Sample ID: <b>1710688-03A MSI</b> |         |               |      | Units: <b>mg/Kg</b>   |               | Analysis Date: <b>10/16/2017 04:30 PM</b> |           |                |
| Client ID: |        | Run ID: <b>WETCHEM_1710160</b>    |         |               |      | SeqNo: <b>4703153</b> |               | Prep Date: <b>10/11/2017</b>              |           | DF: <b>100</b> |
| Analyte    | Result | PQL                               | SPK Val | SPK Ref Value | %REC | Control Limit         | RPD Ref Value | %RPD                                      | RPD Limit | Qual           |

Chromium, Hexavalent      1442      98      1829      -0.09      78.8      75-125      0

|                             |        |                                   |         |               |      |                       |               |   |           |              |
|-----------------------------|--------|-----------------------------------|---------|---------------|------|-----------------------|---------------|---|-----------|--------------|
| <b>MSD</b>                  |        | Sample ID: <b>1710613-02A MSD</b> |         |               |      | Units: <b>mg/Kg</b>   |               | Analysis Date: <b>10/16/2017 04:30 PM</b> |           |              |
| Client ID: <b>FEE40-BG1</b> |        | Run ID: <b>WETCHEM_1710160</b>    |         |               |      | SeqNo: <b>4703139</b> |               | Prep Date: <b>10/11/2017</b>              |           | DF: <b>1</b> |
| Analyte                     | Result | PQL                               | SPK Val | SPK Ref Value | %REC | Control Limit         | RPD Ref Value | %RPD                                      | RPD Limit | Qual         |

Chromium, Hexavalent      3.34      1.0      5      -0.09      68.6      75-125      3.46      3.53      20      S

**Note:** See Qualifiers Page for a list of Qualifiers and their explanation.

**Client:** Olsson Associates  
**Work Order:** 1710613  
**Project:** Fee 40

## QC BATCH REPORT

Batch ID: **108930** Instrument ID **WETCHEM** Method: **SW7196A**

|                      |        |                                   |         |               |      |                       |               |   |           |              |  |
|----------------------|--------|-----------------------------------|---------|---------------|------|-----------------------|---------------|---|-----------|--------------|--|
| <b>MSD</b>           |        | Sample ID: <b>1710688-03A MSD</b> |         |               |      | Units: <b>mg/Kg</b>   |               | Analysis Date: <b>10/16/2017 04:30 PM</b> |           |              |  |
| Client ID:           |        | Run ID: <b>WETCHEM_1710160</b>    |         |               |      | SeqNo: <b>4703152</b> |               | Prep Date: <b>10/11/2017</b>              |           | DF: <b>1</b> |  |
| Analyte              | Result | PQL                               | SPK Val | SPK Ref Value | %REC | Control Limit         | RPD Ref Value | %RPD                                      | RPD Limit | Qual         |  |
| Chromium, Hexavalent | 1.75   | 1.0                               | 5       | -0.09         | 36.8 | 75-125                | 2.559         | 37.5                                      | 20        | SR           |  |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 1710613-01A | 1710613-02A | 1710613-03A |
| 1710613-04A | 1710613-06A | 1710613-07A |

**Note:** See Qualifiers Page for a list of Qualifiers and their explanation.

**Client:** Olsson Associates  
**Work Order:** 1710613  
**Project:** Fee 40

## QC BATCH REPORT

Batch ID: **108993** Instrument ID **WETCHEM** Method: **USDA H60 Metho**

|                                      |        |                                   |         |               |      |                             |               |   |           |               |
|--------------------------------------|--------|-----------------------------------|---------|---------------|------|-----------------------------|---------------|---|-----------|---------------|
| <b>DUP</b>                           |        | Sample ID: <b>1710598-01A DUP</b> |         |               |      | Units: <b>mmhos/cm @25°</b> |               | Analysis Date: <b>10/16/2017 12:30 PM</b> |           |               |
| Client ID:                           |        | Run ID: <b>WETCHEM_171016F</b>    |         |               |      | SeqNo: <b>4702093</b>       |               | Prep Date: <b>10/13/2017</b>              |           | DF: <b>50</b> |
| Analyte                              | Result | PQL                               | SPK Val | SPK Ref Value | %REC | Control Limit               | RPD Ref Value | %RPD                                      | RPD Limit | Qual          |
| Electrical Conductivity @ Saturation | 1.39   | 0.25                              | 0       | 0             | 0    |                             | 1.39          | 0   | 50        |               |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 1710613-01B | 1710613-02B | 1710613-03B |
| 1710613-04B | 1710613-06B | 1710613-07B |

**Note:** See Qualifiers Page for a list of Qualifiers and their explanation.

**Client:** Olsson Associates  
**Work Order:** 1710613  
**Project:** Fee 40

## QC BATCH REPORT

Batch ID: **109016** Instrument ID **WETCHEM** Method: **SW9045D**

|            |        |      |         |                              |      |               |               |                |           |      |                                    |  |       |  |
|------------|--------|------|---------|------------------------------|------|---------------|---------------|----------------|-----------|------|------------------------------------|--|-------|--|
| LCS        |        |      |         | Sample ID: LCS-109016-109016 |      |               |               | Units: s.u.    |           |      | Analysis Date: 10/13/2017 12:00 PM |  |       |  |
| Client ID: |        |      |         | Run ID: WETCHEM_171013H      |      |               |               | SeqNo: 4698499 |           |      | Prep Date: 10/13/2017              |  | DF: 1 |  |
| Analyte    | Result | PQL  | SPK Val | SPK Ref Value                | %REC | Control Limit | RPD Ref Value | %RPD           | RPD Limit | Qual |                                    |  |       |  |
| pH         | 3.9    | 0.10 | 4       | 0                            | 97.5 | 90-110        | 0             |                |           |      |                                    |  |       |  |

|                      |        |      |         |                            |      |               |               |                |           |      |                                    |  |       |  |
|----------------------|--------|------|---------|----------------------------|------|---------------|---------------|----------------|-----------|------|------------------------------------|--|-------|--|
| DUP                  |        |      |         | Sample ID: 1710613-01A DUP |      |               |               | Units: s.u.    |           |      | Analysis Date: 10/13/2017 12:00 PM |  |       |  |
| Client ID: FEE40-SS1 |        |      |         | Run ID: WETCHEM_171013H    |      |               |               | SeqNo: 4698501 |           |      | Prep Date: 10/13/2017              |  | DF: 1 |  |
| Analyte              | Result | PQL  | SPK Val | SPK Ref Value              | %REC | Control Limit | RPD Ref Value | %RPD           | RPD Limit | Qual |                                    |  |       |  |
| pH                   | 8.34   | 0.10 | 0       | 0                          | 0    | 0-0           | 8.16          | 2.18           | 20        |      |                                    |  |       |  |

|                             |        |      |         |                                   |      |               |               |                       |           |   |  |              |  |
|-----------------------------|--------|------|---------|-----------------------------------|------|---------------|---------------|-----------------------|-----------|---|--|--------------|--|
| <b>DUP</b>                  |        |      |         | Sample ID: <b>1710613-02A DUP</b> |      |               |               | Units: <b>s.u.</b>    |           | Analysis Date: <b>10/13/2017 12:00 PM</b> |  |              |  |
| Client ID: <b>FEE40-BG1</b> |        |      |         | Run ID: <b>WETCHEM_171013H</b>    |      |               |               | SeqNo: <b>4698503</b> |           | Prep Date: <b>10/13/2017</b>              |  | DF: <b>1</b> |  |
| Analyte                     | Result | PQL  | SPK Val | SPK Ref Value                     | %REC | Control Limit | RPD Ref Value | %RPD                  | RPD Limit | Qual                                      |  |              |  |
| pH                          | 7.77   | 0.10 | 0       | 0                                 | 0    | 0-0           | 8.08          | 3.91                  | 20        |   |  |              |  |

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 1710613-01A | 1710613-02A | 1710613-03A |
| 1710613-04A | 1710613-06A | 1710613-07A |

**Note:** See Qualifiers Page for a list of Qualifiers and their explanation.

**Client:** Olsson Associates  
**Work Order:** 1710613  
**Project:** Fee 40

## QC BATCH REPORT

Batch ID: **R222150** Instrument ID **MOIST** Method: **SW3550C**

|            |  |  |  |                          |  |     |         |                    |      |               |                                    |      |           |      |
|------------|--|--|--|--------------------------|--|-----|---------|--------------------|------|---------------|------------------------------------|------|-----------|------|
| MBLK       |  |  |  | Sample ID: WBLKS-R222150 |  |     |         | Units: % of sample |      |               | Analysis Date: 10/12/2017 12:25 PM |      |           |      |
| Client ID: |  |  |  | Run ID: MOIST_171012B    |  |     |         | SeqNo: 4696943     |      |               | Prep Date:                         |      | DF: 1     |      |
| Analyte    |  |  |  | Result                   |  | PQL | SPK Val | SPK Ref Value      | %REC | Control Limit | RPD Ref Value                      | %RPD | RPD Limit | Qual |

Moisture U 0.050

|            |  |  |  |                        |     |         |               |                    |               |               |                                    |           |       |  |
|------------|--|--|--|------------------------|-----|---------|---------------|--------------------|---------------|---------------|------------------------------------|-----------|-------|--|
| LCS        |  |  |  | Sample ID: LCS-R222150 |     |         |               | Units: % of sample |               |               | Analysis Date: 10/12/2017 12:25 PM |           |       |  |
| Client ID: |  |  |  | Run ID: MOIST_171012B  |     |         |               | SeqNo: 4696942     |               |               | Prep Date:                         |           | DF: 1 |  |
| Analyte    |  |  |  | Result                 | PQL | SPK Val | SPK Ref Value | %REC               | Control Limit | RPD Ref Value | %RPD                               | RPD Limit | Qual  |  |

Moisture 100 0.050 100 0 100 99.5-100.5 0

|            |  |  |  |                                   |     |         |               |                       |               |               |   |           |              |  |
|------------|--|--|--|-----------------------------------|-----|---------|---------------|-----------------------|---------------|---------------|---|-----------|--------------|--|
| <b>DUP</b> |  |  |  | Sample ID: <b>1710625-02A DUP</b> |     |         |               | Units: % of sample    |               |               | Analysis Date: <b>10/12/2017 12:25 PM</b> |           |              |  |
| Client ID: |  |  |  | Run ID: <b>MOIST_171012B</b>      |     |         |               | SeqNo: <b>4696926</b> |               |               | Prep Date:                                |           | DF: <b>1</b> |  |
| Analyte    |  |  |  | Result                            | PQL | SPK Val | SPK Ref Value | %REC                  | Control Limit | RPD Ref Value | %RPD                                      | RPD Limit | Qual         |  |

Moisture 13.7 0.050 0 0 0 0-0 14.13 3.09 5

|            |  |  |  |                                   |     |         |               |                       |               |               |   |           |              |  |
|------------|--|--|--|-----------------------------------|-----|---------|---------------|-----------------------|---------------|---------------|---|-----------|--------------|--|
| <b>DUP</b> |  |  |  | Sample ID: <b>1710642-01B DUP</b> |     |         |               | Units: % of sample    |               |               | Analysis Date: <b>10/12/2017 12:25 PM</b> |           |              |  |
| Client ID: |  |  |  | Run ID: <b>MOIST_171012B</b>      |     |         |               | SeqNo: <b>4696937</b> |               |               | Prep Date:                                |           | DF: <b>1</b> |  |
| Analyte    |  |  |  | Result                            | PQL | SPK Val | SPK Ref Value | %REC                  | Control Limit | RPD Ref Value | %RPD                                      | RPD Limit | Qual         |  |

Moisture 7.63 0.050 0 0 0 0-0 7.24 5.25 5 R

The following samples were analyzed in this batch:

1710613-02A 1710613-05A

**Note:** See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Olsson Associates  
 Work Order: 1710613  
 Project: Fee 40

## QC BATCH REPORT

Batch ID: **R222258** Instrument ID **MOIST** Method: **SW3550C**

|             |        |                                 |         |               |      |                       |               |   |           |              |
|-------------|--------|---------------------------------|---------|---------------|------|-----------------------|---------------|---|-----------|--------------|
| <b>MBLK</b> |        | Sample ID: <b>WBLKS-R222258</b> |         |               |      | Units: % of sample    |               | Analysis Date: <b>10/13/2017 01:40 PM</b> |           |              |
| Client ID:  |        | Run ID: <b>MOIST_171013B</b>    |         |               |      | SeqNo: <b>4699846</b> |               | Prep Date:                                |           | DF: <b>1</b> |
| Analyte     | Result | PQL                             | SPK Val | SPK Ref Value | %REC | Control Limit         | RPD Ref Value | %RPD                                      | RPD Limit | Qual         |

Moisture U 0.050

|            |        |                               |         |               |      |                       |               |   |           |              |
|------------|--------|-------------------------------|---------|---------------|------|-----------------------|---------------|---|-----------|--------------|
| <b>LCS</b> |        | Sample ID: <b>LCS-R222258</b> |         |               |      | Units: % of sample    |               | Analysis Date: <b>10/13/2017 01:40 PM</b> |           |              |
| Client ID: |        | Run ID: <b>MOIST_171013B</b>  |         |               |      | SeqNo: <b>4699845</b> |               | Prep Date:                                |           | DF: <b>1</b> |
| Analyte    | Result | PQL                           | SPK Val | SPK Ref Value | %REC | Control Limit         | RPD Ref Value | %RPD                                      | RPD Limit | Qual         |

Moisture 100 0.050 100 0 100 99.5-100.5 0

|                             |        |                                   |         |               |      |                       |               |   |           |              |
|-----------------------------|--------|-----------------------------------|---------|---------------|------|-----------------------|---------------|---|-----------|--------------|
| <b>DUP</b>                  |        | Sample ID: <b>1710613-07A DUP</b> |         |               |      | Units: % of sample    |               | Analysis Date: <b>10/13/2017 01:40 PM</b> |           |              |
| Client ID: <b>FEE40-SS5</b> |        | Run ID: <b>MOIST_171013B</b>      |         |               |      | SeqNo: <b>4699829</b> |               | Prep Date:                                |           | DF: <b>1</b> |
| Analyte                     | Result | PQL                               | SPK Val | SPK Ref Value | %REC | Control Limit         | RPD Ref Value | %RPD                                      | RPD Limit | Qual         |

Moisture 20.59 0.050 0 0 0 0-0 20.22 1.81 5

|            |        |                                   |         |               |      |                       |               |   |           |              |
|------------|--------|-----------------------------------|---------|---------------|------|-----------------------|---------------|---|-----------|--------------|
| <b>DUP</b> |        | Sample ID: <b>1710832-22A DUP</b> |         |               |      | Units: % of sample    |               | Analysis Date: <b>10/13/2017 01:40 PM</b> |           |              |
| Client ID: |        | Run ID: <b>MOIST_171013B</b>      |         |               |      | SeqNo: <b>4699833</b> |               | Prep Date:                                |           | DF: <b>1</b> |
| Analyte    | Result | PQL                               | SPK Val | SPK Ref Value | %REC | Control Limit         | RPD Ref Value | %RPD                                      | RPD Limit | Qual         |

Moisture 16.53 0.050 0 0 0 0-0 16.79 1.56 5

The following samples were analyzed in this batch:

|             |             |             |
|-------------|-------------|-------------|
| 1710613-01A | 1710613-03A | 1710613-04A |
| 1710613-06A | 1710613-07A |             |

Note: See Qualifiers Page for a list of Qualifiers and their explanation.





**Environmental**

# Chain of Custody Form

Page 1 of 1

COC ID: 123456

☐ Cincinnati, OH  
+1 513 733 5336

☒ Holland, MI  
+1 616 399 6070

☐ Salt Lake City, UT  
+1 801 266 7700

☐ Everett, WA  
+1 425 356 2600

☐ Houston, TX  
+1 281 530 5656

☐ Spring City, PA  
+1 610 948 4903

☐ Fort Collins, CO  
+1 970 490 1511

☐ Middletown, PA  
+1 717 944 5541

☐ York, PA  
+1 717 505 5280

| Customer Information  |                                 | Project Information |                             | Parameter/Method Request for Analysis   |       |   |   |   |   |   |   |   |   |                   |   |   |      |  |  |
|---|---------------------------------|---------------------|-----------------------------|---|-------|---|---|---|---|---|---|---|---|-------------------|---|---|------|--|--|
| Purchase Order  |                                 | Project Name        | Fee 40                      | A TPH (GRO & DRO)   |       |   |   |   |   |   |   |   |   |                   |   |   |      |  |  |
| Work Order  |                                 | Project Number      | 013.3287.400.400004         | B BTEX  |       |   |   |   |   |   |   |   |   |                   |   |   |      |  |  |
| Company Name  | Oleson Associates               | Bill To Company     | Oleson Associates           | C PAH (See Attached List) CO Table 910  |       |   |   |   |   |   |   |   |   |                   |   |   |      |  |  |
| Send Report To  | Tim Dobransky                   | Invoice Attn        | Tim Dobransky               | D Electrical Conductivity   |       |   |   |   |   |   |   |   |   |                   |   |   |      |  |  |
| Address   | 760 Horizon Drive, Ste. 102     | Address             | 760 Horizon Drive, Ste. 102 | E Sodium Adsorption Ratio   |       |   |   |   |   |   |   |   |   |                   |   |   |      |  |  |
| City/State/Zip  | Grand Junction, CO 81506        | City/State/Zip      | Grand Junction, CO 81506    | F pH  |       |   |   |   |   |   |   |   |   |                   |   |   |      |  |  |
| Phone   | 970.263.7800                    | Phone               | 970.263.7800                | G Metals (See Attached List) CO Table 910   |       |   |   |   |   |   |   |   |   |                   |   |   |      |  |  |
| Fax   | 970.263.7456                    | Fax                 | 970.263.7456                | H Arsenic Only  |       |   |   |   |   |   |   |   |   |                   |   |   |      |  |  |
| e-Mail Address  | tdobransky@olesonassociates.com | e-Mail Address      |                             | I   |       |   |   |   |   |   |   |   |   |                   |   |   |      |  |  |
|   |                                 |                     |                             | J   |       |   |   |   |   |   |   |   |   |                   |   |   |      |  |  |
| No.   | Sample Description              | Date                | Time                        | Matrix  | Pres. | # Bottles                                     | A | B   | C | D | E | F | G | H                 | I | J | Hold |  |  |
| 1   | FEE40-SS1                       | 10/06/17            | 1040                        | Soil  | 8     | 2   | X | X   | X | X | X | X | X |                   |   |   |      |  |  |
| 2   | FEE40-BG1                       | 10/06/17            | 1045                        | Soil  | 8     | 2   |   |   |   | X | X | X | X |                   |   |   |      |  |  |
| 3   | FEE40-SS2                       | 10/06/17            | 1100                        | Soil  | 8     | 2   | X | X   | X | X | X | X | X |                   |   |   |      |  |  |
| 4   | FEE40-SS3                       | 10/06/17            | 1110                        | Soil  | 8     | 2   | X | X   | X | X | X | X | X |                   |   |   |      |  |  |
| 5   | FEE40-BG2                       | 10/06/17            | 1120                        | Soil  | 8     | 1   |   |   |   |   |   |   |   | X                 |   |   |      |  |  |
| 6   | FEE40-SS4                       | 10/06/17            | 1135                        | Soil  | 8     | 2   | X | X   | X | X | X | X | X |                   |   |   |      |  |  |
| 7   | FEE40-SS5                       | 10/06/17            | 1145                        | Soil  | 8     | 2   | X | X   | X | X | X | X | X |                   |   |   |      |  |  |
| 8   |                                 |                     |                             |   |       |   |   |   |   |   |   |   |   |                   |   |   |      |  |  |
| 9   |                                 |                     |                             |   |       |   |   |   |   |   |   |   |   |                   |   |   |      |  |  |
| 10  |                                 |                     |                             |   |       |   |   |   |   |   |   |   |   |                   |   |   |      |  |  |
| Sampler(s): Please Print & Sign   |                                 | Shipment Method:    |                             | Required Turnaround Time:   |       |   |   |   |   |   |   |   |   | Results Due Date: |   |   |      |  |  |
| Tim Dobransky   |                                 | FedEx               |                             | <input type="checkbox"/> STD 10 Wk Days <input checked="" type="checkbox"/> 5 Wk Days <input type="checkbox"/> 2 Wk Days <input type="checkbox"/> 24 Hour |       |   |   |   |   |   |   |   |   |                   |   |   |      |  |  |
| Relinquished by:  |                                 | Date:               | Time:                       | Received by:  |       | Notes:  |   |   |   |   |   |   |   |                   |   |   |      |  |  |
| TD  |                                 | 10-7-17             | 11:30AM                     | N.M.  |       | Chevron Pricing Applies - Per Bruce Schlatter |   |   |   |   |   |   |   |                   |   |   |      |  |  |
| Relinquished by:  |                                 | Date:               | Time:                       | Received by (Laboratory):   |       | Cooler Temp.                                  |   | QC Package: (Check Box Below)   |   |   |   |   |   |                   |   |   |      |  |  |
| U   |                                 | 10/9/17             | 1820                        | D.S.  |       | 52.2<br>9.6°C                                 |   | <input checked="" type="checkbox"/> Level II: Standard QC<br><input type="checkbox"/> Level III: Std QC + Raw Data<br><input type="checkbox"/> Level IV: SW846 CLP-Like |   |   |   |   |   |                   |   |   |      |  |  |
| Logged by (Laboratory):   |                                 | Date:               | Time:                       | Checked by (Laboratory):  |       | Other:  |   |   |   |   |   |   |   |                   |   |   |      |  |  |
| D.S.  |                                 | 10/10/17            | 1215                        | D.S.  |       |   |   |   |   |   |   |   |   |                   |   |   |      |  |  |
| Preservative Key: 1-HCL 2-HNO3 3-H2SO4 4-NaOH 5-Na2S2O3 6-NaHSO4 7-Other 8-4 degrees C 9-5035 |                                 |                     |                             |   |       |   |   |   |   |   |   |   |   |                   |   |   |      |  |  |

Note: Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.

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Sample Receipt Checklist

Client Name: **OLSSON**

Date/Time Received: **10-Oct-17 09:30**

Work Order: **1710613**

Received by: **DS**

Checklist completed by Diane Shaw 10-Oct-17  
eSignature Date

Reviewed by: Chad Whelton 11-Oct-17  
eSignature Date

Matrices: **Soil**

Carrier name: **FedEx**

|   |   |                             |  |
|---|---|-----------------------------|--|
| Shipping container/cooler in good condition?            | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Present <input type="checkbox"/>                       |
| Custody seals intact on shipping container/cooler?      | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | Not Present <input checked="" type="checkbox"/>            |
| Custody seals intact on sample bottles?                 | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | Not Present <input checked="" type="checkbox"/>            |
| Chain of custody present?                               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |  |
| Chain of custody signed when relinquished and received? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |  |
| Chain of custody agrees with sample labels?             | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |  |
| Samples in proper container/bottle?                     | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |  |
| Sample containers intact?                               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |  |
| Sufficient sample volume for indicated test?            | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |  |
| All samples received within holding time?               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |  |
| Container/Temp Blank temperature in compliance?         | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |  |
| Sample(s) received on ice?                              | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |  |
| Temperature(s)/Thermometer(s):                          | <u>3.6/3.6 c</u>                        |                             | <u>SR2</u>   |
| Cooler(s)/Kit(s):                                       | <u></u>                                 |                             |  |
| Date/Time sample(s) sent to storage:                    | <u>10/10/2017 12:33:43 PM</u>           |                             |  |
| Water - VOA vials have zero headspace?                  | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | No VOA vials submitted <input checked="" type="checkbox"/> |
| Water - pH acceptable upon receipt?                     | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | N/A <input checked="" type="checkbox"/>                    |
| pH adjusted?  | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | N/A <input checked="" type="checkbox"/>                    |
| pH adjusted by:   | <u>-</u>                                |                             |  |

Login Notes:

-----

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction: