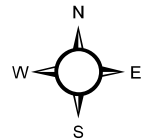
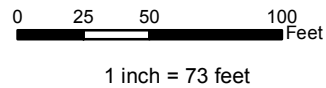




Legend

- Spill Origin
- Other Soil Sample Location
- Spill Path
- Spill Path Area



| | |
|-------------|------------|
| PROJECT NO: | 013-3287 |
| DRAWN BY: | SBS |
| DATE: | 07/19/2015 |

AC MCLAUGHLIN 16
SPILL RESPONSE
CHEVRON USA, INC
RIO BLANCO COUNTY, COLORADO
SWSE S14 T2N R103W



Entrada Consulting Group
 240 Mesa Avenue
 Grand Junction, CO 81501
 (970) 270-2986
www.entradainc.com

FIGURE

1

**Table 1
AC McLaughlin 16
Soil Data Summary**

| SAMPLE SUMMARY | |
|----------------------|--------------------------------|
| Location Description | Chevron AC McLaughlin 16 Spill |
| Sample Type | Soil |

| LABORATORY DATA SUMMARY | | | | | | |
|--|-----------|------------|-----------|-----------|--|----------|
| Sample ID | ACM16-SS1 | ACM16-SS1 | ACM16-SS2 | ACM16-BG1 | COGCC TABLE 910-1 CONCENTRATION LEVELS | UNITS |
| Depth | 0-6" | 0-6" | 0-6" | 0-6" | | |
| Sample Date | 6/10/2015 | 10/19/2017 | 6/10/2015 | 6/10/2015 | | |
| Analytical Parameters | | | | | | |
| TPH | | | | | | |
| TPH Gasoline Range Organics | <2.8 | NT | <2.8 | NT | 500 | mg/kg |
| TPH Diesel Range Organics | 250 | NT | 38 | NT | | |
| BTEX | | | | | | |
| Benzene | <0.033 | NT | <0.034 | NT | 0.17 | mg/kg |
| Toluene | <0.033 | NT | <0.034 | NT | 85 | mg/kg |
| Ethylbenzene | <0.033 | NT | <0.034 | NT | 100 | mg/kg |
| Total Xylene | <0.099 | NT | <0.10 | NT | 175 | mg/kg |
| Metals | | | | | | |
| Arsenic | 8.0 | NT | 8.5 | 8.5 | 0.39 | mg/kg |
| Barium | 200 | NT | 140 | 150 | 15,000 | mg/kg |
| Cadmium | <0.43 | NT | <0.40 | <0.39 | 70 | mg/kg |
| Chromium | 12 | NT | 11 | 11 | NA | mg/kg |
| Copper | 15 | NT | 16 | 16 | 3,100 | mg/kg |
| Lead | 15 | NT | 12 | 12 | 400 | mg/kg |
| Mercury | 0.018 | NT | 0.02 | 0.015 | 23 | mg/kg |
| Nickel | 33 | NT | 35 | 36 | 1,600 | mg/kg |
| Selenium | 1.6 | NT | 1.3 | 1.2 | 390 | mg/kg |
| Silver | <0.43 | NT | <0.40 | <0.39 | 390 | mg/kg |
| Zinc | 75 | NT | 65 | 63 | 23,000 | mg/kg |
| SAR Metals Analysis | | | | | | |
| Calcium | 210 | 130 | 100 | 43 | NA | mg/L |
| Magnesium | 61 | 34 | 32 | 15 | NA | mg/L |
| Sodium | 1200 | 110 | 39 | 220 | NA | mg/L |
| Sodium Adsorption Ratio | 19 | 2.3 | 0.88 | 7.3 | <12 | ratio |
| Polynuclear Aromatic Hydrocarbons | | | | | | |
| Acenaphthene | <0.0073 | NT | <0.0073 | NT | 1,000 | mg/kg |
| Anthracene | <0.0073 | NT | <0.0073 | NT | 1,000 | mg/kg |
| Benzo(a)anthracene | <0.0073 | NT | <0.0073 | NT | 0.22 | mg/kg |
| Benzo(a)pyrene | <0.0073 | NT | <0.0073 | NT | 0.022 | mg/kg |
| Benzo(b)fluoranthene | <0.0073 | NT | <0.0073 | NT | 0.22 | mg/kg |
| Benzo(k)fluoranthene | <0.0073 | NT | <0.0073 | NT | 2.2 | mg/kg |
| Chrysene | <0.0073 | NT | <0.0073 | NT | 22 | mg/kg |
| Dibenzo(a,h)anthracene | <0.0073 | NT | <0.0073 | NT | 0.022 | mg/kg |
| Fluoranthene | <0.0073 | NT | <0.0073 | NT | 1,000 | mg/kg |
| Fluorene | <0.0073 | NT | <0.0073 | NT | 1,000 | mg/kg |
| Indeno(1,2,3-cd)pyrene | <0.0073 | NT | <0.0073 | NT | 0.22 | mg/kg |
| Napthalene | <0.0073 | NT | <0.0073 | NT | 23 | mg/kg |
| Pyrene | <0.0073 | NT | <0.0073 | NT | 1,000 | mg/kg |
| General Chemistry | | | | | | |
| Chromium, Hexavalent | <1.1 | NT | <1.1 | <1.0 | 23 | mg/kg |
| Chromium, Trivalent | 11 | NT | 11 | 11 | 120,000 | mg/kg |
| Specific Conductivity | 8.4 | 1.6 | 1.0 | 1.3 | <4 or 2 x the background | mmhos/cm |
| pH | 8.0 | NT | 8.1 | 8.9 | 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



24-Jun-2015

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

Re: **Chevron AC McLaughlin 16 Spill**

Work Order: **1506792**

Dear Tim,

ALS Environmental received 3 samples on 12-Jun-2015 10:00 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 NELAP standard requirements and QC 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 28.

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

Sincerely,

A handwritten signature in black ink that reads "Les Arnold".

Electronically approved by: Les Arnold

Les Arnold
Senior Project Manager



Certificate No: MN 532786

Report of Laboratory Analysis

ADDRESS 3352 128th Avenue Holland, Michigan 49424-9263 | PHONE (616) 399-6070 | FAX (616) 399-6185

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Environmental ALS Environmental logo icon consisting of a stylized green and blue shape.

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: Olsson Associates
Project: Chevron AC McLaughlin 16 Spill
Work Order: 1506792

Work Order Sample Summary

| <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> |
|--------------------|-------------------------|---------------|-------------------|------------------------|----------------------|--------------------------|
| 1506792-01 | ACM16-BG1 | Soil | | 6/10/2015 12:55 | 6/12/2015 10:00 | <input type="checkbox"/> |
| 1506792-02 | ACM16-SS1 | Soil | | 6/10/2015 13:05 | 6/12/2015 10:00 | <input type="checkbox"/> |
| 1506792-03 | ACM16-SS2 | Soil | | 6/10/2015 13:15 | 6/12/2015 10:00 | <input type="checkbox"/> |

Client: Olsson Associates
Project: Chevron AC McLaughlin 16 Spill
WorkOrder: 1506792

**QUALIFIERS,
ACRONYMS, UNITS**

| <u>Qualifier</u> | <u>Description</u> |
|------------------|---|
| * | Value exceeds Regulatory Limit |
| a | Not 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 |
| n | Not offered for accreditation |
| 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 PQL, sample results may exhibit background or reagent contamination at the observed level. |

| <u>Acronym</u> | <u>Description</u> |
|----------------|-------------------------------------|
| 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 |

| <u>Units Reported</u> | <u>Description</u> |
|-----------------------|--|
| % of sample | Percent of Sample |
| µg/Kg-dry | Micrograms per Kilogram Dry Weight |
| 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 |

Client: Olsson Associates
Project: Chevron AC McLaughlin 16 Spill
Work Order: 1506792

Case Narrative

Samples for the above noted Work Order were received on 06/12/2015. The attached "Sample Receipt Checklist" documents the status of custody seals, container integrity, preservation, and temperature compliance.

Samples were analyzed according to the analytical methodology previously transmitted in the "Work Order Acknowledgement". Methodologies are also documented in the "Analytical Result" section for each sample. Quality control results are listed in the "QC Report" section. Sample association for the reported quality control is located at the end of each batch summary. If applicable, results are appropriately qualified in the Analytical Result and QC Report sections. The "Qualifiers" section documents the various qualifiers, units, and acronyms utilized in reporting.

With the following exceptions, all sample analyses achieved analytical criteria.

Sample Receiving:

No deviations or anomalies were noted.

Volatile Organics:

No other deviations or anomalies were noted.

Extractable Organics:

No other deviations or anomalies were noted.

Metals:

Batch 72263, Method ICP_6010_S, Sample 1506792-03AMS: The MS recovery was outside of the control limit; however, the result in the parent sample is greater than 4x the spike amount. No qualification is required for this analyte: Ba, Ni, and Zn

Batch 72263, Method ICP_6010_S, Sample 1506792-03AMS: The MS recovery was above the upper control limit. The corresponding result in the parent sample may be biased high for this analyte: As, Cr, Cu

Batch 72263, Method ICP_6010_S, Sample 1506792-03AMS: The matrix spike recovery was outside of the control limit. However, the matrix spike duplicate recovery and the RPD between the MS and MSD were in control. No qualification is required for this analyte: Cu

Client: Olsson Associates
Project: Chevron AC McLaughlin 16 Spill
Work Order: 1506792

Case Narrative

Batch 72263, Method ICP_6010_S, Sample 1506792-03AMSD: The RPD between the MS and MSD was outside the control limit. The corresponding result in the parent sample should be considered estimated for this analyte: As

No other deviations or anomalies were noted.

Wet Chemistry:

Batch 72462, Method CR6_7196_S, Sample 1506792-01A: The MS and MSD recoveries were below the lower control limit. The corresponding result in the parent sample may be biased low for this analyte.

No deviations or anomalies were noted.

ALS Group USA, Corp

Date: 24-Jun-15

Client: Olsson Associates
Project: Chevron AC McLaughlin 16 Spill
Sample ID: ACM16-BG1
Collection Date: 6/10/2015 12:55 PM

Work Order: 1506792
Lab ID: 1506792-01
Matrix: SOIL

| Analyses | Result | Qual | Report Limit | Units | Dilution Factor | Date Analyzed |
|--------------------------------------|--------|------|-----------------------|-------------|-----------------------------|---------------------|
| MERCURY BY CVAA | | | SW7471B | | Prep Date: 6/23/2015 | Analyst: LR |
| Mercury | 0.015 | | 0.014 | mg/Kg-dry | 1 | 6/23/2015 08:47 PM |
| METALS ANALYSIS BY ICP | | | SW846 6010C | | Prep Date: 6/15/2015 | Analyst: JEC |
| Arsenic | 8.5 | | 0.39 | mg/Kg-dry | 1 | 6/17/2015 08:27 PM |
| Barium | 150 | | 0.39 | mg/Kg-dry | 1 | 6/17/2015 08:27 PM |
| Cadmium | ND | | 0.39 | mg/Kg-dry | 1 | 6/17/2015 08:27 PM |
| Chromium | 11 | | 0.39 | mg/Kg-dry | 1 | 6/17/2015 08:27 PM |
| Copper | 16 | | 0.39 | mg/Kg-dry | 1 | 6/17/2015 08:27 PM |
| Lead | 12 | | 0.39 | mg/Kg-dry | 1 | 6/17/2015 08:27 PM |
| Nickel | 36 | | 0.39 | mg/Kg-dry | 1 | 6/17/2015 08:27 PM |
| Selenium | 1.2 | | 0.39 | mg/Kg-dry | 1 | 6/17/2015 08:27 PM |
| Silver | ND | | 0.39 | mg/Kg-dry | 1 | 6/17/2015 08:27 PM |
| Zinc | 63 | | 0.78 | mg/Kg-dry | 1 | 6/17/2015 08:27 PM |
| SOLUBLE CATIONS FOR SAR | | | SW846 6010C | | Prep Date: 6/17/2015 | Analyst: JEC |
| Calcium | 43 | | 5.0 | mg/L | 10 | 6/18/2015 11:55 AM |
| Magnesium | 15 | | 2.0 | mg/L | 10 | 6/18/2015 11:55 AM |
| Sodium | 220 | | 2.0 | mg/L | 10 | 6/18/2015 11:55 AM |
| SODIUM ADSORPTION RATIO | | | USDA H60 METHO | | Prep Date: 6/17/2015 | Analyst: JEC |
| Exchangeable Sodium Percentage | 8.7 | | 0.010 | none | 1 | 6/19/2015 |
| Sodium Adsorption Ratio | 7.3 | | 0.010 | none | 1 | 6/19/2015 |
| ELECTRICAL CONDUCTIVITY (SAR) | | | USDA H60 METHO | | Prep Date: 6/17/2015 | Analyst: JB |
| Electrical Conductivity @ Saturation | 1.3 | | 0.25 | mmhos/cm @2 | 50 | 6/17/2015 05:30 PM |
| CHROMIUM, TRIVALENT | | | CALCULATION | | | Analyst: JB |
| Chromium, Trivalent | 11 | | 0.54 | mg/Kg-dry | 1 | 6/18/2015 03:00 PM |
| CHROMIUM, HEXAVALENT | | | SW7196A | | Prep Date: 6/17/2015 | Analyst: MB |
| Chromium, Hexavalent | ND | | 1.0 | mg/Kg-dry | 1 | 6/18/2015 12:00 PM |
| MOISTURE | | | E160.3M | | | Analyst: PT |
| Moisture | 6.8 | | 0.050 | % of sample | 1 | 6/22/2015 03:00 PM |
| PH | | | SW9045D | | Prep Date: 6/12/2015 | Analyst: STP |
| pH | 8.9 | | | s.u. | 1 | 6/12/2015 06:30 PM |

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

ALS Group USA, Corp

Date: 24-Jun-15

Client: Olsson Associates
Project: Chevron AC McLaughlin 16 Spill
Sample ID: ACM16-SS1
Collection Date: 6/10/2015 01:05 PM

Work Order: 1506792
Lab ID: 1506792-02
Matrix: SOIL

| Analyses | Result | Qual | Report Limit | Units | Dilution Factor | Date Analyzed |
|--|--------------|------|-----------------------|------------------|-----------------------------|---------------------|
| DIESEL RANGE ORGANICS BY GC-FID | | | SW8015M | | Prep Date: 6/19/2015 | Analyst: IT |
| DRO (C10-C28) | 250 | | 4.5 | mg/Kg-dry | 1 | 6/20/2015 12:34 PM |
| <i>Surr: 4-Terphenyl-d14</i> | <i>71.4</i> | | <i>39-133</i> | <i>%REC</i> | 1 | 6/20/2015 12:34 PM |
| GASOLINE RANGE ORGANICS BY GC-FID | | | SW8015D | | Prep Date: 6/23/2015 | Analyst: IT |
| GRO (C6-C10) | ND | | 2.8 | mg/Kg-dry | 1 | 6/23/2015 08:59 PM |
| <i>Surr: Toluene-d8</i> | <i>114</i> | | <i>50-150</i> | <i>%REC</i> | 1 | 6/23/2015 08:59 PM |
| MERCURY BY CVAA | | | SW7471B | | Prep Date: 6/23/2015 | Analyst: LR |
| Mercury | 0.018 | | 0.016 | mg/Kg-dry | 1 | 6/23/2015 08:50 PM |
| METALS ANALYSIS BY ICP | | | SW846 6010C | | Prep Date: 6/15/2015 | Analyst: JEC |
| Arsenic | 8.0 | | 0.43 | mg/Kg-dry | 1 | 6/17/2015 08:33 PM |
| Barium | 200 | | 0.43 | mg/Kg-dry | 1 | 6/17/2015 08:33 PM |
| Cadmium | ND | | 0.43 | mg/Kg-dry | 1 | 6/17/2015 08:33 PM |
| Chromium | 12 | | 0.43 | mg/Kg-dry | 1 | 6/17/2015 08:33 PM |
| Copper | 15 | | 0.43 | mg/Kg-dry | 1 | 6/17/2015 08:33 PM |
| Lead | 15 | | 0.43 | mg/Kg-dry | 1 | 6/17/2015 08:33 PM |
| Nickel | 33 | | 0.43 | mg/Kg-dry | 1 | 6/17/2015 08:33 PM |
| Selenium | 1.6 | | 0.43 | mg/Kg-dry | 1 | 6/24/2015 11:18 AM |
| Silver | ND | | 0.43 | mg/Kg-dry | 1 | 6/17/2015 08:33 PM |
| Zinc | 75 | | 0.86 | mg/Kg-dry | 1 | 6/17/2015 08:33 PM |
| SOLUBLE CATIONS FOR SAR | | | SW846 6010C | | Prep Date: 6/17/2015 | Analyst: JEC |
| Calcium | 210 | | 5.0 | mg/L | 10 | 6/18/2015 12:00 PM |
| Magnesium | 61 | | 2.0 | mg/L | 10 | 6/18/2015 12:00 PM |
| Sodium | 1,200 | | 2.0 | mg/L | 10 | 6/18/2015 12:00 PM |
| SODIUM ADSORPTION RATIO | | | USDA H60 METHO | | Prep Date: 6/17/2015 | Analyst: JEC |
| Exchangeable Sodium Percentage | 21 | | 0.010 | none | 1 | 6/19/2015 |
| Sodium Adsorption Ratio | 19 | | 0.010 | none | 1 | 6/19/2015 |
| SEMI-VOLATILE ORGANIC COMPOUNDS | | | SW846 8270D | | Prep Date: 6/19/2015 | Analyst: RS |
| Acenaphthene | ND | | 7.3 | µg/Kg-dry | 1 | 6/22/2015 03:19 AM |
| Acenaphthylene | ND | | 7.3 | µg/Kg-dry | 1 | 6/22/2015 03:19 AM |
| Anthracene | ND | | 7.3 | µg/Kg-dry | 1 | 6/22/2015 03:19 AM |
| Benzo(a)anthracene | ND | | 7.3 | µg/Kg-dry | 1 | 6/22/2015 03:19 AM |
| Benzo(a)pyrene | ND | | 7.3 | µg/Kg-dry | 1 | 6/22/2015 03:19 AM |
| Benzo(b)fluoranthene | ND | | 7.3 | µg/Kg-dry | 1 | 6/22/2015 03:19 AM |
| Benzo(g,h,i)perylene | ND | | 7.3 | µg/Kg-dry | 1 | 6/22/2015 03:19 AM |
| Benzo(k)fluoranthene | ND | | 7.3 | µg/Kg-dry | 1 | 6/22/2015 03:19 AM |
| Chrysene | ND | | 7.3 | µg/Kg-dry | 1 | 6/22/2015 03:19 AM |
| Dibenzo(a,h)anthracene | ND | | 7.3 | µg/Kg-dry | 1 | 6/22/2015 03:19 AM |

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

ALS Group USA, Corp

Date: 24-Jun-15

Client: Olsson Associates
Project: Chevron AC McLaughlin 16 Spill
Sample ID: ACM16-SS1
Collection Date: 6/10/2015 01:05 PM

Work Order: 1506792
Lab ID: 1506792-02
Matrix: SOIL

| Analyses | Result | Qual | Report Limit | Units | Dilution Factor | Date Analyzed |
|--------------------------------------|--------|------|-----------------------|-------------|-----------------------------|---------------------|
| Fluoranthene | ND | | 7.3 | µg/Kg-dry | 1 | 6/22/2015 03:19 AM |
| Fluorene | ND | | 7.3 | µg/Kg-dry | 1 | 6/22/2015 03:19 AM |
| Indeno(1,2,3-cd)pyrene | ND | | 7.3 | µg/Kg-dry | 1 | 6/22/2015 03:19 AM |
| Naphthalene | ND | | 7.3 | µg/Kg-dry | 1 | 6/22/2015 03:19 AM |
| Pyrene | ND | | 7.3 | µg/Kg-dry | 1 | 6/22/2015 03:19 AM |
| Surr: 2-Fluorobiphenyl | 77.4 | | 12-100 | %REC | 1 | 6/22/2015 03:19 AM |
| Surr: 4-Terphenyl-d14 | 89.7 | | 25-137 | %REC | 1 | 6/22/2015 03:19 AM |
| Surr: Nitrobenzene-d5 | 69.8 | | 37-107 | %REC | 1 | 6/22/2015 03:19 AM |
| VOLATILE ORGANIC COMPOUNDS | | | SW8260B | | Prep Date: 6/18/2015 | Analyst: JNJ |
| Benzene | ND | | 33 | µg/Kg-dry | 1 | 6/23/2015 08:02 AM |
| Ethylbenzene | ND | | 33 | µg/Kg-dry | 1 | 6/23/2015 08:02 AM |
| m,p-Xylene | ND | | 66 | µg/Kg-dry | 1 | 6/23/2015 08:02 AM |
| o-Xylene | ND | | 33 | µg/Kg-dry | 1 | 6/23/2015 08:02 AM |
| Toluene | ND | | 33 | µg/Kg-dry | 1 | 6/23/2015 08:02 AM |
| Xylenes, Total | ND | | 99 | µg/Kg-dry | 1 | 6/23/2015 08:02 AM |
| Surr: 1,2-Dichloroethane-d4 | 92.8 | | 70-130 | %REC | 1 | 6/23/2015 08:02 AM |
| Surr: 4-Bromofluorobenzene | 103 | | 70-130 | %REC | 1 | 6/23/2015 08:02 AM |
| Surr: Dibromofluoromethane | 86.8 | | 70-130 | %REC | 1 | 6/23/2015 08:02 AM |
| Surr: Toluene-d8 | 96.2 | | 70-130 | %REC | 1 | 6/23/2015 08:02 AM |
| ELECTRICAL CONDUCTIVITY (SAR) | | | USDA H60 METHO | | Prep Date: 6/17/2015 | Analyst: JB |
| Electrical Conductivity @ Saturation | 8.4 | | 0.050 | mmhos/cm @2 | 10 | 6/17/2015 05:30 PM |
| CHROMIUM, TRIVALENT | | | CALCULATION | | | Analyst: JB |
| Chromium, Trivalent | 11 | | 0.55 | mg/Kg-dry | 1 | 6/18/2015 03:00 PM |
| CHROMIUM, HEXAVALENT | | | SW7196A | | Prep Date: 6/17/2015 | Analyst: MB |
| Chromium, Hexavalent | ND | | 1.1 | mg/Kg-dry | 1 | 6/18/2015 12:00 PM |
| MOISTURE | | | E160.3M | | | Analyst: PT |
| Moisture | 9.5 | | 0.050 | % of sample | 1 | 6/22/2015 03:00 PM |
| PH | | | SW9045D | | Prep Date: 6/12/2015 | Analyst: STP |
| pH | 8.0 | | | s.u. | 1 | 6/12/2015 06:30 PM |

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

ALS Group USA, Corp

Date: 24-Jun-15

Client: Olsson Associates
Project: Chevron AC McLaughlin 16 Spill
Sample ID: ACM16-SS2
Collection Date: 6/10/2015 01:15 PM

Work Order: 1506792
Lab ID: 1506792-03
Matrix: SOIL

| Analyses | Result | Qual | Report Limit | Units | Dilution Factor | Date Analyzed |
|--|--------------|------|-----------------------|------------------|-----------------------------|---------------------|
| DIESEL RANGE ORGANICS BY GC-FID | | | SW8015M | | Prep Date: 6/19/2015 | Analyst: IT |
| DRO (C10-C28) | 38 | | 4.5 | mg/Kg-dry | 1 | 6/20/2015 01:04 AM |
| <i>Surr: 4-Terphenyl-d14</i> | <i>77.8</i> | | <i>39-133</i> | <i>%REC</i> | 1 | 6/20/2015 01:04 AM |
| GASOLINE RANGE ORGANICS BY GC-FID | | | SW8015D | | Prep Date: 6/23/2015 | Analyst: IT |
| GRO (C6-C10) | ND | | 2.8 | mg/Kg-dry | 1 | 6/23/2015 09:23 PM |
| <i>Surr: Toluene-d8</i> | <i>106</i> | | <i>50-150</i> | <i>%REC</i> | 1 | 6/23/2015 09:23 PM |
| MERCURY BY CVAA | | | SW7471B | | Prep Date: 6/23/2015 | Analyst: LR |
| Mercury | 0.020 | | 0.016 | mg/Kg-dry | 1 | 6/23/2015 08:52 PM |
| METALS ANALYSIS BY ICP | | | SW846 6010C | | Prep Date: 6/15/2015 | Analyst: JEC |
| Arsenic | 8.5 | | 0.40 | mg/Kg-dry | 1 | 6/17/2015 08:38 PM |
| Barium | 140 | | 0.40 | mg/Kg-dry | 1 | 6/17/2015 08:38 PM |
| Cadmium | ND | | 0.40 | mg/Kg-dry | 1 | 6/17/2015 08:38 PM |
| Chromium | 11 | | 0.40 | mg/Kg-dry | 1 | 6/17/2015 08:38 PM |
| Copper | 16 | | 0.40 | mg/Kg-dry | 1 | 6/17/2015 08:38 PM |
| Lead | 12 | | 0.40 | mg/Kg-dry | 1 | 6/17/2015 08:38 PM |
| Nickel | 35 | | 0.40 | mg/Kg-dry | 1 | 6/17/2015 08:38 PM |
| Selenium | 1.3 | | 0.40 | mg/Kg-dry | 1 | 6/17/2015 08:38 PM |
| Silver | ND | | 0.40 | mg/Kg-dry | 1 | 6/17/2015 08:38 PM |
| Zinc | 65 | | 0.80 | mg/Kg-dry | 1 | 6/17/2015 08:38 PM |
| SOLUBLE CATIONS FOR SAR | | | SW846 6010C | | Prep Date: 6/17/2015 | Analyst: JEC |
| Calcium | 100 | | 5.0 | mg/L | 10 | 6/18/2015 12:06 PM |
| Magnesium | 32 | | 2.0 | mg/L | 10 | 6/18/2015 12:06 PM |
| Sodium | 39 | | 2.0 | mg/L | 10 | 6/18/2015 12:06 PM |
| SODIUM ADSORPTION RATIO | | | USDA H60 METHO | | Prep Date: 6/17/2015 | Analyst: JEC |
| Exchangeable Sodium Percentage | 0.034 | | 0.010 | none | 1 | 6/19/2015 |
| Sodium Adsorption Ratio | 0.88 | | 0.010 | none | 1 | 6/19/2015 |
| SEMI-VOLATILE ORGANIC COMPOUNDS | | | SW846 8270D | | Prep Date: 6/19/2015 | Analyst: RS |
| Acenaphthene | ND | | 7.3 | µg/Kg-dry | 1 | 6/22/2015 02:56 AM |
| Acenaphthylene | ND | | 7.3 | µg/Kg-dry | 1 | 6/22/2015 02:56 AM |
| Anthracene | ND | | 7.3 | µg/Kg-dry | 1 | 6/22/2015 02:56 AM |
| Benzo(a)anthracene | ND | | 7.3 | µg/Kg-dry | 1 | 6/22/2015 02:56 AM |
| Benzo(a)pyrene | ND | | 7.3 | µg/Kg-dry | 1 | 6/22/2015 02:56 AM |
| Benzo(b)fluoranthene | ND | | 7.3 | µg/Kg-dry | 1 | 6/22/2015 02:56 AM |
| Benzo(g,h,i)perylene | ND | | 7.3 | µg/Kg-dry | 1 | 6/22/2015 02:56 AM |
| Benzo(k)fluoranthene | ND | | 7.3 | µg/Kg-dry | 1 | 6/22/2015 02:56 AM |
| Chrysene | ND | | 7.3 | µg/Kg-dry | 1 | 6/22/2015 02:56 AM |
| Dibenzo(a,h)anthracene | ND | | 7.3 | µg/Kg-dry | 1 | 6/22/2015 02:56 AM |

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

ALS Group USA, Corp

Date: 24-Jun-15

Client: Olsson Associates
Project: Chevron AC McLaughlin 16 Spill
Sample ID: ACM16-SS2
Collection Date: 6/10/2015 01:15 PM

Work Order: 1506792
Lab ID: 1506792-03
Matrix: SOIL

| Analyses | Result | Qual | Report Limit | Units | Dilution Factor | Date Analyzed |
|--------------------------------------|--------|------|-----------------------|-------------|-----------------------------|---------------------|
| Fluoranthene | ND | | 7.3 | µg/Kg-dry | 1 | 6/22/2015 02:56 AM |
| Fluorene | ND | | 7.3 | µg/Kg-dry | 1 | 6/22/2015 02:56 AM |
| Indeno(1,2,3-cd)pyrene | ND | | 7.3 | µg/Kg-dry | 1 | 6/22/2015 02:56 AM |
| Naphthalene | ND | | 7.3 | µg/Kg-dry | 1 | 6/22/2015 02:56 AM |
| Pyrene | ND | | 7.3 | µg/Kg-dry | 1 | 6/22/2015 02:56 AM |
| Surr: 2-Fluorobiphenyl | 65.3 | | 12-100 | %REC | 1 | 6/22/2015 02:56 AM |
| Surr: 4-Terphenyl-d14 | 85.9 | | 25-137 | %REC | 1 | 6/22/2015 02:56 AM |
| Surr: Nitrobenzene-d5 | 55.3 | | 37-107 | %REC | 1 | 6/22/2015 02:56 AM |
| VOLATILE ORGANIC COMPOUNDS | | | SW8260B | | Prep Date: 6/18/2015 | Analyst: JNJ |
| Benzene | ND | | 34 | µg/Kg-dry | 1 | 6/23/2015 08:27 AM |
| Ethylbenzene | ND | | 34 | µg/Kg-dry | 1 | 6/23/2015 08:27 AM |
| m,p-Xylene | ND | | 67 | µg/Kg-dry | 1 | 6/23/2015 08:27 AM |
| o-Xylene | ND | | 34 | µg/Kg-dry | 1 | 6/23/2015 08:27 AM |
| Toluene | ND | | 34 | µg/Kg-dry | 1 | 6/23/2015 08:27 AM |
| Xylenes, Total | ND | | 100 | µg/Kg-dry | 1 | 6/23/2015 08:27 AM |
| Surr: 1,2-Dichloroethane-d4 | 93.4 | | 70-130 | %REC | 1 | 6/23/2015 08:27 AM |
| Surr: 4-Bromofluorobenzene | 100 | | 70-130 | %REC | 1 | 6/23/2015 08:27 AM |
| Surr: Dibromofluoromethane | 88.4 | | 70-130 | %REC | 1 | 6/23/2015 08:27 AM |
| Surr: Toluene-d8 | 92.9 | | 70-130 | %REC | 1 | 6/23/2015 08:27 AM |
| ELECTRICAL CONDUCTIVITY (SAR) | | | USDA H60 METHO | | Prep Date: 6/17/2015 | Analyst: JB |
| Electrical Conductivity @ Saturation | 1.0 | | 0.050 | mmhos/cm @2 | 10 | 6/17/2015 05:30 PM |
| CHROMIUM, TRIVALENT | | | CALCULATION | | | Analyst: JB |
| Chromium, Trivalent | 11 | | 0.56 | mg/Kg-dry | 1 | 6/18/2015 03:00 PM |
| CHROMIUM, HEXAVALENT | | | SW7196A | | Prep Date: 6/17/2015 | Analyst: MB |
| Chromium, Hexavalent | ND | | 1.1 | mg/Kg-dry | 1 | 6/18/2015 12:00 PM |
| MOISTURE | | | E160.3M | | | Analyst: PT |
| Moisture | 11 | | 0.050 | % of sample | 1 | 6/22/2015 03:00 PM |
| PH | | | SW9045D | | Prep Date: 6/12/2015 | Analyst: STP |
| pH | 8.1 | | | s.u. | 1 | 6/12/2015 06:30 PM |

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

Client: Olsson Associates
Work Order: 1506792
Project: Chevron AC McLaughlin 16 Spill

QC BATCH REPORT

Batch ID: **72487** Instrument ID **GC8** Method: **SW8015M**

| MBLK | | Sample ID: DBLKS1-72487-72487 | | | | Units: mg/Kg | | Analysis Date: 6/19/2015 06:03 PM | | |
|------------------------------|--------|--------------------------------------|---------|-----------------------|------|-----------------------------|---------------|--|-----------|------|
| Client ID: | | Run ID: GC8_150619A | | SeqNo: 3333905 | | Prep Date: 6/19/2015 | | DF: 1 | | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
| DRO (C10-C28) | ND | 5.0 | | | | | | | | |
| <i>Surr: 4-Terphenyl-d14</i> | 1.429 | 0 | 2 | 0 | 71.5 | 39-133 | | 0 | | |

| LCS | | Sample ID: DLCSS1-72487-72487 | | | | Units: mg/Kg | | Analysis Date: 6/19/2015 06:33 PM | | |
|------------------------------|--------|--------------------------------------|---------|-----------------------|------|-----------------------------|---------------|--|-----------|------|
| Client ID: | | Run ID: GC8_150619A | | SeqNo: 3333906 | | Prep Date: 6/19/2015 | | DF: 1 | | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
| DRO (C10-C28) | 169 | 5.0 | 200 | 0 | 84.5 | 61-109 | | 0 | | |
| <i>Surr: 4-Terphenyl-d14</i> | 1.296 | 0 | 2 | 0 | 64.8 | 39-133 | | 0 | | |

| MS | | Sample ID: 15061112-01A MS | | | | Units: mg/Kg | | Analysis Date: 6/19/2015 07:03 PM | | |
|------------------------------|--------|-----------------------------------|---------|-----------------------|------|-----------------------------|---------------|--|-----------|------|
| Client ID: | | Run ID: GC8_150619A | | SeqNo: 3333907 | | Prep Date: 6/19/2015 | | DF: 1 | | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
| DRO (C10-C28) | 255.6 | 8.0 | 320.8 | 22.21 | 72.8 | 48-110 | | 0 | | |
| <i>Surr: 4-Terphenyl-d14</i> | 2.089 | 0 | 3.208 | 0 | 65.1 | 39-133 | | 0 | | |

| MSD | | Sample ID: 15061112-01A MSD | | | | Units: mg/Kg | | Analysis Date: 6/19/2015 07:33 PM | | |
|------------------------------|--------|------------------------------------|---------|-----------------------|------|-----------------------------|---------------|--|-----------|------|
| Client ID: | | Run ID: GC8_150619A | | SeqNo: 3333908 | | Prep Date: 6/19/2015 | | DF: 1 | | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
| DRO (C10-C28) | 268.6 | 8.1 | 324.7 | 22.21 | 75.9 | 48-110 | 255.6 | 4.93 | 30 | |
| <i>Surr: 4-Terphenyl-d14</i> | 2.291 | 0 | 3.247 | 0 | 70.6 | 39-133 | 2.089 | 9.2 | 30 | |

The following samples were analyzed in this batch:

| | |
|-------------|-------------|
| 1506792-02A | 1506792-03A |
|-------------|-------------|

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

Client: Olsson Associates
 Work Order: 1506792
 Project: Chevron AC McLaughlin 16 Spill

QC BATCH REPORT

Batch ID: **72672** Instrument ID **GC9** Method: **SW8015D**

| MBLK | | Sample ID: MBLK-72672-72672 | | | | Units: µg/Kg | | Analysis Date: 6/23/2015 06:55 PM | | |
|-------------------------|--------|------------------------------------|---------|-----------------------|------|-----------------------------|---------------|--|-----------|------|
| Client ID: | | Run ID: GC9_150623A | | SeqNo: 3338574 | | Prep Date: 6/23/2015 | | DF: 1 | | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
| GRO (C6-C10) | ND | 2,500 | | | | | | | | |
| <i>Surr: Toluene-d8</i> | 5349 | 0 | 5000 | 0 | 107 | 50-150 | 0 | | | |

| LCS | | Sample ID: LCS-72672-72672 | | | | Units: µg/Kg | | Analysis Date: 6/23/2015 06:30 PM | | |
|-------------------------|--------|-----------------------------------|---------|-----------------------|------|-----------------------------|---------------|--|-----------|------|
| Client ID: | | Run ID: GC9_150623A | | SeqNo: 3338573 | | Prep Date: 6/23/2015 | | DF: 1 | | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
| GRO (C6-C10) | 524500 | 2,500 | 500000 | 0 | 105 | 70-130 | 0 | | | |
| <i>Surr: Toluene-d8</i> | 5038 | 0 | 5000 | 0 | 101 | 50-150 | 0 | | | |

| MS | | Sample ID: 15061183-02A MS | | | | Units: µg/Kg | | Analysis Date: 6/23/2015 07:44 PM | | |
|-------------------------|--------|-----------------------------------|---------|-----------------------|------|-----------------------------|---------------|--|-----------|------|
| Client ID: | | Run ID: GC9_150623A | | SeqNo: 3338576 | | Prep Date: 6/23/2015 | | DF: 1 | | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
| GRO (C6-C10) | 647000 | 2,500 | 500000 | 62800 | 117 | 70-130 | 0 | | | |
| <i>Surr: Toluene-d8</i> | 4698 | 0 | 5000 | 0 | 94 | 50-150 | 0 | | | |

| MSD | | Sample ID: 15061183-02A MSD | | | | Units: µg/Kg | | Analysis Date: 6/23/2015 08:09 PM | | |
|-------------------------|--------|------------------------------------|---------|-----------------------|------|-----------------------------|---------------|--|-----------|------|
| Client ID: | | Run ID: GC9_150623A | | SeqNo: 3338577 | | Prep Date: 6/23/2015 | | DF: 1 | | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
| GRO (C6-C10) | 673900 | 2,500 | 500000 | 62800 | 122 | 70-130 | 647000 | 4.07 | 30 | |
| <i>Surr: Toluene-d8</i> | 4935 | 0 | 5000 | 0 | 98.7 | 50-150 | 4698 | 4.91 | 30 | |

The following samples were analyzed in this batch: 1506792-02A 1506792-03A

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

Client: Olsson Associates
 Work Order: 1506792
 Project: Chevron AC McLaughlin 16 Spill

QC BATCH REPORT

Batch ID: **72628** Instrument ID **HG1** Method: **SW7471B**

| | | | | | | | | | | |
|-------------|------------------------------------|-----|---------|-----------------------|---------------------|-----------------------------|---------------|--|-----------|------|
| MBLK | Sample ID: MBLK-72628-72628 | | | | Units: mg/Kg | | | Analysis Date: 6/23/2015 08:10 PM | | |
| Client ID: | Run ID: HG1_150623A | | | SeqNo: 3338630 | | Prep Date: 6/23/2015 | | DF: 1 | | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |

Mercury ND 0.020

| | | | | | | | | | | |
|------------|-----------------------------------|-----|---------|-----------------------|---------------------|-----------------------------|---------------|--|-----------|------|
| LCS | Sample ID: LCS-72628-72628 | | | | Units: mg/Kg | | | Analysis Date: 6/23/2015 08:12 PM | | |
| Client ID: | Run ID: HG1_150623A | | | SeqNo: 3338632 | | Prep Date: 6/23/2015 | | DF: 1 | | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |

Mercury 0.1762 0.020 0.1665 0 106 80-120 0

| | | | | | | | | | | |
|------------|---------------------------------|-----|---------|-----------------------|---------------------|-----------------------------|---------------|--|-----------|------|
| MS | Sample ID: 1506789-05AMS | | | | Units: mg/Kg | | | Analysis Date: 6/23/2015 08:43 PM | | |
| Client ID: | Run ID: HG1_150623A | | | SeqNo: 3338655 | | Prep Date: 6/23/2015 | | DF: 1 | | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |

Mercury 0.1148 0.012 0.1018 0.01692 96.1 75-125 0

| | | | | | | | | | | |
|------------|----------------------------------|-----|---------|-----------------------|---------------------|-----------------------------|---------------|--|-----------|------|
| MSD | Sample ID: 1506789-05AMSD | | | | Units: mg/Kg | | | Analysis Date: 6/23/2015 08:45 PM | | |
| Client ID: | Run ID: HG1_150623A | | | SeqNo: 3338656 | | Prep Date: 6/23/2015 | | DF: 1 | | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |

Mercury 0.1164 0.013 0.1048 0.01692 94.9 75-125 0.1148 1.42 35

The following samples were analyzed in this batch: 1506792-01A 1506792-02A 1506792-03A

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

Client: Olsson Associates
 Work Order: 1506792
 Project: Chevron AC McLaughlin 16 Spill

QC BATCH REPORT

Batch ID: 72263 Instrument ID ICP2 Method: SW846 6010C

| MBLK | | Sample ID: MBLK-72263-72263 | | | | Units: mg/L | | Analysis Date: 6/17/2015 07:48 PM | | |
|------------|---------|-----------------------------|---------|---------------|----------------|---------------|----------------------|-----------------------------------|-----------|------|
| Client ID: | | Run ID: ICP2_150617B | | | SeqNo: 3327713 | | Prep Date: 6/15/2015 | | DF: 1 | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
| Arsenic | ND | 0.25 | | | | | | | | |
| Barium | ND | 0.25 | | | | | | | | |
| Cadmium | ND | 0.50 | | | | | | | | |
| Chromium | 0.01075 | 0.25 | | | | | | | | J |
| Copper | ND | 0.50 | | | | | | | | |
| Lead | ND | 0.25 | | | | | | | | |
| Nickel | ND | 0.25 | | | | | | | | |
| Selenium | ND | 0.50 | | | | | | | | |
| Silver | ND | 0.25 | | | | | | | | |
| Zinc | ND | 0.50 | | | | | | | | |

| LCS | | Sample ID: LCS-72263-72263 | | | | Units: mg/L | | Analysis Date: 6/17/2015 07:53 PM | | |
|------------|--------|----------------------------|---------|---------------|----------------|---------------|----------------------|-----------------------------------|-----------|------|
| Client ID: | | Run ID: ICP2_150617B | | | SeqNo: 3327714 | | Prep Date: 6/15/2015 | | DF: 1 | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
| Arsenic | 4.875 | 0.25 | 5 | 0 | 97.5 | 80-120 | 0 | | | |
| Barium | 4.773 | 0.25 | 5 | 0 | 95.5 | 80-120 | 0 | | | |
| Cadmium | 4.611 | 0.50 | 5 | 0 | 92.2 | 80-120 | 0 | | | |
| Chromium | 5.085 | 0.25 | 5 | 0 | 102 | 80-120 | 0 | | | |
| Copper | 5.006 | 0.50 | 5 | 0 | 100 | 80-120 | 0 | | | |
| Lead | 4.907 | 0.25 | 5 | 0 | 98.1 | 80-120 | 0 | | | |
| Nickel | 5.363 | 0.25 | 5 | 0 | 107 | 80-120 | 0 | | | |
| Selenium | 4.941 | 0.50 | 5 | 0 | 98.8 | 80-120 | 0 | | | |
| Silver | 4.86 | 0.25 | 5 | 0 | 97.2 | 80-120 | 0 | | | |
| Zinc | 4.378 | 0.50 | 5 | 0 | 87.6 | 80-120 | 0 | | | |

| MS | | Sample ID: 1506792-03AMS | | | | Units: mg/Kg | | Analysis Date: 6/17/2015 09:00 PM | | |
|----------------------|--------|--------------------------|---------|---------------|----------------|---------------|----------------------|-----------------------------------|-----------|------|
| Client ID: ACM16-SS2 | | Run ID: ICP2_150617B | | | SeqNo: 3327726 | | Prep Date: 6/15/2015 | | DF: 1 | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
| Arsenic | 19.23 | 0.36 | 7.143 | 7.572 | 163 | 75-125 | 0 | | | S |
| Barium | 141.3 | 0.36 | 7.143 | 128.4 | 181 | 75-125 | 0 | | | SO |
| Cadmium | 7.172 | 0.71 | 7.143 | 0.02914 | 100 | 75-125 | 0 | | | |
| Chromium | 19.77 | 0.36 | 7.143 | 9.579 | 143 | 75-125 | 0 | | | S |
| Copper | 23.58 | 0.71 | 7.143 | 14.33 | 130 | 75-125 | 0 | | | S |
| Lead | 17.97 | 0.36 | 7.143 | 10.93 | 98.5 | 75-125 | 0 | | | |
| Nickel | 38.75 | 0.36 | 7.143 | 30.85 | 111 | 75-125 | 0 | | | O |
| Selenium | 9.293 | 0.71 | 7.143 | 1.127 | 114 | 75-125 | 0 | | | |
| Silver | 7.577 | 0.36 | 7.143 | -0.02231 | 106 | 75-125 | 0 | | | |
| Zinc | 64 | 0.71 | 7.143 | 57.92 | 85.1 | 75-125 | 0 | | | O |

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

Client: Olsson Associates
Work Order: 1506792
Project: Chevron AC McLaughlin 16 Spill

QC BATCH REPORT

Batch ID: **72263** Instrument ID **ICP2** Method: **SW846 6010C**

| MSD | | Sample ID: 1506792-03AMSD | | | | Units: mg/Kg | | Analysis Date: 6/17/2015 09:06 PM | | |
|----------------------|--------|---------------------------|---------|---------------|------|----------------|---------------|-----------------------------------|-----------|-------|
| Client ID: ACM16-SS2 | | Run ID: ICP2_150617B | | | | SeqNo: 3327727 | | Prep Date: 6/15/2015 | | DF: 1 |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
| Arsenic | 15.7 | 0.35 | 7.082 | 7.572 | 115 | 75-125 | 19.23 | 20.2 | 20 | R |
| Barium | 130.8 | 0.35 | 7.082 | 128.4 | 34.3 | 75-125 | 141.3 | 7.7 | 20 | SO |
| Cadmium | 6.963 | 0.71 | 7.082 | 0.02914 | 97.9 | 75-125 | 7.172 | 2.95 | 20 | |
| Chromium | 19.6 | 0.35 | 7.082 | 9.579 | 142 | 75-125 | 19.77 | 0.836 | 20 | S |
| Copper | 21.6 | 0.71 | 7.082 | 14.33 | 103 | 75-125 | 23.58 | 8.77 | 20 | |
| Lead | 17.28 | 0.35 | 7.082 | 10.93 | 89.7 | 75-125 | 17.97 | 3.88 | 20 | |
| Nickel | 38.72 | 0.35 | 7.082 | 30.85 | 111 | 75-125 | 38.75 | 0.0659 | 20 | O |
| Selenium | 9.124 | 0.71 | 7.082 | 1.127 | 113 | 75-125 | 9.293 | 1.83 | 20 | |
| Silver | 7.391 | 0.35 | 7.082 | -0.02231 | 105 | 75-125 | 7.577 | 2.48 | 20 | |
| Zinc | 64.6 | 0.71 | 7.082 | 57.92 | 94.3 | 75-125 | 64 | 0.933 | 20 | O |

The following samples were analyzed in this batch:

| | | |
|-------------|-------------|-------------|
| 1506792-01A | 1506792-02A | 1506792-03A |
|-------------|-------------|-------------|

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

Client: Olsson Associates
Work Order: 1506792
Project: Chevron AC McLaughlin 16 Spill

QC BATCH REPORT

Batch ID: **72386** Instrument ID **ICP2** Method: **SW846 6010C**

| DUP | | Sample ID: 1506789-04BDUP | | | | Units: mg/L | | Analysis Date: 6/18/2015 11:24 AM | | |
|------------|--------|----------------------------------|---------|---------------|-----------------------|--------------------|-----------------------------|--|---------------|------|
| Client ID: | | Run ID: ICP2_150618A | | | SeqNo: 3329016 | | Prep Date: 6/17/2015 | | DF: 10 | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
| Calcium | 888.6 | 5.0 | 0 | 0 | 0 | 0-0 | 968.3 | 8.59 | | |
| Magnesium | 142.3 | 2.0 | 0 | 0 | 0 | 0-0 | 154.8 | 8.39 | | |
| Sodium | 2909 | 2.0 | 0 | 0 | 0 | 0-0 | 3112 | 6.73 | | |

| DUP | | Sample ID: 1506789-04BDUP | | | | Units: none | | Analysis Date: 6/18/2015 | | |
|--------------------------------|--------|----------------------------------|---------|---------------|-----------------------|--------------------|-----------------------------|---------------------------------|--------------|------|
| Client ID: | | Run ID: SAR_150618A | | | SeqNo: 3329023 | | Prep Date: 6/17/2015 | | DF: 1 | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
| Exchangeable Sodium Percentage | 25.37 | 0.010 | 0 | 0 | 0 | | 25.86 | 1.89 | 50 | |
| Sodium Adsorption Ratio | 23.9 | 0.010 | 0 | 0 | 0 | | 24.5 | 2.46 | 50 | |

The following samples were analyzed in this batch:

| | | |
|-------------|-------------|-------------|
| 1506792-01B | 1506792-02B | 1506792-03B |
|-------------|-------------|-------------|

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

Client: Olsson Associates
 Work Order: 1506792
 Project: Chevron AC McLaughlin 16 Spill

QC BATCH REPORT

Batch ID: 72486 Instrument ID SVMS8 Method: SW846 8270D

| MBLK | | Sample ID: SBLKS1-72486-72486 | | | | Units: µg/Kg | | Analysis Date: 6/21/2015 01:15 PM | | |
|------------------------|--------|-------------------------------|---------|----------------|------|----------------------|---------------|-----------------------------------|-----------|------|
| Client ID: | | Run ID: SVMS8_150621A | | SeqNo: 3333707 | | Prep Date: 6/19/2015 | | DF: 1 | | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
| Acenaphthene | ND | 6.7 | | | | | | | | |
| Acenaphthylene | ND | 6.7 | | | | | | | | |
| Anthracene | ND | 6.7 | | | | | | | | |
| Benzo(a)anthracene | ND | 6.7 | | | | | | | | |
| Benzo(a)pyrene | ND | 6.7 | | | | | | | | |
| Benzo(b)fluoranthene | ND | 6.7 | | | | | | | | |
| Benzo(g,h,i)perylene | ND | 6.7 | | | | | | | | |
| Benzo(k)fluoranthene | ND | 6.7 | | | | | | | | |
| Chrysene | ND | 6.7 | | | | | | | | |
| Dibenzo(a,h)anthracene | ND | 6.7 | | | | | | | | |
| Fluoranthene | ND | 6.7 | | | | | | | | |
| Fluorene | ND | 6.7 | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | ND | 6.7 | | | | | | | | |
| Naphthalene | ND | 6.7 | | | | | | | | |
| Pyrene | ND | 6.7 | | | | | | | | |
| Surr: 2-Fluorobiphenyl | 1127 | 0 | 1667 | 0 | 67.6 | 12-100 | 0 | | | |
| Surr: 4-Terphenyl-d14 | 1553 | 0 | 1667 | 0 | 93.2 | 25-137 | 0 | | | |
| Surr: Nitrobenzene-d5 | 1124 | 0 | 1667 | 0 | 67.4 | 37-107 | 0 | | | |

| LCS | | Sample ID: SLCSS1-72486-72486 | | | | Units: µg/Kg | | Analysis Date: 6/21/2015 01:35 PM | | |
|------------------------|--------|-------------------------------|---------|----------------|------|----------------------|---------------|-----------------------------------|-----------|------|
| Client ID: | | Run ID: SVMS8_150621A | | SeqNo: 3333709 | | Prep Date: 6/19/2015 | | DF: 1 | | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
| Acenaphthene | 497.3 | 6.7 | 666.7 | 0 | 74.6 | 45-110 | 0 | | | |
| Acenaphthylene | 510 | 6.7 | 666.7 | 0 | 76.5 | 45-105 | 0 | | | |
| Anthracene | 558.7 | 6.7 | 666.7 | 0 | 83.8 | 55-105 | 0 | | | |
| Benzo(a)anthracene | 575.7 | 6.7 | 666.7 | 0 | 86.3 | 50-110 | 0 | | | |
| Benzo(a)pyrene | 640.7 | 6.7 | 666.7 | 0 | 96.1 | 50-110 | 0 | | | |
| Benzo(b)fluoranthene | 635.7 | 6.7 | 666.7 | 0 | 95.3 | 45-115 | 0 | | | |
| Benzo(g,h,i)perylene | 538.3 | 6.7 | 666.7 | 0 | 80.7 | 40-125 | 0 | | | |
| Benzo(k)fluoranthene | 629 | 6.7 | 666.7 | 0 | 94.3 | 45-115 | 0 | | | |
| Chrysene | 559.3 | 6.7 | 666.7 | 0 | 83.9 | 55-110 | 0 | | | |
| Dibenzo(a,h)anthracene | 518 | 6.7 | 666.7 | 0 | 77.7 | 40-125 | 0 | | | |
| Fluoranthene | 600.7 | 6.7 | 666.7 | 0 | 90.1 | 55-115 | 0 | | | |
| Fluorene | 525 | 6.7 | 666.7 | 0 | 78.7 | 50-110 | 0 | | | |
| Indeno(1,2,3-cd)pyrene | 562.7 | 6.7 | 666.7 | 0 | 84.4 | 40-120 | 0 | | | |
| Naphthalene | 465.7 | 6.7 | 666.7 | 0 | 69.8 | 40-105 | 0 | | | |
| Pyrene | 585.3 | 6.7 | 666.7 | 0 | 87.8 | 45-125 | 0 | | | |
| Surr: 2-Fluorobiphenyl | 1161 | 0 | 1667 | 0 | 69.6 | 12-100 | 0 | | | |
| Surr: 4-Terphenyl-d14 | 1593 | 0 | 1667 | 0 | 95.6 | 25-137 | 0 | | | |
| Surr: Nitrobenzene-d5 | 1169 | 0 | 1667 | 0 | 70.1 | 37-107 | 0 | | | |

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

Client: Olsson Associates
 Work Order: 1506792
 Project: Chevron AC McLaughlin 16 Spill

QC BATCH REPORT

Batch ID: 72486 Instrument ID SVMS8 Method: SW846 8270D

| MS | | | | Sample ID: 1506971-01B MS | | | Units: µg/Kg | | Analysis Date: 6/21/2015 04:04 PM | | |
|------------------------|--------|-----------------------|---------|---------------------------|------|----------------------|---------------|-------|-----------------------------------|------|--|
| Client ID: | | Run ID: SVMS8_150621A | | SeqNo: 3333720 | | Prep Date: 6/19/2015 | | DF: 1 | | | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual | |
| Acenaphthene | 901.6 | 13 | 1279 | 0 | 70.5 | 45-110 | 0 | | | | |
| Acenaphthylene | 927.9 | 13 | 1279 | 0 | 72.5 | 45-105 | 0 | | | | |
| Anthracene | 1092 | 13 | 1279 | 0 | 85.4 | 55-105 | 0 | | | | |
| Benzo(a)anthracene | 1132 | 13 | 1279 | 3.635 | 88.3 | 50-110 | 0 | | | | |
| Benzo(a)pyrene | 1222 | 13 | 1279 | 0 | 95.5 | 50-110 | 0 | | | | |
| Benzo(b)fluoranthene | 1276 | 13 | 1279 | 0 | 99.7 | 45-115 | 0 | | | | |
| Benzo(g,h,i)perylene | 997.6 | 13 | 1279 | 0 | 78 | 40-125 | 0 | | | | |
| Benzo(k)fluoranthene | 1179 | 13 | 1279 | 0 | 92.2 | 45-115 | 0 | | | | |
| Chrysene | 1058 | 13 | 1279 | 0 | 82.7 | 55-110 | 0 | | | | |
| Dibenzo(a,h)anthracene | 953.4 | 13 | 1279 | 0 | 74.5 | 40-125 | 0 | | | | |
| Fluoranthene | 1166 | 13 | 1279 | 5.617 | 90.7 | 55-115 | 0 | | | | |
| Fluorene | 1014 | 13 | 1279 | 0 | 79.3 | 50-110 | 0 | | | | |
| Indeno(1,2,3-cd)pyrene | 1057 | 13 | 1279 | 0 | 82.6 | 40-120 | 0 | | | | |
| Naphthalene | 802.5 | 13 | 1279 | 0 | 62.7 | 40-105 | 0 | | | | |
| Pyrene | 1148 | 13 | 1279 | 4.626 | 89.4 | 45-125 | 0 | | | | |
| Surr: 2-Fluorobiphenyl | 2056 | 0 | 3197 | 0 | 64.3 | 12-100 | 0 | | | | |
| Surr: 4-Terphenyl-d14 | 3141 | 0 | 3197 | 0 | 98.2 | 25-137 | 0 | | | | |
| Surr: Nitrobenzene-d5 | 2009 | 0 | 3197 | 0 | 62.8 | 37-107 | 0 | | | | |

| MSD | | | | Sample ID: 1506971-01B MSD | | | Units: µg/Kg | | Analysis Date: 6/21/2015 04:24 PM | | |
|------------------------|--------|-----------------------|---------|----------------------------|------|----------------------|---------------|-------|-----------------------------------|------|--|
| Client ID: | | Run ID: SVMS8_150621A | | SeqNo: 3333722 | | Prep Date: 6/19/2015 | | DF: 1 | | | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual | |
| Acenaphthene | 858.9 | 13 | 1278 | 0 | 67.2 | 45-110 | 901.6 | 4.86 | 30 | | |
| Acenaphthylene | 871 | 13 | 1278 | 0 | 68.1 | 45-105 | 927.9 | 6.32 | 30 | | |
| Anthracene | 1063 | 13 | 1278 | 0 | 83.2 | 55-105 | 1092 | 2.67 | 30 | | |
| Benzo(a)anthracene | 1100 | 13 | 1278 | 3.635 | 85.8 | 50-110 | 1132 | 2.93 | 30 | | |
| Benzo(a)pyrene | 1205 | 13 | 1278 | 0 | 94.2 | 50-110 | 1222 | 1.43 | 30 | | |
| Benzo(b)fluoranthene | 1238 | 13 | 1278 | 0 | 96.8 | 45-115 | 1276 | 3.01 | 30 | | |
| Benzo(g,h,i)perylene | 1029 | 13 | 1278 | 0 | 80.5 | 40-125 | 997.6 | 3.09 | 30 | | |
| Benzo(k)fluoranthene | 1150 | 13 | 1278 | 0 | 90 | 45-115 | 1179 | 2.48 | 30 | | |
| Chrysene | 1038 | 13 | 1278 | 0 | 81.2 | 55-110 | 1058 | 1.89 | 30 | | |
| Dibenzo(a,h)anthracene | 966.3 | 13 | 1278 | 0 | 75.6 | 40-125 | 953.4 | 1.33 | 30 | | |
| Fluoranthene | 1127 | 13 | 1278 | 5.617 | 87.7 | 55-115 | 1166 | 3.41 | 30 | | |
| Fluorene | 965.6 | 13 | 1278 | 0 | 75.5 | 50-110 | 1014 | 4.91 | 30 | | |
| Indeno(1,2,3-cd)pyrene | 1081 | 13 | 1278 | 0 | 84.6 | 40-120 | 1057 | 2.27 | 30 | | |
| Naphthalene | 711.9 | 13 | 1278 | 0 | 55.7 | 40-105 | 802.5 | 12 | 30 | | |
| Pyrene | 1155 | 13 | 1278 | 4.626 | 90 | 45-125 | 1148 | 0.602 | 30 | | |
| Surr: 2-Fluorobiphenyl | 1875 | 0 | 3195 | 0 | 58.7 | 12-100 | 2056 | 9.2 | 40 | | |
| Surr: 4-Terphenyl-d14 | 3076 | 0 | 3195 | 0 | 96.3 | 25-137 | 3141 | 2.08 | 40 | | |
| Surr: Nitrobenzene-d5 | 1779 | 0 | 3195 | 0 | 55.7 | 37-107 | 2009 | 12.1 | 40 | | |

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

Client: Olsson Associates
Work Order: 1506792
Project: Chevron AC McLaughlin 16 Spill

QC BATCH REPORT

Batch ID: **72486** Instrument ID **SVMS8** Method: **SW846 8270D**

The following samples were analyzed in this batch:

| | |
|-------------|-------------|
| 1506792-02A | 1506792-03A |
|-------------|-------------|

Client: Olsson Associates
 Work Order: 1506792
 Project: Chevron AC McLaughlin 16 Spill

QC BATCH REPORT

Batch ID: 72453 Instrument ID VMS8 Method: SW8260B

| MBLK | | Sample ID: MBLK-72453-72453 | | | | Units: µg/Kg | | Analysis Date: 6/18/2015 01:22 PM | | |
|-----------------------------|--------|-----------------------------|---------|---------------|----------------|---------------|----------------------|-----------------------------------|-----------|------|
| Client ID: | | Run ID: VMS8_150618A | | | SeqNo: 3331389 | | Prep Date: 6/18/2015 | | DF: 1 | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
| Benzene | ND | 30 | | | | | | | | |
| Ethylbenzene | ND | 30 | | | | | | | | |
| m,p-Xylene | ND | 60 | | | | | | | | |
| o-Xylene | ND | 30 | | | | | | | | |
| Toluene | ND | 30 | | | | | | | | |
| Xylenes, Total | ND | 90 | | | | | | | | |
| Surr: 1,2-Dichloroethane-d4 | 1024 | 0 | 1000 | 0 | 102 | 70-130 | 0 | | | |
| Surr: 4-Bromofluorobenzene | 965.5 | 0 | 1000 | 0 | 96.6 | 70-130 | 0 | | | |
| Surr: Dibromofluoromethane | 927.5 | 0 | 1000 | 0 | 92.8 | 70-130 | 0 | | | |
| Surr: Toluene-d8 | 951 | 0 | 1000 | 0 | 95.1 | 70-130 | 0 | | | |

| LCS | | Sample ID: LCS-72453-72453 | | | | Units: µg/Kg | | Analysis Date: 6/18/2015 11:44 AM | | |
|-----------------------------|--------|----------------------------|---------|---------------|----------------|---------------|----------------------|-----------------------------------|-----------|------|
| Client ID: | | Run ID: VMS8_150618A | | | SeqNo: 3331388 | | Prep Date: 6/18/2015 | | DF: 1 | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
| Benzene | 1146 | 30 | 1000 | 0 | 115 | 75-125 | 0 | | | |
| Ethylbenzene | 1046 | 30 | 1000 | 0 | 105 | 75-125 | 0 | | | |
| m,p-Xylene | 2236 | 60 | 2000 | 0 | 112 | 80-125 | 0 | | | |
| o-Xylene | 1003 | 30 | 1000 | 0 | 100 | 75-125 | 0 | | | |
| Toluene | 1019 | 30 | 1000 | 0 | 102 | 70-125 | 0 | | | |
| Xylenes, Total | 3239 | 90 | 3000 | 0 | 108 | 75-125 | 0 | | | |
| Surr: 1,2-Dichloroethane-d4 | 995.5 | 0 | 1000 | 0 | 99.6 | 70-130 | 0 | | | |
| Surr: 4-Bromofluorobenzene | 997.5 | 0 | 1000 | 0 | 99.8 | 70-130 | 0 | | | |
| Surr: Dibromofluoromethane | 984 | 0 | 1000 | 0 | 98.4 | 70-130 | 0 | | | |
| Surr: Toluene-d8 | 970.5 | 0 | 1000 | 0 | 97 | 70-130 | 0 | | | |

The following samples were analyzed in this batch: 1506792-02A 1506792-03A

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

Client: Olsson Associates
Work Order: 1506792
Project: Chevron AC McLaughlin 16 Spill

QC BATCH REPORT

Batch ID: **72219** Instrument ID **WETCHEM** Method: **SW9045D**

| DUP | | Sample ID: 1506706-01B DUP | | | | Units: s.u. | | Analysis Date: 6/12/2015 06:30 PM | | |
|------------|--------|-----------------------------------|---------|-----------------------|------|-----------------------------|---------------|--|-----------|------|
| Client ID: | | Run ID: WETCHEM_150612I | | SeqNo: 3320082 | | Prep Date: 6/12/2015 | | DF: 1 | | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
| pH | 7.91 | 0 | 0 | 0 | 0 | 0-0 | 7.83 | 1.02 | 20 | |

| DUP | | Sample ID: 1506709-01B DUP | | | | Units: s.u. | | Analysis Date: 6/12/2015 06:30 PM | | |
|------------|--------|-----------------------------------|---------|-----------------------|------|-----------------------------|---------------|--|-----------|------|
| Client ID: | | Run ID: WETCHEM_150612I | | SeqNo: 3320085 | | Prep Date: 6/12/2015 | | DF: 1 | | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
| pH | 7.77 | 0 | 0 | 0 | 0 | 0-0 | 7.67 | 1.3 | 20 | |

The following samples were analyzed in this batch:

| | | |
|-------------|-------------|-------------|
| 1506792-01A | 1506792-02A | 1506792-03A |
|-------------|-------------|-------------|

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

Client: Olsson Associates
Work Order: 1506792
Project: Chevron AC McLaughlin 16 Spill

QC BATCH REPORT

Batch ID: **72386** Instrument ID **WETCHEM** Method: **USDA H60 Metho**

| DUP | Sample ID: 1506789-04B DUP | | Units: mmhos/cm @25° | | Analysis Date: 6/17/2015 05:30 PM | | | | | |
|--------------------------------------|-----------------------------------|-------|-----------------------------|---------------|---|---------------|---------------|------|-----------|------|
| Client ID: | Run ID: WETCHEM_150617P | | SeqNo: 3327487 | | Prep Date: 6/17/2015 DF: 10 | | | | | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
| Electrical Conductivity @ Saturation | 22.4 | 0.050 | 0 | 0 | 0 | | 24.1 | 7.31 | 50 | |

The following samples were analyzed in this batch:

 1506792-01B 1506792-02B 1506792-03B

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

Client: Olsson Associates
 Work Order: 1506792
 Project: Chevron AC McLaughlin 16 Spill

QC BATCH REPORT

Batch ID: **72462** Instrument ID **WETCHEM** Method: **SW7196A**

| | | | | | | | | | | |
|-------------|------------------------------------|-----|-----------------------|---------------|--|---------------|---------------|------|-----------|------|
| MBLK | Sample ID: MBLK-72462-72462 | | Units: mg/Kg | | Analysis Date: 6/18/2015 12:00 PM | | | | | |
| Client ID: | Run ID: WETCHEM_150618F | | SeqNo: 3329158 | | Prep Date: 6/17/2015 DF: 1 | | | | | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |

Chromium, Hexavalent ND 1.0

| | | | | | | | | | | |
|------------|-----------------------------------|-----|-----------------------|---------------|--|---------------|---------------|------|-----------|------|
| LCS | Sample ID: LCS-72462-72462 | | Units: mg/Kg | | Analysis Date: 6/18/2015 12:00 PM | | | | | |
| Client ID: | Run ID: WETCHEM_150618F | | SeqNo: 3329157 | | Prep Date: 6/17/2015 DF: 1 | | | | | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |

Chromium, Hexavalent 4.31 1.0 5 0 86.2 80-120 0

| | | | | | | | | | | |
|-----------------------------|----------------------------------|-----|-----------------------|---------------|--|---------------|---------------|------|-----------|------|
| MS | Sample ID: 1506792-01A MS | | Units: mg/Kg | | Analysis Date: 6/18/2015 12:00 PM | | | | | |
| Client ID: ACM16-BG1 | Run ID: WETCHEM_150618F | | SeqNo: 3329148 | | Prep Date: 6/17/2015 DF: 1 | | | | | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |

Chromium, Hexavalent 2.9 1.0 5 0.07619 56.5 75-125 0 S

| | | | | | | | | | | |
|-----------------------------|-----------------------------------|-----|-----------------------|---------------|--|---------------|---------------|------|-----------|------|
| MS | Sample ID: 1506792-01A MSI | | Units: mg/Kg | | Analysis Date: 6/18/2015 12:00 PM | | | | | |
| Client ID: ACM16-BG1 | Run ID: WETCHEM_150618F | | SeqNo: 3329150 | | Prep Date: 6/17/2015 DF: 100 | | | | | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |

Chromium, Hexavalent 2170 100 2714 0.07619 79.9 75-125 0

| | | | | | | | | | | |
|-----------------------------|-----------------------------------|-----|-----------------------|---------------|--|---------------|---------------|------|-----------|------|
| MSD | Sample ID: 1506792-01A MSD | | Units: mg/Kg | | Analysis Date: 6/18/2015 12:00 PM | | | | | |
| Client ID: ACM16-BG1 | Run ID: WETCHEM_150618F | | SeqNo: 3329149 | | Prep Date: 6/17/2015 DF: 1 | | | | | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |

Chromium, Hexavalent 3.347 1.0 5.102 0.07619 64.1 75-125 2.9 14.3 20 S

The following samples were analyzed in this batch: 1506792-01A 1506792-02A 1506792-03A

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

Client: Olsson Associates
 Work Order: 1506792
 Project: Chevron AC McLaughlin 16 Spill

QC BATCH REPORT

Batch ID: **R166067** Instrument ID **MOIST** Method: **E160.3M**

| | | | | | | | | | | |
|-------------|---------------------------------|-----|-----------------------|---------------|--|---------------|---------------|------|-----------|------|
| MBLK | Sample ID: WBLKS-R166067 | | Units: % of sample | | Analysis Date: 6/22/2015 03:00 PM | | | | | |
| Client ID: | Run ID: MOIST_150622B | | SeqNo: 3336623 | | Prep Date: | | | | | |
| | | | | | DF: 1 | | | | | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |

Moisture ND 0.050

| | | | | | | | | | | |
|------------|-------------------------------|-----|-----------------------|---------------|--|---------------|---------------|------|-----------|------|
| LCS | Sample ID: LCS-R166067 | | Units: % of sample | | Analysis Date: 6/22/2015 03:00 PM | | | | | |
| Client ID: | Run ID: MOIST_150622B | | SeqNo: 3336622 | | 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

| | | | | | | | | | | |
|------------|------------------------------------|-----|-----------------------|---------------|--|---------------|---------------|------|-----------|------|
| DUP | Sample ID: 15061005-01A DUP | | Units: % of sample | | Analysis Date: 6/22/2015 03:00 PM | | | | | |
| Client ID: | Run ID: MOIST_150622B | | SeqNo: 3336601 | | Prep Date: | | | | | |
| | | | | | DF: 1 | | | | | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |

Moisture 4.16 0.050 0 0 0 4.33 4 20

| | | | | | | | | | | |
|------------|------------------------------------|-----|-----------------------|---------------|--|---------------|---------------|------|-----------|------|
| DUP | Sample ID: 15061261-01A DUP | | Units: % of sample | | Analysis Date: 6/22/2015 03:00 PM | | | | | |
| Client ID: | Run ID: MOIST_150622B | | SeqNo: 3336608 | | Prep Date: | | | | | |
| | | | | | DF: 1 | | | | | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |

Moisture 19.56 0.050 0 0 0 19.13 2.22 20 H

The following samples were analyzed in this batch:

| | | |
|-------------|-------------|-------------|
| 1506792-01A | 1506792-02A | 1506792-03A |
|-------------|-------------|-------------|

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



Chain of Custody Form

Page 1 of 1

COC ID: 123456

- | | | |
|--|--|--|
| <input type="checkbox"/> Cincinnati, OH +1 513 733 5336 | <input checked="" type="checkbox"/> Holland, MI +1 616 399 6070 | <input type="checkbox"/> Salt Lake City, UT +1 801 266 7700 |
| <input type="checkbox"/> Everett, WA +1 425 356 2600 | <input type="checkbox"/> Houston, TX +1 281 530 5656 | <input type="checkbox"/> Spring City, PA +1 610 948 4903 |
| <input type="checkbox"/> Fort Collins, CO +1 970 490 1511 | <input type="checkbox"/> Middletown, PA +1 717 944 5541 | <input type="checkbox"/> York, PA +1 717 505 5280 |

ALS Project Manager: _____ Work Order #: 1506792

| Customer Information | | Project Information | | Parameter/Method Request for Analysis | | | | | | | | | | | |
|----------------------|-----------------------------|---------------------|--------------------------------|---------------------------------------|---|--|--|--|--|--|--|--|--|--|--|
| Purchase Order | | Project Name | Chevron AC McLaughlin 16 Spill | A | TPH (GRO & DRO) | | | | | | | | | | |
| Work Order | | Project Number | 013.3287.200.200004 | B | BTEX | | | | | | | | | | |
| Company Name | Olson Associates | Bill To Company | Olson 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 81508 | City/State/Zip | Grand Junction, CO 81508 | 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@olsonassoc.com | e-Mail Address | | I | | | | | | | | | | | |
| | | | | J | | | | | | | | | | | |

| No. | Sample Description | Date | Time | Matrix | Pres. | F Bases | A | B | C | D | E | F | G | H | I | J | K | Hold |
|-----|--------------------|----------|------|--------|-------|---------|---|---|---|---|---|---|---|---|---|---|---|------|
| 1 | ACM16-BG1 | 06/10/15 | 1255 | Soil | 8 | 2 | | | | X | X | X | X | | | | | |
| 2 | ACM16-SS1 | 06/10/15 | 1305 | Soil | 8 | 2 | X | X | X | X | X | X | X | | | | | |
| 3 | ACM16-SS2 | 06/10/15 | 1315 | Soil | 8 | 2 | X | X | X | X | X | X | X | | | | | |
| 4 | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | | | |

Sampler(s): Please Print & Sign _____
 Shipment Method: FedEx Other _____
 Required Turnaround Time: STD 10 Wk Days 5 Wk Days 2 Wk Days 4 Hour
 Results Due Date: _____

| | | | | |
|---|---------------|------------|---------------------------|---|
| Retransmitted by: | Date: 6/11/15 | Time: | Received by: | Notes: Chevron Pricing Applies - Per Bruce Schlatter |
| Retransmitted by: | Date: 6-11-15 | Time: 1730 | Received by (Laboratory): | QC Package: (Check Box Below) |
| Logged by (Laboratory): | Date: 6/21/15 | Time: 1435 | Checked by (Laboratory): | <input checked="" type="checkbox"/> Level II: Standard QC <input type="checkbox"/> Level III: Std QC + Raw Data <input type="checkbox"/> Level IV: SW846 CLP-Like Other: _____ |
| Preservative Key: 1-HCL 2-HNO3 3-H2SO4 4-NaOH 5-Na2S2O3 6-NaHSO4 7-Other 8-4 degrees C 9-5035 | | | | Cooler Temp: 5°C |

Note: Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental. Copyright 2011 by ALS Group

6/11/2015

FedEx Ship Manager - Print Your Label(s)

From: (616) 298-1033
Nick Martinez
ALS Environmental
127 E. 1st Street

Origin ID: RILA



Ship Date: 11JUN15
ActWgt: 55.0 LB
CAD: 2264840/NET3610
Dims: 24 X 15 X 15 IN

PARACHUTE, CO 81635

Delivery Address Bar Code



SHIP TO: (616) 399-6070

BILL SENDER

sample receiving
ALS Laboratory Group
3352 128TH AVE

Ref # 061115-1
Invoice #
PO # Parachute
Dept #

HOLLAND, MI 49424

1 of 4

FRI - 12 JUN 10:30A
PRIORITY OVERNIGHT

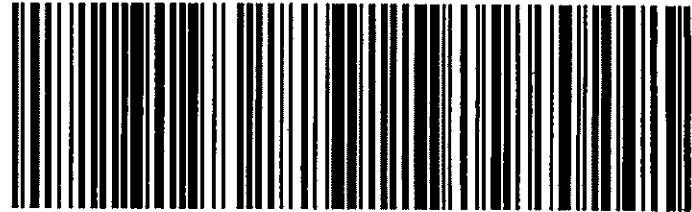
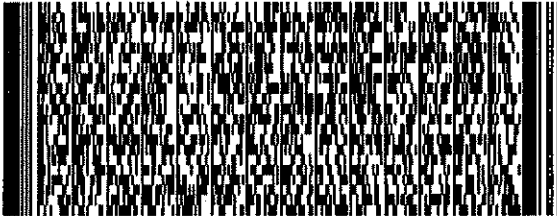
TRK# 7738 1634 8513

6281

MASTER

XX HLMA

49424
MI-US
GRR



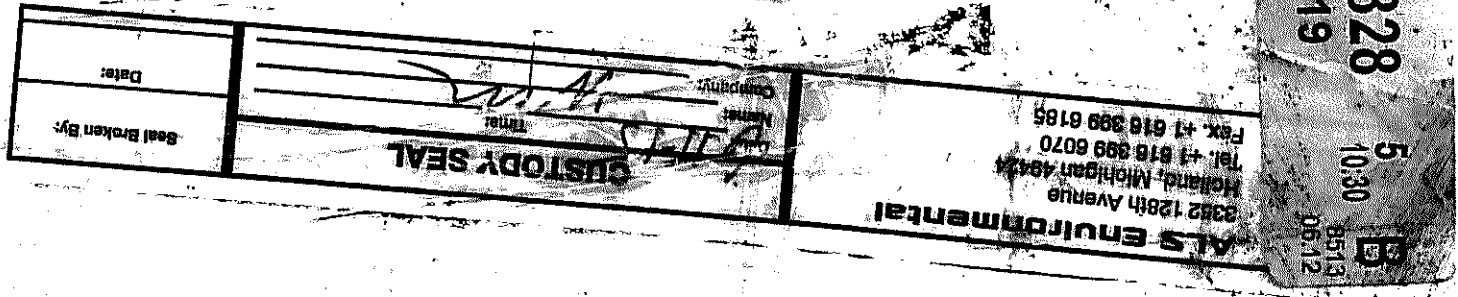
537J18A0EJE4B

After printing this label:

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of \$100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of \$100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is \$1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits - see current FedEx Service Guide.



Sample Receipt Checklist

Client Name: **OLSSON**

Date/Time Received: **12-Jun-15 10:00**

Work Order: **1506792**

Received by: **KRW**

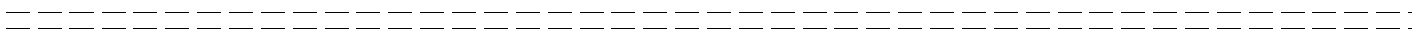
Checklist completed by Keith Wierenga 12-Jun-15
eSignature Date

Reviewed by: Lee Drndol 12-Jun-15
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 checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Present <input 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>5.2 C</u> | | <u>SR2</u> |
| Cooler(s)/Kit(s): | <u> </u> | | |
| Date/Time sample(s) sent to storage: | <u>6/12/2015 2:38:30 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:



30-Oct-2017

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

Re: **ACM 16 Spill Resampling**

Work Order: **17101501**

Dear Tim,

ALS Environmental received 1 sample on 23-Oct-2017 09:00 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 7.

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", is written over a white background.

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 The logo icon for ALS Environmental, a stylized blue triangle with a yellow flame-like shape inside.

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: Olsson Associates
Project: ACM 16 Spill Resampling
Work Order: 17101501

Work Order Sample Summary

| <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> |
|--------------------|-------------------------|---------------|-------------------|------------------------|----------------------|--------------------------|
| 17101501-01 | ACM16-SS1 | Soil | | 10/19/2017 10:00 | 10/23/2017 09:00 | <input type="checkbox"/> |

Client: Olsson Associates
Project: ACM 16 Spill Resampling
WorkOrder: 17101501

**QUALIFIERS,
ACRONYMS, UNITS**

| <u>Qualifier</u> | <u>Description</u> |
|------------------|---|
| * | 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. |

| <u>Acronym</u> | <u>Description</u> |
|----------------|-------------------------------------|
| 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 |

| <u>Units Reported</u> | <u>Description</u> |
|-----------------------|--|
| mg/L | Milligrams per Liter |
| mmhos/cm @25°C | Millimhos-Centimeter at 25 Degrees Celcius |
| none | |

ALS Group, USA

Date: 30-Oct-17

Client: Olsson Associates
Project: ACM 16 Spill Resampling
Sample ID: ACM16-SS1
Collection Date: 10/19/2017 10:00 AM

Work Order: 17101501
Lab ID: 17101501-01
Matrix: SOIL

| Analyses | Result | Qual | MDL | Report Limit | Units | Dilution Factor | Date Analyzed |
|--------------------------------------|--------|------|-------|----------------------------------|----------------------------------|-----------------|--------------------|
| SODIUM ADSORPTION RATIO | | | | Method: USDA H60 METHOD 2 | Prep: USDA Method 20B / 10/27/17 | | Analyst: RH |
| Sodium Adsorption Ratio | 2.3 | | 0.010 | 0.010 | none | 1 | 10/27/2017 |
| SOLUBLE CATIONS FOR SAR | | | | Method: SW6020A | Prep: USDA Method 20B / 10/27/17 | | Analyst: JF |
| Calcium | 130 | | 0.86 | 5.0 | mg/L | 10 | 10/27/2017 15:48 |
| Magnesium | 34 | | 0.068 | 2.0 | mg/L | 10 | 10/27/2017 15:48 |
| Sodium | 110 | | 0.34 | 2.0 | mg/L | 10 | 10/27/2017 15:48 |
| ELECTRICAL CONDUCTIVITY (SAR) | | | | Method: USDA H60 METHOD 2 | Prep: USDA Method 20B / 10/27/17 | | Analyst: ED |
| Electrical Conductivity @ Saturation | 1.6 | | 0.011 | 0.10 | mmhos/cm @25° | 20 | 10/28/2017 17:10 |

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

Client: Olsson Associates
Work Order: 17101501
Project: ACM 16 Spill Resampling

QC BATCH REPORT

Batch ID: **109683** Instrument ID **SAR** Method: **USDA H60 Metho**

| DUP | Sample ID: 17101506-01ADUP | | | | Units: none | | Analysis Date: 10/27/2017 | | | |
|-------------------------|-----------------------------------|-------|---------|-----------------------|--------------------|------------------------------|----------------------------------|--------------|-----------|------|
| Client ID: | Run ID: SAR_171027A | | | SeqNo: 4729221 | | Prep Date: 10/27/2017 | | DF: 1 | | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
| Sodium Adsorption Ratio | 0.3844 | 0.010 | 0 | 0 | 0 | | 0.3682 | 4.29 | 50 | |

The following samples were analyzed in this batch:

17101501-01A

Batch ID: **109683** Instrument ID **ICPMS3** Method: **SW6020A**

| DUP | Sample ID: 17101506-01ADUP | | | | Units: mg/L | | Analysis Date: 10/27/2017 04:11 PM | | | |
|------------|-----------------------------------|-----|---------|-----------------------|--------------------|------------------------------|---|---------------|-----------|------|
| Client ID: | Run ID: ICPMS3_171027A | | | SeqNo: 4727270 | | Prep Date: 10/27/2017 | | DF: 10 | | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
| Calcium | 194.8 | 5.0 | 0 | 0 | 0 | 0-0 | 197 | 1.08 | | |
| Magnesium | 32.48 | 2.0 | 0 | 0 | 0 | 0-0 | 32.48 | 0.00702 | | |
| Sodium | 22 | 2.0 | 0 | 0 | 0 | 0-0 | 21.16 | 3.87 | | |

The following samples were analyzed in this batch:

17101501-01A

Batch ID: **109683** Instrument ID **WETCHEM** Method: **USDA H60 Metho**

| DUP | Sample ID: 17101506-01ADUP | | | | Units: mmhos/cm @25° | | Analysis Date: 10/28/2017 05:10 PM | | | |
|--------------------------------------|-----------------------------------|------|---------|-----------------------|-----------------------------|------------------------------|---|---------------|-----------|------|
| Client ID: | Run ID: WETCHEM_171028E | | | SeqNo: 4726791 | | Prep Date: 10/27/2017 | | DF: 20 | | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
| Electrical Conductivity @ Saturation | 1.544 | 0.10 | 0 | 0 | 0 | | 1.542 | 0.13 | 50 | |

The following samples were analyzed in this batch:

17101501-01A



Chain of Custody Form

Page 1 of 1

COC ID: 123456

- Cincinnati, OH +1 513 733 5336
- Everett, WA +1 425 356 2600
- Fort Collins, CO +1 970 490 1511
- Holland, MI +1 616 399 6070
- Houston, TX +1 281 530 5656
- Middletown, PA +1 717 944 5541
- Salt Lake City, UT +1 801 266 7700
- Spring City, PA +1 610 948 4903
- York, PA +1 717 505 5280

17101501

| Customer Information | | Project Information | | | | Parameter/Method Request for Analysis | | | | | | | | | | |
|----------------------|-----------------------------|---------------------|-----------------------------|--|--|---------------------------------------|---|--|--|--|--|--|--|--|--|--|
| Purchase Order | | Project Name | ACM 16 Spill Resampling | | | A | TPH (GRO & DRO) | | | | | | | | | |
| Work Order | | Project Number | 013.3287.400.400004 | | | B | BTEX | | | | | | | | | |
| Company Name | Olsson Associates | Billing To Company | Olsson 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 | | | | | | | | | |
| | | | | | | F | pH | | | | | | | | | |
| City/State/Zip | Grand Junction, CO 81506 | City/State/Zip | Grand Junction, CO 81506 | | | G | Metals (See Attached List) CO Table 910 | | | | | | | | | |
| Phone | 970.263.7800 | Phone | 970.263.7800 | | | H | Arsenic Only | | | | | | | | | |
| Fax | 970.263.7456 | Fax | 970.263.7456 | | | I | DRO Only | | | | | | | | | |
| e-Mail Address | tdobransky@olssonassoc.com | e-Mail Address | tdobransky@olssonassoc.com | | | J | | | | | | | | | | |

| No. | Sample Description | Date | Time | Matrix | Pres. | # Bottles | A | B | C | D | E | F | G | H | I | J | Hold |
|-----|--------------------|----------|------|--------|-------|-----------|---|---|---|---|---|---|---|---|---|---|------|
| 1 | ACM16-SS1 | 10/19/17 | 1000 | Soil | 8 | 1 | | | | X | X | | | | | | |
| 2 | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | |

Sampler(s): Please Print & Sign **Tim Dobransky**
 Shipment Method: **FedEx**
 Required Turnaround Time: STD 10 Wk Days
 5 Wk Days
 2 Wk Days
 24 Hour
 Results Due Date:

Relinquished by:
 Date: **10-21-17**
 Time: **0900**
 Received by:
 Notes: **Chevron Pricing Applies - Per Bruce Schlatter**

Relinquished by: _____
 Date: _____
 Time: _____
 Received by (Laboratory): _____

| QC Package: (Check Box Below) | |
|-------------------------------------|------------------------------|
| <input checked="" type="checkbox"/> | Level II: Standard QC |
| <input type="checkbox"/> | Level III: Std QC + Raw Data |
| <input type="checkbox"/> | Level IV: SW846 CLP-Like |
| <input type="checkbox"/> | Other: _____ |

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

Sample Receipt Checklist

Client Name: **OLSSON**

Date/Time Received: **23-Oct-17 09:00**

Work Order: **17101501**

Received by: **NCF**

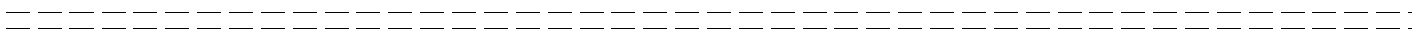
Checklist completed by Niede Fredericks 23-Oct-17
eSignature Date

Reviewed by: Chad Whilton 24-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 checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Present <input 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>5.2/5.2</u> | | <u>SR2</u> |
| Cooler(s)/Kit(s): | <u> </u> | | |
| Date/Time sample(s) sent to storage: | <u>10/23/2017 1:34:21 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 checked="" type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| pH adjusted? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | N/A <input type="checkbox"/> |
| pH adjusted by: | <u> </u> | | |

Login Notes:



Client Contacted: _____ Date Contacted: _____ Person Contacted: _____

Contacted By: _____ Regarding: _____

Comments:

CorrectiveAction: