

## Introduction

Encana Oil & Gas (USA) Inc. (Encana) is submitting this Form 4 Sundry Notice to request final closure status for the culvert pit associated with the Dragon Trail Unit #1306 (COGCC facility #314310, COGCC remediation #6729). The site investigation was conducted by a third party contractor as authorized by Encana personnel. All samples were collected in accordance with Encana's Environmental Compliance Group's Sampling Procedures. The analytical results for the respective soil samples were within the COGCC Table 910-1 standards and are provided in Table 1 and Attachment A of this submittal. The text below provides the details of the site investigation. For a visual description of the site please refer to Figures 1 and 2 – Site Maps.

## Site Investigation

November 21, 2011 - The pit was characterized utilizing a photoionization detector (PID) field unit by a qualified third party contractor. The culvert was carefully removed using the trackhoe and placed onsite for later recycling or disposal. It should be noted that there was not any liquid associated with the culvert during the time of movement. A grab sample was collected directly from the lowest point of the pit. The PID reading for the respective sample was 0.3 ppm. There were no indicators of hydrocarbon impacts in accordance with field screen readings and visual observations. A soil sample was collected from beneath the culvert and sent to an accredited analytical laboratory for analysis. Five (5) background samples were also collected from approximately six (6) inches beneath the grounds surface for analysis with regards to arsenic.

## Conclusion

Based on the site investigation and analytical results, the pit associated with the Dragon Trail Unit #1306 is in compliance with the standards specified within COGCC Table 910-1. Encana respectfully requests that final closure be granted for the respective pit, COGCC remediation #6729.

## Analytical Review

Sample results indicate that the soil within the earthen pit footprint on Encana's Dragon Trail Unit #1306 well pad have exceedances of COGCC Table 910-1 allowable concentrations for arsenic (10.0 ppm). Though the arsenic concentration in the soil is above the allowable

concentration identified in Table 910-1, the concentration is within the range of arsenic background values (2.8 – 7.0 ppm) in this area. Based on these results and footnote 1 to COGCC Table 910-1, Encana requests that the COGCC consider the higher range of background arsenic value(s) as the allowable concentration for this constituent. Please see Attachment A for the respective laboratory analytical results.





# DTU 1306 Site Location Map



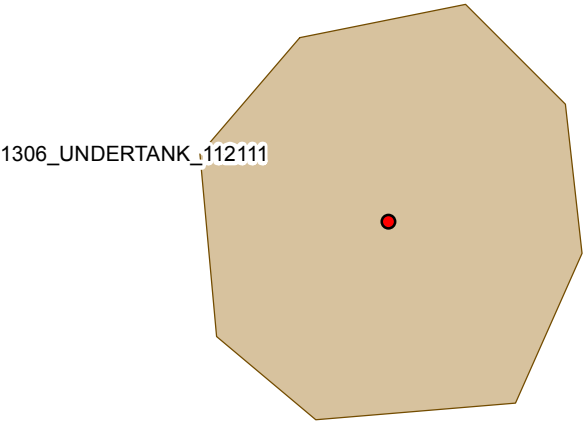
**Legend**

● Sample Location



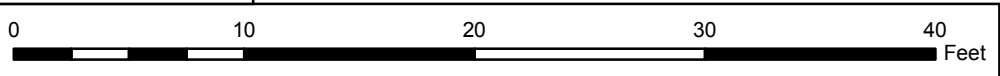


DTU 1306 Site Detail Map



**Legend**

● Sample Location





[illegible]



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Est. 1970

Kate Ramsay  
HRL Compliance Solutions- CO  
744 Horizon Ct., Suite 140  
Grand Junction, CO 81506

## Report Summary

Thursday December 01, 2011

Report Number: L548464

Samples Received: 11/23/11

Client Project:

Description: Culvert Pit Closures Project

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Jayred Willis , ESC Representative

### Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487  
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704, ND - R-140  
NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233  
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032008A,  
TX - T104704245, OK-9915, PA - 68-02979

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

This report may not be reproduced, except in full, without written approval from ESC Lab Sciences. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

REPORT OF ANALYSIS

Kate Ramsay  
HRL Compliance Solutions- CO  
744 Horizon Ct., Suite 140  
Grand Junction, CO 81506

December 01, 2011

Date Received : November 23, 2011  
Description : Culvert Pit Closures Project  
Sample ID : 1306-UNDERTANK-112111  
Collected By : KHR  
Collection Date : 11/21/11 12:45

ESC Sample # : L548464-01

Site ID : DTU 1306

Project # :

| Parameter                         | Result | Det. Limit | Units    | Method      | Date     | Dil. |
|-----------------------------------|--------|------------|----------|-------------|----------|------|
| Chromium, Hexavalent              | BDL    | 50.        | mg/kg    | 3060A/7196A | 12/01/11 | 25   |
| Chromium, Trivalent               | BDL    | 50.        | mg/kg    | Calc.       | 11/27/11 | 1    |
| ORP                               | 140    |            | mV       | 2580        | 11/30/11 | 1    |
| pH                                | 8.4    |            | su       | 9045D       | 11/28/11 | 1    |
| Sodium Adsorption Ratio           | 6.3    |            |          | Calc.       | 11/30/11 | 1    |
| Specific Conductance              | 41.    |            | umhos/cm | 9050AMod    | 11/30/11 | 1    |
| Mercury                           | 0.083  | 0.020      | mg/kg    | 7471        | 11/28/11 | 1    |
| Arsenic                           | 10.    | 1.0        | mg/kg    | 6010B       | 11/27/11 | 1    |
| Barium                            | 130    | 0.25       | mg/kg    | 6010B       | 11/27/11 | 1    |
| Cadmium                           | BDL    | 0.25       | mg/kg    | 6010B       | 11/27/11 | 1    |
| Chromium                          | 10.    | 0.50       | mg/kg    | 6010B       | 11/27/11 | 1    |
| Copper                            | 31.    | 1.0        | mg/kg    | 6010B       | 11/27/11 | 1    |
| Lead                              | 44.    | 0.25       | mg/kg    | 6010B       | 11/27/11 | 1    |
| Nickel                            | 13.    | 1.0        | mg/kg    | 6010B       | 11/27/11 | 1    |
| Selenium                          | 3.7    | 1.0        | mg/kg    | 6010B       | 11/27/11 | 1    |
| Silver                            | BDL    | 0.50       | mg/kg    | 6010B       | 11/27/11 | 1    |
| Zinc                              | 720    | 1.5        | mg/kg    | 6010B       | 11/27/11 | 1    |
| Benzene                           | BDL    | 0.0025     | mg/kg    | 8021/8015   | 11/25/11 | 5    |
| Toluene                           | BDL    | 0.025      | mg/kg    | 8021/8015   | 11/25/11 | 5    |
| Ethylbenzene                      | BDL    | 0.0025     | mg/kg    | 8021/8015   | 11/25/11 | 5    |
| Total Xylene                      | BDL    | 0.0075     | mg/kg    | 8021/8015   | 11/25/11 | 5    |
| TPH (GC/FID) Low Fraction         | 0.95   | 0.50       | mg/kg    | GRO         | 11/25/11 | 5    |
| Surrogate Recovery-%              |        |            |          |             |          |      |
| a,a,a-Trifluorotoluene(FID)       | 95.3   |            | % Rec.   | 8021/8015   | 11/25/11 | 5    |
| a,a,a-Trifluorotoluene(PID)       | 94.4   |            | % Rec.   | 8021/8015   | 11/25/11 | 5    |
| TPH (GC/FID) High Fraction        | BDL    | 4.0        | mg/kg    | 3546/DRO    | 11/29/11 | 1    |
| Surrogate recovery(%)             |        |            |          |             |          |      |
| o-Terphenyl                       | 57.6   |            | % Rec.   | 3546/DRO    | 11/29/11 | 1    |
| Polynuclear Aromatic Hydrocarbons |        |            |          |             |          |      |
| Anthracene                        | BDL    | 0.0060     | mg/kg    | 8270C-SIM   | 11/28/11 | 1    |
| Acenaphthene                      | BDL    | 0.0060     | mg/kg    | 8270C-SIM   | 11/28/11 | 1    |
| Acenaphthylene                    | BDL    | 0.0060     | mg/kg    | 8270C-SIM   | 11/28/11 | 1    |
| Benzo(a)anthracene                | BDL    | 0.0060     | mg/kg    | 8270C-SIM   | 11/28/11 | 1    |
| Benzo(a)pyrene                    | BDL    | 0.0060     | mg/kg    | 8270C-SIM   | 11/28/11 | 1    |

BDL - Below Detection Limit  
Det. Limit - Practical Quantitation Limit(PQL)  
L548464-01 (PH) - 8.36@18.1c  
L548464-01 (CR6) - Diluted due to sample color interference.

REPORT OF ANALYSIS

Kate Ramsay  
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744 Horizon Ct., Suite 140  
Grand Junction, CO 81506

December 01, 2011

Date Received : November 23, 2011  
Description : Culvert Pit Closures Project

Sample ID : 1306-UNDERTANK-112111

Collected By : KHR  
Collection Date : 11/21/11 12:45

ESC Sample # : L548464-01

Site ID : DTU 1306

Project # :

| Parameter              | Result | Det. Limit | Units  | Method    | Date     | Dil. |
|------------------------|--------|------------|--------|-----------|----------|------|
| Benzo(b)fluoranthene   | BDL    | 0.0060     | mg/kg  | 8270C-SIM | 11/28/11 | 1    |
| Benzo(g,h,i)perylene   | BDL    | 0.0060     | mg/kg  | 8270C-SIM | 11/28/11 | 1    |
| Benzo(k)fluoranthene   | BDL    | 0.0060     | mg/kg  | 8270C-SIM | 11/28/11 | 1    |
| Chrysene               | BDL    | 0.0060     | mg/kg  | 8270C-SIM | 11/28/11 | 1    |
| Dibenz(a,h)anthracene  | BDL    | 0.0060     | mg/kg  | 8270C-SIM | 11/28/11 | 1    |
| Fluoranthene           | BDL    | 0.0060     | mg/kg  | 8270C-SIM | 11/28/11 | 1    |
| Fluorene               | BDL    | 0.0060     | mg/kg  | 8270C-SIM | 11/28/11 | 1    |
| Indeno(1,2,3-cd)pyrene | BDL    | 0.0060     | mg/kg  | 8270C-SIM | 11/28/11 | 1    |
| Naphthalene            | BDL    | 0.0060     | mg/kg  | 8270C-SIM | 11/28/11 | 1    |
| Phenanthrene           | BDL    | 0.0060     | mg/kg  | 8270C-SIM | 11/28/11 | 1    |
| Pyrene                 | BDL    | 0.0060     | mg/kg  | 8270C-SIM | 11/28/11 | 1    |
| 1-Methylnaphthalene    | BDL    | 0.0060     | mg/kg  | 8270C-SIM | 11/28/11 | 1    |
| 2-Methylnaphthalene    | BDL    | 0.0060     | mg/kg  | 8270C-SIM | 11/28/11 | 1    |
| 2-Chloronaphthalene    | BDL    | 0.0060     | mg/kg  | 8270C-SIM | 11/28/11 | 1    |
| Surrogate Recovery     |        |            |        |           |          |      |
| Nitrobenzene-d5        | 72.3   |            | % Rec. | 8270C-SIM | 11/28/11 | 1    |
| 2-Fluorobiphenyl       | 67.7   |            | % Rec. | 8270C-SIM | 11/28/11 | 1    |
| p-Terphenyl-d14        | 98.5   |            | % Rec. | 8270C-SIM | 11/28/11 | 1    |

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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L548464-01 (PH) - 8.36@18.1c

L548464-01 (CR6) - Diluted due to sample color interference.





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December 01, 2011

Date Received : November 23, 2011  
Description : Culvert Pit Closures Project  
Sample ID : 1306-BKG1-112111  
Collected By : KHR  
Collection Date : 11/21/11 13:10

ESC Sample # : L548464-02

Site ID : DTU 1306

Project # :

| Parameter | Result | Det. Limit | Units | Method | Date     | Dil. |
|-----------|--------|------------|-------|--------|----------|------|
| Arsenic   | 2.8    | 1.0        | mg/kg | 6010B  | 11/29/11 | 1    |

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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December 01, 2011

Date Received : November 23, 2011  
Description : Culvert Pit Closures Project  
Sample ID : 1306-BKG2-112111  
Collected By : KHR  
Collection Date : 11/21/11 13:20

ESC Sample # : L548464-03

Site ID : DTU 1306

Project # :

| Parameter | Result | Det. Limit | Units | Method | Date     | Dil. |
|-----------|--------|------------|-------|--------|----------|------|
| Arsenic   | 3.9    | 1.0        | mg/kg | 6010B  | 11/29/11 | 1    |

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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December 01, 2011

Date Received : November 23, 2011  
Description : Culvert Pit Closures Project  
Sample ID : 1306-BKG3-112111  
Collected By : KHR  
Collection Date : 11/21/11 13:30

ESC Sample # : L548464-04

Site ID : DTU 1306

Project # :

| Parameter | Result | Det. Limit | Units | Method | Date     | Dil. |
|-----------|--------|------------|-------|--------|----------|------|
| Arsenic   | 3.8    | 1.0        | mg/kg | 6010B  | 11/29/11 | 1    |

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Reported: 12/01/11 14:01 Printed: 12/01/11 16:58



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REPORT OF ANALYSIS

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December 01, 2011

Date Received : November 23, 2011  
Description : Culvert Pit Closures Project  
Sample ID : 1306-BKG4-112111  
Collected By : KHR  
Collection Date : 11/21/11 13:40

ESC Sample # : L548464-05

Site ID : DTU 1306

Project # :

| Parameter | Result | Det. Limit | Units | Method | Date     | Dil. |
|-----------|--------|------------|-------|--------|----------|------|
| Arsenic   | 7.0    | 1.0        | mg/kg | 6010B  | 11/29/11 | 1    |

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Reported: 12/01/11 14:01 Printed: 12/01/11 16:58



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REPORT OF ANALYSIS

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December 01, 2011

Date Received : November 23, 2011  
Description : Culvert Pit Closures Project  
Sample ID : 1306-BKG5-112111  
Collected By : KHR  
Collection Date : 11/21/11 13:50

ESC Sample # : L548464-06

Site ID : DTU 1306

Project # :

| Parameter | Result | Det. Limit | Units | Method | Date     | Dil. |
|-----------|--------|------------|-------|--------|----------|------|
| Arsenic   | 6.1    | 1.0        | mg/kg | 6010B  | 11/29/11 | 1    |

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Reported: 12/01/11 14:01 Printed: 12/01/11 16:58

Attachment A  
List of Analytes with QC Qualifiers

| Sample<br>Number | Work<br>Group | Sample<br>Type | Analyte              | Run<br>ID | Qualifier |
|------------------|---------------|----------------|----------------------|-----------|-----------|
| L548464-01       | WG567573      | SAMP           | ORP                  | R1950672  | T8        |
|                  | WG567411      | SAMP           | Chromium, Hexavalent | R1951094  | O         |



Attachment B  
Explanation of QC Qualifier Codes

| Qualifier | Meaning  |
|-----------|--|
| 0         | (ESC) Sample diluted due to matrix interferences that impaired the ability to make an accurate analytical determination. The detection limit is elevated in order to reflect the necessary dilution. |
| T8        | (ESC) - Additional method/sample information: Sample(s) received past/too close to holding time expiration.  |

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods, it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable "unless qualified as 'R' (Rejected)."

Definitions

- Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.
- Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Difference.
- Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromatography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.
- TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.



YOUR LAB OF CHOICE

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Quality Assurance Report  
Level II

L548464

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| Analyte  | Result  | Laboratory Blank |       | Limit  | Batch    | Date Analyzed  |
|--|---------|------------------|-------|--------|----------|----------------|
|  |         | Units            | % Rec |        |          |                |
| Benzene  | < .0005 | mg/kg            |       |        | WG567252 | 11/24/11 23:07 |
| Ethylbenzene   | < .0005 | mg/kg            |       |        | WG567252 | 11/24/11 23:07 |
| Toluene  | < .005  | mg/kg            |       |        | WG567252 | 11/24/11 23:07 |
| TPH (GC/FID) Low Fraction  | < .1    | mg/kg            |       |        | WG567252 | 11/24/11 23:07 |
| Total Xylene   | < .0015 | mg/kg            |       |        | WG567252 | 11/24/11 23:07 |
| a,a,a-Trifluorotoluene(FID)  |         | % Rec.           | 95.86 | 59-128 | WG567252 | 11/24/11 23:07 |
| a,a,a-Trifluorotoluene(PID)  |         | % Rec.           | 96.00 | 54-144 | WG567252 | 11/24/11 23:07 |
| Arsenic  | < 1     | mg/kg            |       |        | WG567265 | 11/27/11 18:28 |
| Barium   | < .25   | mg/kg            |       |        | WG567265 | 11/27/11 18:28 |
| Cadmium  | < .25   | mg/kg            |       |        | WG567265 | 11/27/11 18:28 |
| Chromium   | < .5    | mg/kg            |       |        | WG567265 | 11/27/11 18:28 |
| Copper   | < 1     | mg/kg            |       |        | WG567265 | 11/27/11 18:28 |
| Lead   | < .25   | mg/kg            |       |        | WG567265 | 11/27/11 18:28 |
| Nickel   | < 1     | mg/kg            |       |        | WG567265 | 11/27/11 18:28 |
| Selenium   | < 1     | mg/kg            |       |        | WG567265 | 11/27/11 18:28 |
| Silver   | < .5    | mg/kg            |       |        | WG567265 | 11/27/11 18:28 |
| Zinc   | < 1.5   | mg/kg            |       |        | WG567265 | 11/27/11 18:28 |
| pH   | 4.20    | su               |       |        | WG567410 | 11/28/11 16:11 |
| Mercury  | < .02   | mg/kg            |       |        | WG567255 | 11/28/11 10:21 |
| 1-Methylnaphthalene  | < .006  | mg/kg            |       |        | WG567393 | 11/28/11 14:06 |
| 2-Chloronaphthalene  | < .006  | mg/kg            |       |        | WG567393 | 11/28/11 14:06 |
| 2-Methylnaphthalene  | < .006  | mg/kg            |       |        | WG567393 | 11/28/11 14:06 |
| Acenaphthene   | < .006  | mg/kg            |       |        | WG567393 | 11/28/11 14:06 |
| Acenaphthylene   | < .006  | mg/kg            |       |        | WG567393 | 11/28/11 14:06 |
| Anthracene   | < .006  | mg/kg            |       |        | WG567393 | 11/28/11 14:06 |
| Benzo(a)anthracene   | < .006  | mg/kg            |       |        | WG567393 | 11/28/11 14:06 |
| Benzo(a)pyrene   | < .006  | mg/kg            |       |        | WG567393 | 11/28/11 14:06 |
| Benzo(b)fluoranthene   | < .006  | mg/kg            |       |        | WG567393 | 11/28/11 14:06 |
| Benzo(g,h,i)perylene   | < .006  | mg/kg            |       |        | WG567393 | 11/28/11 14:06 |
| Benzo(k)fluoranthene   | < .006  | mg/kg            |       |        | WG567393 | 11/28/11 14:06 |
| Chrysene   | < .006  | mg/kg            |       |        | WG567393 | 11/28/11 14:06 |
| Dibenz(a,h)anthracene  | < .006  | mg/kg            |       |        | WG567393 | 11/28/11 14:06 |
| Fluoranthene   | < .006  | mg/kg            |       |        | WG567393 | 11/28/11 14:06 |
| Fluorene   | < .006  | mg/kg            |       |        | WG567393 | 11/28/11 14:06 |
| Indeno(1,2,3-cd)pyrene   | < .006  | mg/kg            |       |        | WG567393 | 11/28/11 14:06 |
| Naphthalene  | < .006  | mg/kg            |       |        | WG567393 | 11/28/11 14:06 |
| Phenanthrene   | < .006  | mg/kg            |       |        | WG567393 | 11/28/11 14:06 |
| Pyrene   | < .006  | mg/kg            |       |        | WG567393 | 11/28/11 14:06 |
| 2-Fluorobiphenyl   |         | % Rec.           | 84.28 | 34-129 | WG567393 | 11/28/11 14:06 |
| Nitrobenzene-d5  |         | % Rec.           | 94.18 | 14-141 | WG567393 | 11/28/11 14:06 |
| p-Terphenyl-d14  |         | % Rec.           | 105.2 | 25-139 | WG567393 | 11/28/11 14:06 |
| TPH (GC/FID) High Fraction   | < 4     | ppm              |       |        | WG567258 | 11/29/11 00:20 |
| o-Terphenyl  |         | % Rec.           | 89.27 | 50-150 | WG567258 | 11/29/11 00:20 |
| Arsenic  | < 1     | mg/kg            |       |        | WG567450 | 11/29/11 09:31 |
| Specific Conductance   | 2.40    | umhos/cm         |       |        | WG567723 | 11/30/11 10:20 |
| * Performance of this Analyte is outside of established criteria.                          |         |                  |       |        |          |                |
| For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.' |         |                  |       |        |          |                |



**YOUR LAB OF CHOICE**

HRL Compliance Solutions- CO  
Kate Ramsay  
744 Horizon Ct., Suite 140

Grand Junction, CO 81506

Quality Assurance Report  
Level II

L548464

12065 Lebanon Rd.  
Mt. Juliet, TN 37122  
(615) 758-5858  
1-800-767-5859  
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

December 01, 2011

| Analyte             | Result | Laboratory Blank |       | Limit | Batch    | Date Analyzed  |
|---------------------|--------|------------------|-------|-------|----------|----------------|
|                     |        | Units            | % Rec |       |          |                |
| Chromium,Hexavalent | < 2    | mg/kg            |       |       | WG567411 | 12/01/11 12:01 |

| Analyte              | Units    | Duplicate |           | RPD   | Limit | Ref Samp   | Batch    |
|----------------------|----------|-----------|-----------|-------|-------|------------|----------|
|                      |          | Result    | Duplicate |       |       |            |          |
| Arsenic              | mg/kg    | 0         | 0         | 0     | 20    | L548472-04 | WG567265 |
| Barium               | mg/kg    | 120.      | 130.      | 3.92  | 20    | L548472-04 | WG567265 |
| Cadmium              | mg/kg    | 0         | 0         | 0     | 20    | L548472-04 | WG567265 |
| Chromium             | mg/kg    | 15.0      | 14.0      | 8.22  | 20    | L548472-04 | WG567265 |
| Copper               | mg/kg    | 17.0      | 17.0      | 2.33  | 20    | L548472-04 | WG567265 |
| Lead                 | mg/kg    | 9.50      | 9.40      | 1.48  | 20    | L548472-04 | WG567265 |
| Nickel               | mg/kg    | 13.0      | 13.0      | 2.28  | 20    | L548472-04 | WG567265 |
| Selenium             | mg/kg    | 1.50      | 2.40      | 44.9* | 20    | L548472-04 | WG567265 |
| Silver               | mg/kg    | 0         | 0.220     | NA    | 20    | L548472-04 | WG567265 |
| Zinc                 | mg/kg    | 44.0      | 43.0      | 1.84  | 20    | L548472-04 | WG567265 |
| pH                   | su       | 10.0      | 10.0      | 2.27* | 1     | L548320-04 | WG567410 |
| pH                   | su       | 7.10      | 7.10      | 0     | 1     | L548472-04 | WG567410 |
| Mercury              | mg/kg    | 0.00760   | 0.00730   | 4.03  | 20    | L548393-01 | WG567255 |
| Arsenic              | mg/kg    | 4.00      | 3.90      | 2.28  | 20    | L548464-03 | WG567450 |
| Specific Conductance | umhos/cm | 3200      | 3100      | 3.17  | 20    | L548320-05 | WG567723 |
| Specific Conductance | umhos/cm | 38.0      | 33.0      | 15.4  | 20    | L548472-04 | WG567723 |
| ORP                  | mV       | 55.0      | 53.0      | 3.70  | 20    | L548320-02 | WG567573 |
| ORP                  | mV       | 160.      | 160.      | 0     | 20    | L548468-01 | WG567573 |
| Chromium,Hexavalent  | mg/kg    | 0         | 0         | 0     | 20    | L548467-01 | WG567411 |
| Chromium,Hexavalent  | mg/kg    | 0         | 0         | 0     | 20    | L548320-01 | WG567411 |

| Analyte                     | Units | Laboratory Control Sample |        | % Rec | Limit    | Batch    |
|-----------------------------|-------|---------------------------|--------|-------|----------|----------|
|                             |       | Known Val                 | Result |       |          |          |
| Benzene                     | mg/kg | .05                       | 0.0469 | 93.8  | 76-113   | WG567252 |
| Ethylbenzene                | mg/kg | .05                       | 0.0482 | 96.5  | 78-115   | WG567252 |
| Toluene                     | mg/kg | .05                       | 0.0508 | 102.  | 76-114   | WG567252 |
| Total Xylene                | mg/kg | .15                       | 0.139  | 92.6  | 81-118   | WG567252 |
| a,a,a-Trifluorotoluene(PID) |       |                           |        | 95.21 | 54-144   | WG567252 |
| TPH (GC/FID) Low Fraction   | mg/kg | 5.5                       | 6.09   | 111.  | 67-135   | WG567252 |
| a,a,a-Trifluorotoluene(FID) |       |                           |        | 102.3 | 59-128   | WG567252 |
| Arsenic                     | mg/kg | 92.6                      | 83.7   | 90.4  | 82.9-117 | WG567265 |
| Barium                      | mg/kg | 169                       | 164.   | 97.0  | 82.8-117 | WG567265 |
| Cadmium                     | mg/kg | 61.8                      | 61.0   | 98.7  | 83.3-117 | WG567265 |
| Chromium                    | mg/kg | 71.3                      | 66.4   | 93.1  | 81.8-118 | WG567265 |
| Copper                      | mg/kg | 81.2                      | 81.1   | 99.9  | 83.9-116 | WG567265 |
| Lead                        | mg/kg | 92.4                      | 86.1   | 93.2  | 83.3-117 | WG567265 |
| Nickel                      | mg/kg | 59.1                      | 56.2   | 95.1  | 83.8-116 | WG567265 |
| Selenium                    | mg/kg | 89.5                      | 88.9   | 99.3  | 79-121   | WG567265 |
| Silver                      | mg/kg | 34.4                      | 32.0   | 93.0  | 66.3-134 | WG567265 |

\* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



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| Analyte                    | Units    | Laboratory Control<br>Known Val | Sample<br>Result | % Rec | Limit       | Batch    |
|----------------------------|----------|---------------------------------|------------------|-------|-------------|----------|
| Zinc                       | mg/kg    | 141                             | 135.             | 95.7  | 80.9-119    | WG567265 |
| pH                         | su       | 7.98                            | 8.00             | 100.  | 98-101      | WG567410 |
| Mercury                    | mg/kg    | 3.77                            | 4.38             | 116.  | 71.6-128    | WG567255 |
| 1-Methylnaphthalene        | mg/kg    | .033                            | 0.0283           | 85.7  | 48-113      | WG567393 |
| 2-Chloronaphthalene        | mg/kg    | .033                            | 0.0288           | 87.2  | 51-114      | WG567393 |
| 2-Methylnaphthalene        | mg/kg    | .033                            | 0.0290           | 87.8  | 44-109      | WG567393 |
| Acenaphthene               | mg/kg    | .033                            | 0.0288           | 87.2  | 52-108      | WG567393 |
| Acenaphthylene             | mg/kg    | .033                            | 0.0287           | 86.9  | 51-110      | WG567393 |
| Anthracene                 | mg/kg    | .033                            | 0.0306           | 92.6  | 58-120      | WG567393 |
| Benzo(a)anthracene         | mg/kg    | .033                            | 0.0302           | 91.4  | 54-110      | WG567393 |
| Benzo(a)pyrene             | mg/kg    | .033                            | 0.0302           | 91.6  | 56-118      | WG567393 |
| Benzo(b)fluoranthene       | mg/kg    | .033                            | 0.0316           | 95.9  | 55-114      | WG567393 |
| Benzo(g,h,i)perylene       | mg/kg    | .033                            | 0.0245           | 74.3  | 48-130      | WG567393 |
| Benzo(k)fluoranthene       | mg/kg    | .033                            | 0.0296           | 89.8  | 55-122      | WG567393 |
| Chrysene                   | mg/kg    | .033                            | 0.0296           | 89.6  | 57-118      | WG567393 |
| Dibenz(a,h)anthracene      | mg/kg    | .033                            | 0.0248           | 75.3  | 53-122      | WG567393 |
| Fluoranthene               | mg/kg    | .033                            | 0.0307           | 93.0  | 58-118      | WG567393 |
| Fluorene                   | mg/kg    | .033                            | 0.0295           | 89.4  | 54-109      | WG567393 |
| Indeno(1,2,3-cd)pyrene     | mg/kg    | .033                            | 0.0253           | 76.7  | 51-125      | WG567393 |
| Naphthalene                | mg/kg    | .033                            | 0.0272           | 82.5  | 45-105      | WG567393 |
| Phenanthrene               | mg/kg    | .033                            | 0.0302           | 91.4  | 53-114      | WG567393 |
| Pyrene                     | mg/kg    | .033                            | 0.0295           | 89.2  | 53-121      | WG567393 |
| 2-Fluorobiphenyl           |          |                                 |                  | 87.25 | 34-129      | WG567393 |
| Nitrobenzene-d5            |          |                                 |                  | 89.08 | 14-141      | WG567393 |
| p-Terphenyl-d14            |          |                                 |                  | 99.66 | 25-139      | WG567393 |
| TPH (GC/FID) High Fraction | ppm      | 60                              | 49.1             | 81.8  | 50-150      | WG567258 |
| o-Terphenyl                |          |                                 |                  | 99.30 | 50-150      | WG567258 |
| Arsenic                    | mg/kg    | 92.6                            | 87.0             | 94.0  | 82.9-117    | WG567450 |
| Specific Conductance       | umhos/cm | 427                             | 420.             | 98.4  | 85-115      | WG567723 |
| ORP                        | mV       | 229                             | 230.             | 100.  | 95.6-104.37 | WG567573 |
| Chromium,Hexavalent        | mg/kg    | 203                             | 157.             | 77.3  | 50-150      | WG567411 |

| Analyte                     | Units | Laboratory Control<br>Result | Ref    | Sample Duplicate<br>%Rec | Limit  | RPD   | Limit | Batch    |
|-----------------------------|-------|------------------------------|--------|--------------------------|--------|-------|-------|----------|
| Benzene                     | mg/kg | 0.0479                       | 0.0469 | 96.0                     | 76-113 | 2.13  | 20    | WG567252 |
| Ethylbenzene                | mg/kg | 0.0490                       | 0.0482 | 98.0                     | 78-115 | 1.63  | 20    | WG567252 |
| Toluene                     | mg/kg | 0.0526                       | 0.0508 | 105.                     | 76-114 | 3.48  | 20    | WG567252 |
| Total Xylene                | mg/kg | 0.140                        | 0.139  | 93.0                     | 81-118 | 0.550 | 20    | WG567252 |
| a,a,a-Trifluorotoluene(PID) |       |                              |        | 96.94                    | 54-144 |       |       | WG567252 |
| TPH (GC/FID) Low Fraction   | mg/kg | 6.07                         | 6.09   | 110.                     | 67-135 | 0.360 | 20    | WG567252 |
| a,a,a-Trifluorotoluene(FID) |       |                              |        | 102.2                    | 59-128 |       |       | WG567252 |
| a,a,a-Trifluorotoluene(PID) |       |                              |        | 107.9                    | 54-144 |       |       | WG567252 |

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| Analyte                    | Units  | Laboratory Control Sample Duplicate |        |       | Limit       | RPD  | Limit | Batch    |
|----------------------------|--------|-------------------------------------|--------|-------|-------------|------|-------|----------|
|                            |        | Result                              | Ref    | %Rec  |             |      |       |          |
| pH                         | su     | 8.00                                | 8.00   | 100.  | 98-101      | 0    | 20    | WG567410 |
| 1-Methylnaphthalene        | mg/kg  | 0.0269                              | 0.0283 | 81.0  | 48-113      | 5.12 | 24    | WG567393 |
| 2-Chloronaphthalene        | mg/kg  | 0.0268                              | 0.0288 | 81.0  | 51-114      | 7.01 | 24    | WG567393 |
| 2-Methylnaphthalene        | mg/kg  | 0.0276                              | 0.0290 | 84.0  | 44-109      | 4.75 | 24    | WG567393 |
| Acenaphthene               | mg/kg  | 0.0270                              | 0.0288 | 82.0  | 52-108      | 6.19 | 22    | WG567393 |
| Acenaphthylene             | mg/kg  | 0.0277                              | 0.0287 | 84.0  | 51-110      | 3.32 | 21    | WG567393 |
| Anthracene                 | mg/kg  | 0.0284                              | 0.0306 | 86.0  | 58-120      | 7.26 | 20    | WG567393 |
| Benzo(a)anthracene         | mg/kg  | 0.0288                              | 0.0302 | 87.0  | 54-110      | 4.82 | 22    | WG567393 |
| Benzo(a)pyrene             | mg/kg  | 0.0285                              | 0.0302 | 86.0  | 56-118      | 5.75 | 21    | WG567393 |
| Benzo(b)fluoranthene       | mg/kg  | 0.0296                              | 0.0316 | 90.0  | 55-114      | 6.49 | 20    | WG567393 |
| Benzo(g,h,i)perylene       | mg/kg  | 0.0225                              | 0.0245 | 68.0  | 48-130      | 8.47 | 20    | WG567393 |
| Benzo(k)fluoranthene       | mg/kg  | 0.0282                              | 0.0296 | 86.0  | 55-122      | 4.89 | 25    | WG567393 |
| Chrysene                   | mg/kg  | 0.0278                              | 0.0296 | 84.0  | 57-118      | 6.21 | 20    | WG567393 |
| Dibenz(a,h)anthracene      | mg/kg  | 0.0227                              | 0.0248 | 69.0  | 53-122      | 9.24 | 20    | WG567393 |
| Fluoranthene               | mg/kg  | 0.0287                              | 0.0307 | 87.0  | 58-118      | 6.58 | 20    | WG567393 |
| Fluorene                   | mg/kg  | 0.0278                              | 0.0295 | 84.0  | 54-109      | 5.92 | 20    | WG567393 |
| Indeno(1,2,3-cd)pyrene     | mg/kg  | 0.0235                              | 0.0253 | 71.0  | 51-125      | 7.39 | 21    | WG567393 |
| Naphthalene                | mg/kg  | 0.0251                              | 0.0272 | 76.0  | 45-105      | 8.10 | 24    | WG567393 |
| Phenanthrene               | mg/kg  | 0.0287                              | 0.0302 | 87.0  | 53-114      | 5.02 | 20    | WG567393 |
| Pyrene                     | mg/kg  | 0.0279                              | 0.0295 | 85.0  | 53-121      | 5.24 | 20    | WG567393 |
| 2-Fluorobiphenyl           |        |                                     |        | 82.36 | 34-129      |      |       | WG567393 |
| Nitrobenzene-d5            |        |                                     |        | 88.72 | 14-141      |      |       | WG567393 |
| p-Terphenyl-d14            |        |                                     |        | 110.1 | 25-139      |      |       | WG567393 |
| TPH (GC/FID) High Fraction | ppm    | 46.6                                | 49.1   | 78.0  | 50-150      | 5.21 | 25    | WG567258 |
| o-Terphenyl                |        |                                     |        | 89.57 | 50-150      |      |       | WG567258 |
| Specific Conductance       | umhos/ | 420.                                | 420.   | 98.0  | 85-115      | 0    | 20    | WG567723 |
| ORP                        | mV     | 220.                                | 230.   | 96.0  | 95.6-104.37 | 4.44 | 20    | WG567573 |
| Chromium,Hexavalent        | mg/kg  | 146.                                | 157.   | 72.0  | 50-150      | 7.26 | 20    | WG567411 |

| Analyte                     | Units | Matrix Spike |         |     |       | Limit  | Ref Samp   | Batch    |
|-----------------------------|-------|--------------|---------|-----|-------|--------|------------|----------|
|                             |       | MS Res       | Ref Res | TV  | % Rec |        |            |          |
| Benzene                     | mg/kg | 0.220        | 0       | .05 | 87.9  | 32-137 | L548180-15 | WG567252 |
| Ethylbenzene                | mg/kg | 0.227        | 0       | .05 | 90.6  | 10-150 | L548180-15 | WG567252 |
| Toluene                     | mg/kg | 0.244        | 0       | .05 | 97.5  | 20-142 | L548180-15 | WG567252 |
| Total Xylene                | mg/kg | 0.656        | 0       | .15 | 87.5  | 16-141 | L548180-15 | WG567252 |
| a,a,a-Trifluorotoluene(PID) |       |              |         |     | 96.20 | 54-144 |            | WG567252 |
| TPH (GC/FID) Low Fraction   | mg/kg | 26.1         | 0       | 5.5 | 94.9  | 55-109 | L548180-15 | WG567252 |
| a,a,a-Trifluorotoluene(FID) |       |              |         |     | 100.1 | 59-128 |            | WG567252 |
| Arsenic                     | mg/kg | 46.3         | 0       | 50  | 92.6  | 75-125 | L548472-04 | WG567265 |
| Barium                      | mg/kg | 178.         | 130.    | 50  | 96.0  | 75-125 | L548472-04 | WG567265 |
| Cadmium                     | mg/kg | 48.3         | 0       | 50  | 96.6  | 75-125 | L548472-04 | WG567265 |
| Chromium                    | mg/kg | 62.6         | 14.0    | 50  | 97.2  | 75-125 | L548472-04 | WG567265 |
| Copper                      | mg/kg | 67.4         | 17.0    | 50  | 101.  | 75-125 | L548472-04 | WG567265 |
| Lead                        | mg/kg | 56.2         | 9.40    | 50  | 93.6  | 75-125 | L548472-04 | WG567265 |
| Nickel                      | mg/kg | 58.0         | 13.0    | 50  | 90.0  | 75-125 | L548472-04 | WG567265 |
| Selenium                    | mg/kg | 43.5         | 2.40    | 50  | 82.2  | 75-125 | L548472-04 | WG567265 |

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| Analyte                    | Units | MS Res | Matrix Spike |      | % Rec | Limit  | Ref Samp   | Batch    |
|----------------------------|-------|--------|--------------|------|-------|--------|------------|----------|
|                            |       |        | Ref Res      | TV   |       |        |            |          |
| Silver                     | mg/kg | 47.3   | 0.220        | 50   | 94.2  | 75-125 | L548472-04 | WG567265 |
| Zinc                       | mg/kg | 94.7   | 43.0         | 50   | 103.  | 75-125 | L548472-04 | WG567265 |
| Mercury                    | mg/kg | 0.261  | 0.00730      | .25  | 101.  | 70-130 | L548393-01 | WG567255 |
| 1-Methylnaphthalene        | mg/kg | 0.0240 | 0            | .033 | 72.9  | 25-155 | L548177-07 | WG567393 |
| 2-Chloronaphthalene        | mg/kg | 0.0237 | 0            | .033 | 71.7  | 31-153 | L548177-07 | WG567393 |
| 2-Methylnaphthalene        | mg/kg | 0.0251 | 0            | .033 | 76.0  | 22-172 | L548177-07 | WG567393 |
| Acenaphthene               | mg/kg | 0.0243 | 0            | .033 | 73.7  | 43-133 | L548177-07 | WG567393 |
| Acenaphthylene             | mg/kg | 0.0241 | 0            | .033 | 73.0  | 42-146 | L548177-07 | WG567393 |
| Anthracene                 | mg/kg | 0.0250 | 0            | .033 | 75.8  | 38-153 | L548177-07 | WG567393 |
| Benzo(a)anthracene         | mg/kg | 0.0249 | 0            | .033 | 75.4  | 31-142 | L548177-07 | WG567393 |
| Benzo(a)pyrene             | mg/kg | 0.0245 | 0            | .033 | 74.1  | 26-152 | L548177-07 | WG567393 |
| Benzo(b)fluoranthene       | mg/kg | 0.0257 | 0            | .033 | 78.0  | 10-188 | L548177-07 | WG567393 |
| Benzo(g,h,i)perylene       | mg/kg | 0.0183 | 0            | .033 | 55.6  | 10-176 | L548177-07 | WG567393 |
| Benzo(k)fluoranthene       | mg/kg | 0.0241 | 0            | .033 | 73.2  | 22-163 | L548177-07 | WG567393 |
| Chrysene                   | mg/kg | 0.0241 | 0            | .033 | 73.0  | 26-146 | L548177-07 | WG567393 |
| Dibenz(a,h)anthracene      | mg/kg | 0.0187 | 0            | .033 | 56.6  | 10-160 | L548177-07 | WG567393 |
| Fluoranthene               | mg/kg | 0.0250 | 0            | .033 | 75.8  | 23-160 | L548177-07 | WG567393 |
| Fluorene                   | mg/kg | 0.0246 | 0            | .033 | 74.5  | 44-143 | L548177-07 | WG567393 |
| Indeno(1,2,3-cd)pyrene     | mg/kg | 0.0188 | 0            | .033 | 57.0  | 10-157 | L548177-07 | WG567393 |
| Naphthalene                | mg/kg | 0.0227 | 0            | .033 | 68.9  | 22-156 | L548177-07 | WG567393 |
| Phenanthrene               | mg/kg | 0.0246 | 0            | .033 | 74.6  | 23-164 | L548177-07 | WG567393 |
| Pyrene                     | mg/kg | 0.0241 | 0            | .033 | 73.1  | 12-170 | L548177-07 | WG567393 |
| 2-Fluorobiphenyl           |       |        |              |      | 72.31 | 34-129 |            | WG567393 |
| Nitrobenzene-d5            |       |        |              |      | 76.73 | 14-141 |            | WG567393 |
| p-Terphenyl-d14            |       |        |              |      | 84.49 | 25-139 |            | WG567393 |
| TPH (GC/FID) High Fraction | ppm   | 38.0   | 0            | 60   | 63.4  | 50-150 | L548467-01 | WG567258 |
| o-Terphenyl                |       |        |              |      | 62.82 | 50-150 |            | WG567258 |
| Arsenic                    | mg/kg | 46.1   | 3.90         | 50   | 84.4  | 75-125 | L548464-03 | WG567450 |
| Chromium,Hexavalent        | mg/kg | 12.4   | 0            | 20   | 62.0  | 50-150 | L548449-01 | WG567411 |

| Analyte                     | Units | MSD   | Matrix Spike Duplicate |       | Limit  | RPD    | Limit | Ref Samp   | Batch    |
|-----------------------------|-------|-------|------------------------|-------|--------|--------|-------|------------|----------|
|                             |       |       | Ref                    | %Rec  |        |        |       |            |          |
| Benzene                     | mg/kg | 0.227 | 0.220                  | 90.8  | 32-137 | 3.25   | 39    | L548180-15 | WG567252 |
| Ethylbenzene                | mg/kg | 0.231 | 0.227                  | 92.6  | 10-150 | 2.13   | 44    | L548180-15 | WG567252 |
| Toluene                     | mg/kg | 0.249 | 0.244                  | 99.7  | 20-142 | 2.21   | 42    | L548180-15 | WG567252 |
| Total Xylene                | mg/kg | 0.663 | 0.656                  | 88.4  | 16-141 | 1.12   | 46    | L548180-15 | WG567252 |
| a,a,a-Trifluorotoluene(PID) |       |       |                        | 94.94 | 54-144 |        |       |            | WG567252 |
| TPH (GC/FID) Low Fraction   | mg/kg | 26.1  | 26.1                   | 94.8  | 55-109 | 0.0700 | 20    | L548180-15 | WG567252 |
| a,a,a-Trifluorotoluene(FID) |       |       |                        | 100.2 | 59-128 |        |       |            | WG567252 |
| Arsenic                     | mg/kg | 46.5  | 46.3                   | 93.0  | 75-125 | 0.431  | 20    | L548472-04 | WG567265 |
| Barium                      | mg/kg | 177.  | 178.                   | 94.0  | 75-125 | 0.563  | 20    | L548472-04 | WG567265 |
| Cadmium                     | mg/kg | 48.6  | 48.3                   | 97.2  | 75-125 | 0.619  | 20    | L548472-04 | WG567265 |
| Chromium                    | mg/kg | 62.1  | 62.6                   | 96.2  | 75-125 | 0.802  | 20    | L548472-04 | WG567265 |
| Copper                      | mg/kg | 67.5  | 67.4                   | 101.  | 75-125 | 0.148  | 20    | L548472-04 | WG567265 |
| Lead                        | mg/kg | 56.0  | 56.2                   | 93.2  | 75-125 | 0.357  | 20    | L548472-04 | WG567265 |
| Nickel                      | mg/kg | 57.7  | 58.0                   | 89.4  | 75-125 | 0.519  | 20    | L548472-04 | WG567265 |

\* Performance of this Analyte is outside of established criteria.

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Est. 1970

Quality Assurance Report  
Level II

December 01, 2011

L548464

| Analyte                    | Units | MSD    | Matrix Spike Duplicate |       | Limit  | RPD   | Limit | Ref Samp   | Batch    |
|----------------------------|-------|--------|------------------------|-------|--------|-------|-------|------------|----------|
|                            |       |        | Ref                    | %Rec  |        |       |       |            |          |
| Selenium                   | mg/kg | 42.6   | 43.5                   | 80.4  | 75-125 | 2.09  | 20    | L548472-04 | WG567265 |
| Silver                     | mg/kg | 47.3   | 47.3                   | 94.2  | 75-125 | 0     | 20    | L548472-04 | WG567265 |
| Zinc                       | mg/kg | 94.9   | 94.7                   | 104.  | 75-125 | 0.211 | 20    | L548472-04 | WG567265 |
| Mercury                    | mg/kg | 0.271  | 0.261                  | 105.  | 70-130 | 3.76  | 20    | L548393-01 | WG567255 |
| 1-Methylnaphthalene        | mg/kg | 0.0265 | 0.0240                 | 80.3  | 25-155 | 9.71  | 27    | L548177-07 | WG567393 |
| 2-Chloronaphthalene        | mg/kg | 0.0266 | 0.0237                 | 80.7  | 31-153 | 11.8  | 22    | L548177-07 | WG567393 |
| 2-Methylnaphthalene        | mg/kg | 0.0269 | 0.0251                 | 81.6  | 22-172 | 7.07  | 29    | L548177-07 | WG567393 |
| Acenaphthene               | mg/kg | 0.0264 | 0.0243                 | 79.9  | 43-133 | 8.03  | 26    | L548177-07 | WG567393 |
| Acenaphthylene             | mg/kg | 0.0262 | 0.0241                 | 79.4  | 42-146 | 8.43  | 22    | L548177-07 | WG567393 |
| Anthracene                 | mg/kg | 0.0272 | 0.0250                 | 82.4  | 38-153 | 8.30  | 27    | L548177-07 | WG567393 |
| Benzo(a)anthracene         | mg/kg | 0.0263 | 0.0249                 | 79.8  | 31-142 | 5.66  | 31    | L548177-07 | WG567393 |
| Benzo(a)pyrene             | mg/kg | 0.0263 | 0.0245                 | 79.8  | 26-152 | 7.44  | 32    | L548177-07 | WG567393 |
| Benzo(b)fluoranthene       | mg/kg | 0.0273 | 0.0257                 | 82.8  | 10-188 | 5.93  | 33    | L548177-07 | WG567393 |
| Benzo(g,h,i)perylene       | mg/kg | 0.0172 | 0.0183                 | 52.2  | 10-176 | 6.15  | 30    | L548177-07 | WG567393 |
| Benzo(k)fluoranthene       | mg/kg | 0.0254 | 0.0241                 | 77.1  | 22-163 | 5.23  | 29    | L548177-07 | WG567393 |
| Chrysene                   | mg/kg | 0.0255 | 0.0241                 | 77.4  | 26-146 | 5.82  | 30    | L548177-07 | WG567393 |
| Dibenz(a,h)anthracene      | mg/kg | 0.0177 | 0.0187                 | 53.7  | 10-160 | 5.27  | 39    | L548177-07 | WG567393 |
| Fluoranthene               | mg/kg | 0.0283 | 0.0250                 | 85.8  | 23-160 | 12.4  | 22    | L548177-07 | WG567393 |
| Fluorene                   | mg/kg | 0.0258 | 0.0246                 | 78.1  | 44-143 | 4.74  | 23    | L548177-07 | WG567393 |
| Indeno(1,2,3-cd)pyrene     | mg/kg | 0.0184 | 0.0188                 | 55.7  | 10-157 | 2.30  | 40    | L548177-07 | WG567393 |
| Naphthalene                | mg/kg | 0.0245 | 0.0227                 | 74.3  | 22-156 | 7.64  | 27    | L548177-07 | WG567393 |
| Phenanthrene               | mg/kg | 0.0272 | 0.0246                 | 82.5  | 23-164 | 10.1  | 25    | L548177-07 | WG567393 |
| Pyrene                     | mg/kg | 0.0257 | 0.0241                 | 77.8  | 12-170 | 6.24  | 24    | L548177-07 | WG567393 |
| 2-Fluorobiphenyl           |       |        |                        | 74.59 | 34-129 |       |       |            | WG567393 |
| Nitrobenzene-d5            |       |        |                        | 86.08 | 14-141 |       |       |            | WG567393 |
| p-Terphenyl-d14            |       |        |                        | 84.84 | 25-139 |       |       |            | WG567393 |
| TPH (GC/FID) High Fraction | ppm   | 40.5   | 38.0                   | 67.5  | 50-150 | 6.31  | 25    | L548467-01 | WG567258 |
| o-Terphenyl                |       |        |                        | 70.84 | 50-150 |       |       |            | WG567258 |
| Arsenic                    | mg/kg | 48.0   | 46.1                   | 88.2  | 75-125 | 4.04  | 20    | L548464-03 | WG567450 |
| Chromium, Hexavalent       | mg/kg | 12.3   | 12.4                   | 61.5  | 50-150 | 0.810 | 20    | L548449-01 | WG567411 |

Batch number /Run number / Sample number cross reference

WG567252: R1944233: L548464-01  
WG567265: R1946576: L548464-01  
WG567410: R1947633: L548464-01  
WG567255: R1948074: L548464-01  
WG567393: R1948172: L548464-01  
WG567258: R1948213: L548464-01  
WG567450: R1948633: L548464-02 03 04 05 06  
WG567723: R1949912: L548464-01  
WG567593: R1950652: L548464-01  
WG567573: R1950672: L548464-01  
WG567411: R1951094: L548464-01

\* \* Calculations are performed prior to rounding of reported values.  
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The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.