

State of Colorado
Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203 Phone: (303)894-2100 Fax:(303)894-2109



| | | | |
|-----------------------|----|----|----|
| DE | ET | OE | ES |
| RECEIVED 8/10/2011 | | | |

SUNDRY NOTICE

Submit original plus one copy. This form is to be used for general, technical and environmental sundry Information. For proposed or completed operations, describe in full on Technical Information Page (Page 2 of this form.) Identify well or other facility by API Number or by OGCC Facility ID. Operator shall send an informational copy of all sundry notices for wells located in High Density Areas to the Local Government Designee (Rule 603b.)

| | | |
|--|------------------------------------|--------------------------------------|
| 1. OGCC Operator Number: 96850 | 4. Contact Name Karolina Blaney | Complete the Attachment Checklist |
| 2. Name of Operator: Williams Production RMT Company | Phone: 970-683-2285 | |
| 3. Address: 1058 County Road 215 City: Parachute State: CO Zip: 81635 | Fax: | |
| 5. API Number N/A | OGCC Facility ID Number 322416 | OP OGCC |
| 6. Well/Facility Name: Clough | 7. Well/Facility Number 66S94W | Survey Plat |
| 8. Location (QtrQtr, Sec, Twp, Rng, Meridian): SESE Sec 16 T6S R94W | | Directional Survey |
| 9. County: Garfield | 10. Field Name: Rulison | Surface Eqpm Diagram |
| 11. Federal, Indian or State Lease Number: 12866 | | Technical Info Page X |
| | | Other X |

General Notice

| | | | | | | | | | | | | | | | | | | | | | |
|--|---|--|---------|--|---------|--|--|--|--|--|--|--|--|---|--|--|--|---|--|--|--|
| <input type="checkbox"/> CHANGE OF LOCATION: Attach New Survey Plat (a change of surface qtr/qtr is substantive and requires a new permit) | | | | | | | | | | | | | | | | | | | | | |
| Change of Surface Footage from Exterior Section Lines: | <table border="1"><tr><td></td><td>FNL/FSL</td><td></td><td>FEL/FWL</td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td>Change of Surface Footage to Exterior Section Lines:</td><td></td><td></td><td></td></tr><tr><td>Change of Bottomhole Footage from Exterior Section Lines:</td><td></td><td></td><td></td></tr><tr><td>Change of Bottomhole Footage to Exterior Section Lines:</td><td></td><td></td><td></td></tr></table> attach directional survey | | FNL/FSL | | FEL/FWL | | | | | Change of Surface Footage to Exterior Section Lines: | | | | Change of Bottomhole Footage from Exterior Section Lines: | | | | Change of Bottomhole Footage to Exterior Section Lines: | | | |
| | FNL/FSL | | FEL/FWL | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| Change of Surface Footage to Exterior Section Lines: | | | | | | | | | | | | | | | | | | | | | |
| Change of Bottomhole Footage from Exterior Section Lines: | | | | | | | | | | | | | | | | | | | | | |
| Change of Bottomhole Footage to Exterior Section Lines: | | | | | | | | | | | | | | | | | | | | | |
| Bottomhole location Qtr/Qtr, Sec, Twp, Rng, Mer _____ | | | | | | | | | | | | | | | | | | | | | |
| Latitude _____ | Distance to nearest property line _____ Distance to nearest bldg, public rd, utility or RR _____ | | | | | | | | | | | | | | | | | | | | |
| Longitude _____ | Distance to nearest lease line _____ Is location in a High Density Area (rule 603b)? Yes/No <input type="checkbox"/> | | | | | | | | | | | | | | | | | | | | |
| Ground Elevation _____ | Distance to nearest well same formation _____ Surface owner consultation date: _____ | | | | | | | | | | | | | | | | | | | | |
| GPS DATA: Date of Measurement _____ PDOP Reading _____ Instrument Operator's Name _____ | | | | | | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> CHANGE SPACING UNIT Formation _____ Formation Code _____ Spacing order number _____ Unit Acreage _____ Unit configuration _____ | <input type="checkbox"/> Remove from surface bond Signed surface use agreement attached | | | | | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> CHANGE OF OPERATOR (prior to drilling): Effective Date: _____ Plugging Bond: <input type="checkbox"/> Blanket <input type="checkbox"/> Individual | <input type="checkbox"/> CHANGE WELL NAME From: _____ NUMBER _____ To: _____ Effective Date: _____ | | | | | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> ABANDONED LOCATION: Was location ever built? <input type="checkbox"/> Yes <input type="checkbox"/> No Is site ready for Inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No Date Ready for Inspection: _____ | <input type="checkbox"/> NOTICE OF CONTINUED SHUT IN STATUS Date well shut in or temporarily abandoned: _____ Has Production Equipment been removed from site? <input type="checkbox"/> Yes <input type="checkbox"/> No MIT required if shut in longer than two years. Date of last MIT _____ | | | | | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> SPUD DATE: _____ | <input type="checkbox"/> REQUEST FOR CONFIDENTIAL STATUS (6 mos from date casing set) | | | | | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> SUBSEQUENT REPORT OF STAGE, SQUEEZE OR REMEDIAL CEMENT WORK *submit cbl and cement job summaries Method used _____ Cementing tool setting/perf depth _____ Cement volume _____ Cement top _____ Cement bottom _____ Date _____ | | | | | | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> RECLAMATION: Attach technical page describing final reclamation procedures per Rule 1004. Final reclamation will commence on approximately _____ <input type="checkbox"/> Final reclamation is completed and site is ready for inspection. | | | | | | | | | | | | | | | | | | | | | |

Technical Engineering/Environmental Notice

| | | |
|---|--|---|
| <input type="checkbox"/> Notice of Intent Approximate Start Date: _____ | <input checked="" type="checkbox"/> Report of Work Done Date Work Completed: August 1, 2011 | |
| Details of work must be described in full on Technical Information Page (Page 2 must be submitted.) | | |
| <input type="checkbox"/> Intent to Recomplete (submit form 2) | <input type="checkbox"/> Request to Vent or Flare | <input type="checkbox"/> E&P Waste Disposal |
| <input type="checkbox"/> Change Drilling Plans | <input type="checkbox"/> Repair Well | <input type="checkbox"/> Beneficial Reuse of E&P Waste |
| <input type="checkbox"/> Gross Interval Changed? | <input type="checkbox"/> Rule 502 variance requested | <input checked="" type="checkbox"/> Status Update/Change of Remediation Plans |
| <input type="checkbox"/> Casing/Cementing Program Change | <input type="checkbox"/> Other: _____ | for Spills and Releases |

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.

Signed: Karolina Blaney Date: 8/9/2011 Email: karolina.blaney@williams.com
Print Name: Karolina Blaney Title: Environmental Specialist.

COGCC Approved: _____ Title _____ Date: _____

CONDITIONS OF APPROVAL, IF ANY:



FOR OGCC USE ONLY

| | | | |
|--|---|-----------------------|--------|
| 1. OGCC Operator Number: | 96850 | API Number: | |
| 2. Name of Operator: | Williams Production RMT Company OGCC Facility ID # 322416 | | |
| 3. Well/Facility Name: | Clough | Well/Facility Number: | 66S94W |
| 4. Location (QtrQtr, Sec, Twp, Rng, Meridian): | SESE Sec 16 T6S R94W | | |

This form is to be completed whenever a Sundry Notice is submitted requiring detailed report of work to be performed or completed. This form shall be transmitted within 30 days of work completed as a "subsequent" report and must accompany Form 4, page 1.

5. DESCRIBE PROPOSED OR COMPLETED OPERATIONS

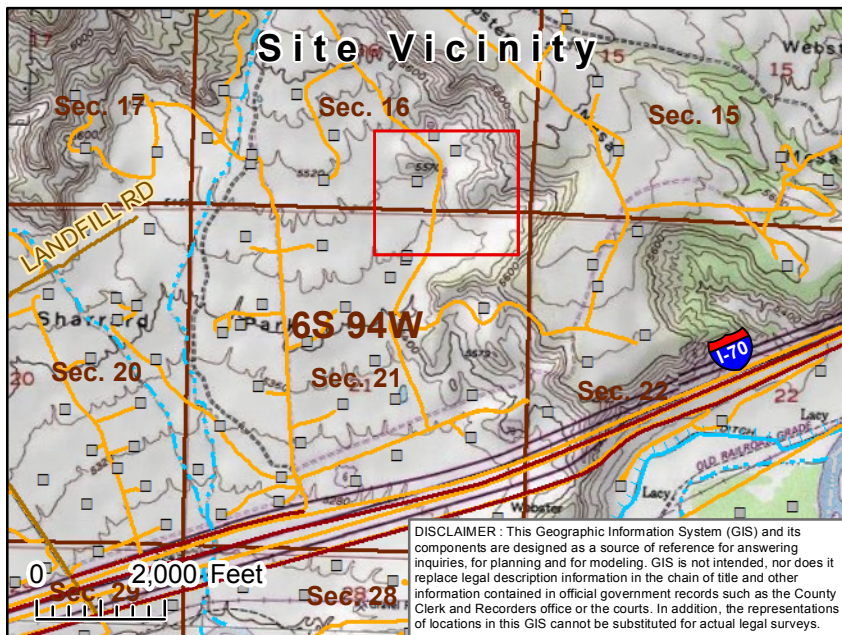
Williams Production is submitting the analytical data for the Clough 104 Tank Farm as requested by the COGCC on May 12, 2011. The release occurred on April 28, 2011. The incident tracking number for the release is 2214062. Samples were collected from 4 locations in the effected drainage and analyzed for Table 910-1. Refer to the attached map for the sampling locations. All parameters were below Table 910-1 standards with the exception of Arsenic and the SAR values, which was expected to be somewhat higher due to the fact the release was produced water. The original plan was to flush the drainage with fresh water if the residual salt content was high. This did not occur due to fairly significant precipitation events which aided in lowering the residual salt content. Williams would like to close this incident out if approved by the COGCC. A copy of the analytical results is included with the Form 4 for reference. Background arsenic data is from two nearby locations with similar soil types as the area of the release.

Below are the SAR analytical results.

| | | |
|-------------------------------|------------------|-------|
| Confluence Bar Ditch/Drainage | SAR on 4/29/2011 | 112.9 |
| Confluence Bar Ditch/Drainage | SAR on 5/13/2011 | 81.5 |
| Straw Bale Check Dam | SAR on 4/29/2011 | 54.1 |
| Straw Bale Check Dam | SAR on 5/13/2011 | 133.4 |
| Open Area in Drainage | SAR on 4/29/2011 | 99.4 |
| Open Area in Drainage | SAR on 5/13/2011 | 39.5 |
| Terminus (Drainage) | SAR on 4/29/2011 | 118.9 |
| Terminus (Drainage) | SAR on 5/13/2011 | 49.6 |
| Background (Drainage) | SAR on 7/28/2011 | 19.8 |
| Background (Surrounding soil) | SAR on 7/28/2011 | 4.0 |

Below are the analytical results for arsenic in the drainage and background locations.

| | | |
|-------------------------------|-----------------------------|------------|
| Confluence Bar Ditch/Drainage | Depth Collected 0-12 inches | 6.2 mg/Kg |
| Straw Bale Check Dam | Depth Collected 0-12 inches | 6.9 mg/Kg |
| Open Area in Drainage | Depth Collected 0-12 inches | 6.2 mg/Kg |
| Terminus (Drainage) | Depth Collected 0-12 inches | 6.8 mg/Kg |
| Background Location 1 | Depth Collected 0-12 inches | 7.4 mg/Kg |
| Background Location 2 | Depth Collected 0-12 inches | 10.5 mg/Kg |
| Background Location 3 | Depth Collected 0-12 inches | 8.1 mg/Kg |
| Background Location 4 | Depth Collected 0-12 inches | 8.8 mg/Kg |
| Background Location 5 | Depth Collected 0-12 inches | 8.8 mg/Kg |



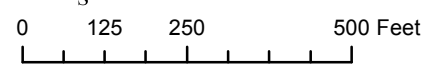
Attachment A--Sample Location Map

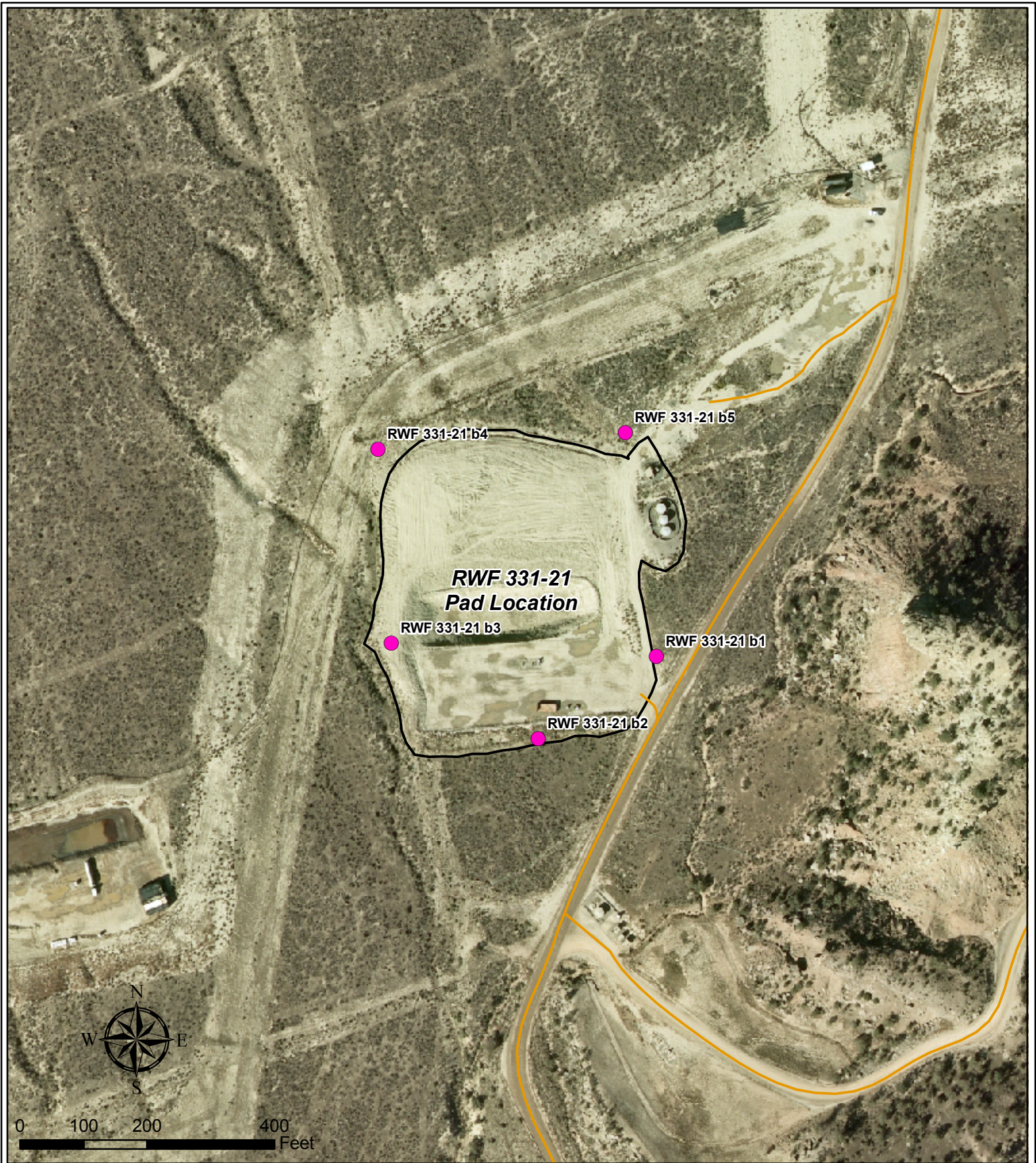
Location: Clough 104 Tank Farm

Williams Production RMT

Legend

- | | | |
|-------------|---------------------|--------------------------------|
| | Sample Location | Transportation Features |
| | Well Head Location | Highways |
| | Township | Public Roads |
| | Section | Williams Access Roads |
| PLSS | | Hydrographic Features |
| | Perennial Stream | |
| | Intermittent Stream | |
| | Ditch/Canal | |





Legend

- Background Sample Location
- Existing Road
- Existing Pad Limit of Disturbance

RWF 331-21
Arsenic Background Sample Location Map
T6S R94W, Section 21

November 15, 2010





28-Jul-2011

Mark Mumby
HRL Compliance Solutions
744 Horizon Ct. Suite 140
Grand Junction, CO 81506

Re: **Clough 104 Tank Farm**

Work Order: **1105070**

Dear Mark,

ALS Environmental received 4 samples on 04-May-2011 09:30 AM for the analyses presented in the following report.

This is a REVISED REPORT. The Case Narrative provides information discussing the reason for issuing a revised report. The total number of pages in this revision is 31.

If you have any questions regarding these test results, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Ann Preston".

Electronically approved by: Ann Preston

Ann Preston
Project Manager



Certificate No: IL100452

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

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

Environmental 

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: HRL Compliance Solutions
Project: Clough 104 Tank Farm
Work Order: 1105070

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> |
|--------------------|---------------------------------|---------------|-------------------|------------------------|----------------------|--------------------------|
| 1105070-01 | Staw Bale Check Dam | Soil | | 4/29/2011 10:20 | 5/4/2011 09:30 | <input type="checkbox"/> |
| 1105070-02 | Confluence Bar Ditch / Drainage | Soil | | 4/29/2011 09:55 | 5/4/2011 09:30 | <input type="checkbox"/> |
| 1105070-03 | Terminus (Drainage) | Soil | | 4/29/2011 10:45 | 5/4/2011 09:30 | <input type="checkbox"/> |
| 1105070-04 | Open Area in Drainage | Soil | | 4/29/2011 10:30 | 5/4/2011 09:30 | <input type="checkbox"/> |

Client: HRL Compliance Solutions**Project:** Clough 104 Tank Farm**Work Order:** 1105070**Case Narrative**

The samples for pH were received after the hold time had expired.

Batch 33137 MS/MSD data for Metals is not related to this project's samples.

The ID for sample 1105070-04 was changed to Open Area in Drainage.

Client: HRL Compliance Solutions
Project: Clough 104 Tank Farm
WorkOrder: 1105070

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 detected below quantitation 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 |

| <u>Acronym</u> | <u>Description</u> |
|-----------------------|-------------------------------------|
| DUP | Method Duplicate |
| LCS | Laboratory Control Sample |
| LCSD | Laboratory Control Sample Duplicate |
| MBLK | Method Blank |
| MDL | Method Detection Limit |
| MQL | Method Quantitation Limit |
| MS | Matrix Spike |
| MSD | Matrix Spike Duplicate |
| PDS | Post Digestion Spike |
| PQL | Practical Quantitation Limit |
| SD | Serial Dilution |
| TDL | Target Detection Limit |

| <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 |
| s.u. | Standard Units |

ALS Group USA, Corp

Date: 28-Jul-11

Client: HRL Compliance Solutions

Project: Clough 104 Tank Farm

Sample ID: Staw Bale Check Dam

Collection Date: 4/29/2011 10:20 AM

Work Order: 1105070

Lab ID: 1105070-01

Matrix: SOIL

| Analyses | Result | Qual | Report Limit | Units | Dilution Factor | Date Analyzed |
|--|--------------------|------|--------------------|------------------|----------------------------|---------------------------|
| DIESEL RANGE ORGANICS BY GC-FID | | | | | | |
| DRO (C10-C28) | 12 | | SW8015M | | Prep Date: 5/4/2011 | Analyst: RM |
| | | | 4.8 | mg/Kg-dry | 1 | 5/4/2011 06:18 PM |
| Surr: 4-Terphenyl-d14 | 90.1 | | 39-115 | %REC | 1 | 5/4/2011 06:18 PM |
| GASOLINE RANGE ORGANICS BY GC-FID | | | | | | |
| GRO (C6-C10) | ND | | SW8015 | | | Analyst: RM |
| | | | 5.9 | mg/Kg-dry | 100 | 5/4/2011 07:27 PM |
| Surr: Toluene-d8 | 95.5 | | 50-150 | %REC | 100 | 5/4/2011 07:27 PM |
| MERCURY BY CVAA | | | | | | |
| Mercury | ND | | SW7471 | | Prep Date: 5/6/2011 | Analyst: LR |
| | | | 0.022 | mg/Kg-dry | 1 | 5/6/2011 02:08 PM |
| METALS BY ICP-MS | | | | | | |
| Arsenic | 6.2 | | SW6020A | | Prep Date: 5/4/2011 | Analyst: CES |
| | | | 0.89 | mg/Kg-dry | 2 | 5/5/2011 08:26 PM |
| Barium | 230 | | 0.89 | mg/Kg-dry | 2 | 5/5/2011 08:26 PM |
| Cadmium | 1.4 | | 0.36 | mg/Kg-dry | 2 | 5/5/2011 08:26 PM |
| Chromium | 6.1 | | 0.89 | mg/Kg-dry | 2 | 5/5/2011 08:26 PM |
| Copper | 7.2 | | 0.89 | mg/Kg-dry | 2 | 5/5/2011 08:26 PM |
| Lead | 13 | | 0.89 | mg/Kg-dry | 2 | 5/5/2011 08:26 PM |
| Nickel | 9.2 | | 0.89 | mg/Kg-dry | 2 | 5/5/2011 08:26 PM |
| Selenium | ND | | 0.89 | mg/Kg-dry | 2 | 5/5/2011 08:26 PM |
| Silver | ND | | 0.89 | mg/Kg-dry | 2 | 5/5/2011 08:26 PM |
| Zinc | 38 | | 1.8 | mg/Kg-dry | 2 | 5/5/2011 08:26 PM |
| SUBCONTRACTED ANALYSES | | | | | | |
| Subcontracted Analyses | Rcvd 5/6/11 | | SUBCONTRACT | | | Analyst: A&LGL |
| | | | attached | | 1 | 5/6/2011 |
| SEMI-VOLATILE ORGANIC COMPOUNDS | | | | | | |
| Acenaphthene | ND | | SW8270 | | Prep Date: 5/4/2011 | Analyst: CW |
| | | | 34 | µg/Kg-dry | 1 | 5/4/2011 08:20 PM |
| Anthracene | ND | | 34 | µg/Kg-dry | 1 | 5/4/2011 08:20 PM |
| Benzo(a)anthracene | ND | | 34 | µg/Kg-dry | 1 | 5/4/2011 08:20 PM |
| Benzo(a)pyrene | ND | | 34 | µg/Kg-dry | 1 | 5/4/2011 08:20 PM |
| Benzo(b)fluoranthene | ND | | 34 | µg/Kg-dry | 1 | 5/4/2011 08:20 PM |
| Benzo(g,h,i)perylene | ND | | 34 | µg/Kg-dry | 1 | 5/4/2011 08:20 PM |
| Benzo(k)fluoranthene | ND | | 34 | µg/Kg-dry | 1 | 5/4/2011 08:20 PM |
| Chrysene | ND | | 34 | µg/Kg-dry | 1 | 5/4/2011 08:20 PM |
| Dibenzo(a,h)anthracene | ND | | 34 | µg/Kg-dry | 1 | 5/4/2011 08:20 PM |
| Fluoranthene | ND | | 34 | µg/Kg-dry | 1 | 5/4/2011 08:20 PM |
| Fluorene | ND | | 34 | µg/Kg-dry | 1 | 5/4/2011 08:20 PM |
| Indeno(1,2,3-cd)pyrene | ND | | 34 | µg/Kg-dry | 1 | 5/4/2011 08:20 PM |
| Naphthalene | ND | | 34 | µg/Kg-dry | 1 | 5/4/2011 08:20 PM |
| Pyrene | ND | | 34 | µg/Kg-dry | 1 | 5/4/2011 08:20 PM |
| Surr: 2,4,6-Tribromophenol | 72.4 | | 34-140 | %REC | 1 | 5/4/2011 08:20 PM |

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

ALS Group USA, Corp

Date: 28-Jul-11

Client: HRL Compliance Solutions
Project: Clough 104 Tank Farm
Sample ID: Staw Bale Check Dam
Collection Date: 4/29/2011 10:20 AM

Work Order: 1105070
Lab ID: 1105070-01
Matrix: SOIL

| Analyses | Result | Qual | Report Limit | Units | Dilution Factor | Date Analyzed |
|-----------------------------------|--------|------|--------------------|-------------|----------------------------|---------------------|
| <i>Surr: 2-Fluorobiphenyl</i> | 71.5 | | 12-100 | %REC | 1 | 5/4/2011 08:20 PM |
| <i>Surr: 2-Fluorophenol</i> | 84.2 | | 33-117 | %REC | 1 | 5/4/2011 08:20 PM |
| <i>Surr: 4-Terphenyl-d14</i> | 81.2 | | 25-137 | %REC | 1 | 5/4/2011 08:20 PM |
| <i>Surr: Nitrobenzene-d5</i> | 83.8 | | 37-107 | %REC | 1 | 5/4/2011 08:20 PM |
| <i>Surr: Phenol-d6</i> | 79.9 | | 40-106 | %REC | 1 | 5/4/2011 08:20 PM |
| VOLATILE ORGANIC COMPOUNDS | | | SW8260 | | | Analyst: AK |
| Benzene | ND | | 28 | µg/Kg-dry | 100 | 5/4/2011 06:12 PM |
| Ethylbenzene | ND | | 26 | µg/Kg-dry | 100 | 5/4/2011 06:12 PM |
| m,p-Xylene | ND | | 53 | µg/Kg-dry | 100 | 5/4/2011 06:12 PM |
| o-Xylene | ND | | 30 | µg/Kg-dry | 100 | 5/4/2011 06:12 PM |
| Toluene | ND | | 26 | µg/Kg-dry | 100 | 5/4/2011 06:12 PM |
| Xylenes, Total | ND | | 83 | µg/Kg-dry | 100 | 5/4/2011 06:12 PM |
| CHROMIUM, TRIVALENT | | | CALCULATION | | | Analyst: MB |
| Chromium, Trivalent | 6.1 | | | mg/Kg-dry | 1 | 5/6/2011 12:30 PM |
| CHROMIUM, HEXAVALENT | | | SW7196A | | Prep Date: 5/4/2011 | Analyst: MB |
| Chromium, Hexavalent | ND | | 0.58 | mg/Kg-dry | 1 | 5/6/2011 12:00 PM |
| MOISTURE | | | A2540 G | | | Analyst: JJG |
| Moisture | 15 | | 0.050 | % of sample | 1 | 5/4/2011 12:58 PM |
| PH | | | SW9045D | | | Analyst: JJG |
| pH | 8.04 | H | | s.u. | 1 | 5/4/2011 09:00 AM |

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

ALS Group USA, Corp

Date: 28-Jul-11

Client: HRL Compliance Solutions

Project: Clough 104 Tank Farm

Work Order: 1105070

Sample ID: Confluence Bar Ditch / Drainage

Lab ID: 1105070-02

Collection Date: 4/29/2011 09:55 AM

Matrix: SOIL

| Analyses | Result | Qual | Report Limit | Units | Dilution Factor | Date Analyzed |
|--|--------------------|------|--------------------|------------------|----------------------------|---------------------------|
| DIESEL RANGE ORGANICS BY GC-FID | | | | | | |
| DRO (C10-C28) | 17 | | SW8015M | | Prep Date: 5/4/2011 | Analyst: RM |
| | | | 5.1 | mg/Kg-dry | 1 | 5/4/2011 06:18 PM |
| Surr: 4-Terphenyl-d14 | 113 | | 39-115 | %REC | 1 | 5/4/2011 06:18 PM |
| GASOLINE RANGE ORGANICS BY GC-FID | | | | | | |
| GRO (C6-C10) | ND | | SW8015 | | | Analyst: RM |
| | | | 6.2 | mg/Kg-dry | 100 | 5/4/2011 07:53 PM |
| Surr: Toluene-d8 | 106 | | 50-150 | %REC | 100 | 5/4/2011 07:53 PM |
| MERCURY BY CVAA | | | | | | |
| Mercury | 0.051 | | SW7471 | | Prep Date: 5/6/2011 | Analyst: LR |
| | | | 0.022 | mg/Kg-dry | 1 | 5/6/2011 02:10 PM |
| METALS BY ICP-MS | | | | | | |
| Arsenic | 6.9 | | SW6020A | | Prep Date: 5/4/2011 | Analyst: CES |
| | | | 1.0 | mg/Kg-dry | 2 | 5/5/2011 08:32 PM |
| Barium | 250 | | 1.0 | mg/Kg-dry | 2 | 5/5/2011 08:32 PM |
| Cadmium | 1.2 | | 0.40 | mg/Kg-dry | 2 | 5/5/2011 08:32 PM |
| Chromium | 6.9 | | 1.0 | mg/Kg-dry | 2 | 5/5/2011 08:32 PM |
| Copper | 8.9 | | 1.0 | mg/Kg-dry | 2 | 5/5/2011 08:32 PM |
| Lead | 11 | | 1.0 | mg/Kg-dry | 2 | 5/5/2011 08:32 PM |
| Nickel | 9.8 | | 1.0 | mg/Kg-dry | 2 | 5/5/2011 08:32 PM |
| Selenium | ND | | 1.0 | mg/Kg-dry | 2 | 5/5/2011 08:32 PM |
| Silver | ND | | 1.0 | mg/Kg-dry | 2 | 5/5/2011 08:32 PM |
| Zinc | 39 | | 2.0 | mg/Kg-dry | 2 | 5/5/2011 08:32 PM |
| SUBCONTRACTED ANALYSES | | | | | | |
| Subcontracted Analyses | Rcvd 5/6/11 | | SUBCONTRACT | | | Analyst: A&LGL |
| | | | attached | | 1 | 5/6/2011 |
| SEMI-VOLATILE ORGANIC COMPOUNDS | | | | | | |
| Acenaphthene | ND | | SW8270 | | Prep Date: 5/4/2011 | Analyst: CW |
| | | | 37 | µg/Kg-dry | 1 | 5/4/2011 08:56 PM |
| Anthracene | ND | | 37 | µg/Kg-dry | 1 | 5/4/2011 08:56 PM |
| Benzo(a)anthracene | ND | | 37 | µg/Kg-dry | 1 | 5/4/2011 08:56 PM |
| Benzo(a)pyrene | ND | | 37 | µg/Kg-dry | 1 | 5/4/2011 08:56 PM |
| Benzo(b)fluoranthene | ND | | 37 | µg/Kg-dry | 1 | 5/4/2011 08:56 PM |
| Benzo(g,h,i)perylene | ND | | 37 | µg/Kg-dry | 1 | 5/4/2011 08:56 PM |
| Benzo(k)fluoranthene | ND | | 37 | µg/Kg-dry | 1 | 5/4/2011 08:56 PM |
| Chrysene | ND | | 37 | µg/Kg-dry | 1 | 5/4/2011 08:56 PM |
| Dibenzo(a,h)anthracene | ND | | 37 | µg/Kg-dry | 1 | 5/4/2011 08:56 PM |
| Fluoranthene | ND | | 37 | µg/Kg-dry | 1 | 5/4/2011 08:56 PM |
| Fluorene | ND | | 37 | µg/Kg-dry | 1 | 5/4/2011 08:56 PM |
| Indeno(1,2,3-cd)pyrene | ND | | 37 | µg/Kg-dry | 1 | 5/4/2011 08:56 PM |
| Naphthalene | ND | | 37 | µg/Kg-dry | 1 | 5/4/2011 08:56 PM |
| Pyrene | ND | | 37 | µg/Kg-dry | 1 | 5/4/2011 08:56 PM |
| Surr: 2,4,6-Tribromophenol | 73.5 | | 34-140 | %REC | 1 | 5/4/2011 08:56 PM |

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

ALS Group USA, Corp

Date: 28-Jul-11

Client: HRL Compliance Solutions

Project: Clough 104 Tank Farm

Sample ID: Confluence Bar Ditch / Drainage

Collection Date: 4/29/2011 09:55 AM

Work Order: 1105070

Lab ID: 1105070-02

Matrix: SOIL

| Analyses | Result | Qual | Report Limit | Units | Dilution Factor | Date Analyzed |
|-----------------------------------|--------|------|--------------------|-------------|----------------------------|---------------------|
| Surr: 2-Fluorobiphenyl | 71.2 | | 12-100 | %REC | 1 | 5/4/2011 08:56 PM |
| Surr: 2-Fluorophenol | 85.6 | | 33-117 | %REC | 1 | 5/4/2011 08:56 PM |
| Surr: 4-Terphenyl-d14 | 87.6 | | 25-137 | %REC | 1 | 5/4/2011 08:56 PM |
| Surr: Nitrobenzene-d5 | 85.1 | | 37-107 | %REC | 1 | 5/4/2011 08:56 PM |
| Surr: Phenol-d6 | 80.8 | | 40-106 | %REC | 1 | 5/4/2011 08:56 PM |
| VOLATILE ORGANIC COMPOUNDS | | | SW8260 | | | Analyst: AK |
| Benzene | 100 | | 21 | µg/Kg-dry | 100 | 5/4/2011 06:39 PM |
| Ethylbenzene | 56 | | 15 | µg/Kg-dry | 100 | 5/4/2011 06:39 PM |
| m,p-Xylene | 910 | | 19 | µg/Kg-dry | 100 | 5/4/2011 06:39 PM |
| o-Xylene | 160 | | 15 | µg/Kg-dry | 100 | 5/4/2011 06:39 PM |
| Toluene | 630 | | 14 | µg/Kg-dry | 100 | 5/4/2011 06:39 PM |
| Xylenes, Total | 1,100 | | 35 | µg/Kg-dry | 100 | 5/4/2011 06:39 PM |
| CHROMIUM, TRIVALENT | | | CALCULATION | | | Analyst: MB |
| Chromium, Trivalent | 6.8 | | | mg/Kg-dry | 1 | 5/6/2011 12:30 PM |
| CHROMIUM, HEXAVALENT | | | SW7196A | | Prep Date: 5/4/2011 | Analyst: MB |
| Chromium, Hexavalent | ND | | 0.60 | mg/Kg-dry | 1 | 5/6/2011 12:00 PM |
| MOISTURE | | | A2540 G | | | Analyst: JJG |
| Moisture | 20 | | 0.050 | % of sample | 1 | 5/4/2011 12:58 PM |
| PH | | | SW9045D | | | Analyst: JJG |
| pH | 7.58 | H | | s.u. | 1 | 5/4/2011 09:00 AM |

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

ALS Group USA, Corp

Date: 28-Jul-11

Client: HRL Compliance Solutions

Project: Clough 104 Tank Farm

Sample ID: Terminus (Drainage)

Collection Date: 4/29/2011 10:45 AM

Work Order: 1105070

Lab ID: 1105070-03

Matrix: SOIL

| Analyses | Result | Qual | Report Limit | Units | Dilution Factor | Date Analyzed |
|--|------------|--------------------|--------------------|------------------|----------------------------|---------------------------|
| DIESEL RANGE ORGANICS BY GC-FID | | | | | | |
| DRO (C10-C28) | 6.2 | | SW8015M | | Prep Date: 5/4/2011 | Analyst: RM |
| | | | 5.5 | mg/Kg-dry | 1 | 5/4/2011 06:42 PM |
| Surr: 4-Terphenyl-d14 | 91.8 | | 39-115 | %REC | 1 | 5/4/2011 06:42 PM |
| GASOLINE RANGE ORGANICS BY GC-FID | | | | | | |
| GRO (C6-C10) | ND | | SW8015 | | | Analyst: RM |
| | | | 6.6 | mg/Kg-dry | 100 | 5/4/2011 08:19 PM |
| Surr: Toluene-d8 | 95.2 | | 50-150 | %REC | 100 | 5/4/2011 08:19 PM |
| MERCURY BY CVAA | | | | | | |
| Mercury | ND | | SW7471 | | Prep Date: 5/6/2011 | Analyst: LR |
| | | | 0.024 | mg/Kg-dry | 1 | 5/6/2011 02:12 PM |
| METALS BY ICP-MS | | | | | | |
| Arsenic | 6.8 | | SW6020A | | Prep Date: 5/4/2011 | Analyst: CES |
| | | | 1.0 | mg/Kg-dry | 2 | 5/5/2011 08:38 PM |
| Barium | 250 | | 1.0 | mg/Kg-dry | 2 | 5/5/2011 08:38 PM |
| Cadmium | 1.5 | | 0.40 | mg/Kg-dry | 2 | 5/5/2011 08:38 PM |
| Chromium | 7.3 | | 1.0 | mg/Kg-dry | 2 | 5/5/2011 08:38 PM |
| Copper | 8.5 | | 1.0 | mg/Kg-dry | 2 | 5/5/2011 08:38 PM |
| Lead | 14 | | 1.0 | mg/Kg-dry | 2 | 5/5/2011 08:38 PM |
| Nickel | 10 | | 1.0 | mg/Kg-dry | 2 | 5/5/2011 08:38 PM |
| Selenium | ND | | 1.0 | mg/Kg-dry | 2 | 5/5/2011 08:38 PM |
| Silver | ND | | 1.0 | mg/Kg-dry | 2 | 5/5/2011 08:38 PM |
| Zinc | 40 | | 2.0 | mg/Kg-dry | 2 | 5/5/2011 08:38 PM |
| SUBCONTRACTED ANALYSES | | | | | | |
| Subcontracted Analyses | | Rcvd 5/6/11 | SUBCONTRACT | | | Analyst: A&LGL |
| | | | attached | | 1 | 5/6/2011 |
| SEMI-VOLATILE ORGANIC COMPOUNDS | | | | | | |
| Acenaphthene | ND | | SW8270 | | Prep Date: 5/4/2011 | Analyst: CW |
| | | | 39 | µg/Kg-dry | 1 | 5/4/2011 09:32 PM |
| Anthracene | ND | | 39 | µg/Kg-dry | 1 | 5/4/2011 09:32 PM |
| Benzo(a)anthracene | ND | | 39 | µg/Kg-dry | 1 | 5/4/2011 09:32 PM |
| Benzo(a)pyrene | ND | | 39 | µg/Kg-dry | 1 | 5/4/2011 09:32 PM |
| Benzo(b)fluoranthene | ND | | 39 | µg/Kg-dry | 1 | 5/4/2011 09:32 PM |
| Benzo(g,h,i)perylene | ND | | 39 | µg/Kg-dry | 1 | 5/4/2011 09:32 PM |
| Benzo(k)fluoranthene | ND | | 39 | µg/Kg-dry | 1 | 5/4/2011 09:32 PM |
| Chrysene | ND | | 39 | µg/Kg-dry | 1 | 5/4/2011 09:32 PM |
| Dibenzo(a,h)anthracene | ND | | 39 | µg/Kg-dry | 1 | 5/4/2011 09:32 PM |
| Fluoranthene | ND | | 39 | µg/Kg-dry | 1 | 5/4/2011 09:32 PM |
| Fluorene | ND | | 39 | µg/Kg-dry | 1 | 5/4/2011 09:32 PM |
| Indeno(1,2,3-cd)pyrene | ND | | 39 | µg/Kg-dry | 1 | 5/4/2011 09:32 PM |
| Naphthalene | ND | | 39 | µg/Kg-dry | 1 | 5/4/2011 09:32 PM |
| Pyrene | ND | | 39 | µg/Kg-dry | 1 | 5/4/2011 09:32 PM |
| Surr: 2,4,6-Tribromophenol | 66.9 | | 34-140 | %REC | 1 | 5/4/2011 09:32 PM |

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

ALS Group USA, Corp

Date: 28-Jul-11

Client: HRL Compliance Solutions

Project: Clough 104 Tank Farm

Sample ID: Terminus (Drainage)

Collection Date: 4/29/2011 10:45 AM

Work Order: 1105070

Lab ID: 1105070-03

Matrix: SOIL

| Analyses | Result | Qual | Report Limit | Units | Dilution Factor | Date Analyzed |
|-----------------------------------|--------|------|--------------------|-------------|----------------------------|---------------------|
| <i>Surr: 2-Fluorobiphenyl</i> | 62.4 | | 12-100 | %REC | 1 | 5/4/2011 09:32 PM |
| <i>Surr: 2-Fluorophenol</i> | 77.0 | | 33-117 | %REC | 1 | 5/4/2011 09:32 PM |
| <i>Surr: 4-Terphenyl-d14</i> | 95.6 | | 25-137 | %REC | 1 | 5/4/2011 09:32 PM |
| <i>Surr: Nitrobenzene-d5</i> | 77.9 | | 37-107 | %REC | 1 | 5/4/2011 09:32 PM |
| <i>Surr: Phenol-d6</i> | 72.9 | | 40-106 | %REC | 1 | 5/4/2011 09:32 PM |
| VOLATILE ORGANIC COMPOUNDS | | | SW8260 | | | Analyst: AK |
| Benzene | ND | | 23 | µg/Kg-dry | 100 | 5/4/2011 07:07 PM |
| Ethylbenzene | ND | | 16 | µg/Kg-dry | 100 | 5/4/2011 07:07 PM |
| m,p-Xylene | ND | | 21 | µg/Kg-dry | 100 | 5/4/2011 07:07 PM |
| o-Xylene | ND | | 16 | µg/Kg-dry | 100 | 5/4/2011 07:07 PM |
| Toluene | ND | | 15 | µg/Kg-dry | 100 | 5/4/2011 07:07 PM |
| Xylenes, Total | ND | | 37 | µg/Kg-dry | 100 | 5/4/2011 07:07 PM |
| CHROMIUM, TRIVALENT | | | CALCULATION | | | Analyst: MB |
| Chromium, Trivalent | 7.3 | | | mg/Kg-dry | 1 | 5/6/2011 12:30 PM |
| CHROMIUM, HEXAVALENT | | | SW7196A | | Prep Date: 5/4/2011 | Analyst: MB |
| Chromium, Hexavalent | ND | | 0.64 | mg/Kg-dry | 1 | 5/6/2011 12:00 PM |
| MOISTURE | | | A2540 G | | | Analyst: JJG |
| Moisture | 25 | | 0.050 | % of sample | 1 | 5/4/2011 12:58 PM |
| PH | | | SW9045D | | | Analyst: JJG |
| pH | 8.29 | H | | s.u. | 1 | 5/4/2011 09:00 AM |

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

ALS Group USA, Corp

Date: 28-Jul-11

Client: HRL Compliance Solutions

Project: Clough 104 Tank Farm

Sample ID: Open Area in Drainage

Collection Date: 4/29/2011 10:30 AM

Work Order: 1105070

Lab ID: 1105070-04

Matrix: SOIL

| Analyses | Result | Qual | Report Limit | Units | Dilution Factor | Date Analyzed |
|--|--------------------|------|--------------------|------------------|----------------------------|---------------------------|
| DIESEL RANGE ORGANICS BY GC-FID | | | | | | |
| DRO (C10-C28) | 7.1 | | SW8015M | | Prep Date: 5/4/2011 | Analyst: RM |
| | | | 4.8 | mg/Kg-dry | 1 | 5/4/2011 06:42 PM |
| Surr: 4-Terphenyl-d14 | 105 | | 39-115 | %REC | 1 | 5/4/2011 06:42 PM |
| GASOLINE RANGE ORGANICS BY GC-FID | | | | | | |
| GRO (C6-C10) | ND | | SW8015 | | | Analyst: RM |
| | | | 5.8 | mg/Kg-dry | 100 | 5/4/2011 08:45 PM |
| Surr: Toluene-d8 | 96.0 | | 50-150 | %REC | 100 | 5/4/2011 08:45 PM |
| MERCURY BY CVAA | | | | | | |
| Mercury | 0.032 | | SW7471 | | Prep Date: 5/6/2011 | Analyst: LR |
| | | | 0.021 | mg/Kg-dry | 1 | 5/6/2011 02:14 PM |
| METALS BY ICP-MS | | | | | | |
| Arsenic | 6.2 | | SW6020A | | Prep Date: 5/4/2011 | Analyst: CES |
| | | | 0.86 | mg/Kg-dry | 2 | 5/5/2011 08:44 PM |
| Barium | 300 | | 0.86 | mg/Kg-dry | 2 | 5/5/2011 08:44 PM |
| Cadmium | 1.9 | | 0.34 | mg/Kg-dry | 2 | 5/5/2011 08:44 PM |
| Chromium | 6.6 | | 0.86 | mg/Kg-dry | 2 | 5/5/2011 08:44 PM |
| Copper | 27 | | 0.86 | mg/Kg-dry | 2 | 5/5/2011 08:44 PM |
| Lead | 15 | | 0.86 | mg/Kg-dry | 2 | 5/5/2011 08:44 PM |
| Nickel | 9.1 | | 0.86 | mg/Kg-dry | 2 | 5/5/2011 08:44 PM |
| Selenium | 1.0 | | 0.86 | mg/Kg-dry | 2 | 5/5/2011 08:44 PM |
| Silver | ND | | 0.86 | mg/Kg-dry | 2 | 5/5/2011 08:44 PM |
| Zinc | 37 | | 1.7 | mg/Kg-dry | 2 | 5/5/2011 08:44 PM |
| SUBCONTRACTED ANALYSES | | | | | | |
| Subcontracted Analyses | Rcvd 5/6/11 | | SUBCONTRACT | | | Analyst: A&LGL |
| | | | attached | | 1 | 5/6/2011 |
| SEMI-VOLATILE ORGANIC COMPOUNDS | | | | | | |
| Acenaphthene | ND | | SW8270 | | Prep Date: 5/4/2011 | Analyst: CW |
| | | | 35 | µg/Kg-dry | 1 | 5/4/2011 10:08 PM |
| Anthracene | ND | | 35 | µg/Kg-dry | 1 | 5/4/2011 10:08 PM |
| Benzo(a)anthracene | ND | | 35 | µg/Kg-dry | 1 | 5/4/2011 10:08 PM |
| Benzo(a)pyrene | ND | | 35 | µg/Kg-dry | 1 | 5/4/2011 10:08 PM |
| Benzo(b)fluoranthene | ND | | 35 | µg/Kg-dry | 1 | 5/4/2011 10:08 PM |
| Benzo(g,h,i)perylene | ND | | 35 | µg/Kg-dry | 1 | 5/4/2011 10:08 PM |
| Benzo(k)fluoranthene | ND | | 35 | µg/Kg-dry | 1 | 5/4/2011 10:08 PM |
| Chrysene | ND | | 35 | µg/Kg-dry | 1 | 5/4/2011 10:08 PM |
| Dibenzo(a,h)anthracene | ND | | 35 | µg/Kg-dry | 1 | 5/4/2011 10:08 PM |
| Fluoranthene | ND | | 35 | µg/Kg-dry | 1 | 5/4/2011 10:08 PM |
| Fluorene | ND | | 35 | µg/Kg-dry | 1 | 5/4/2011 10:08 PM |
| Indeno(1,2,3-cd)pyrene | ND | | 35 | µg/Kg-dry | 1 | 5/4/2011 10:08 PM |
| Naphthalene | ND | | 35 | µg/Kg-dry | 1 | 5/4/2011 10:08 PM |
| Pyrene | ND | | 35 | µg/Kg-dry | 1 | 5/4/2011 10:08 PM |
| Surr: 2,4,6-Tribromophenol | 72.4 | | 34-140 | %REC | 1 | 5/4/2011 10:08 PM |

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

ALS Group USA, Corp

Date: 28-Jul-11

Client: HRL Compliance Solutions
Project: Clough 104 Tank Farm
Sample ID: Open Area in Drainage
Collection Date: 4/29/2011 10:30 AM

Work Order: 1105070
Lab ID: 1105070-04
Matrix: SOIL

| Analyses | Result | Qual | Report Limit | Units | Dilution Factor | Date Analyzed |
|-----------------------------------|--------|------|--------------------|-------------|----------------------------|---------------------|
| Surr: 2-Fluorobiphenyl | 74.1 | | 12-100 | %REC | 1 | 5/4/2011 10:08 PM |
| Surr: 2-Fluorophenol | 86.6 | | 33-117 | %REC | 1 | 5/4/2011 10:08 PM |
| Surr: 4-Terphenyl-d14 | 96.7 | | 25-137 | %REC | 1 | 5/4/2011 10:08 PM |
| Surr: Nitrobenzene-d5 | 89.3 | | 37-107 | %REC | 1 | 5/4/2011 10:08 PM |
| Surr: Phenol-d6 | 82.1 | | 40-106 | %REC | 1 | 5/4/2011 10:08 PM |
| VOLATILE ORGANIC COMPOUNDS | | | SW8260 | | | Analyst: AK |
| Benzene | ND | | 20 | µg/Kg-dry | 100 | 5/4/2011 07:34 PM |
| Ethylbenzene | ND | | 14 | µg/Kg-dry | 100 | 5/4/2011 07:34 PM |
| m,p-Xylene | ND | | 18 | µg/Kg-dry | 100 | 5/4/2011 07:34 PM |
| o-Xylene | ND | | 14 | µg/Kg-dry | 100 | 5/4/2011 07:34 PM |
| Toluene | ND | | 13 | µg/Kg-dry | 100 | 5/4/2011 07:34 PM |
| Xylenes, Total | ND | | 32 | µg/Kg-dry | 100 | 5/4/2011 07:34 PM |
| CHROMIUM, TRIVALENT | | | CALCULATION | | | Analyst: MB |
| Chromium, Trivalent | 6.7 | | | mg/Kg-dry | 1 | 5/6/2011 12:30 PM |
| CHROMIUM, HEXAVALENT | | | SW7196A | | Prep Date: 5/4/2011 | Analyst: MB |
| Chromium, Hexavalent | ND | | 0.57 | mg/Kg-dry | 1 | 5/6/2011 12:00 PM |
| MOISTURE | | | A2540 G | | | Analyst: JJG |
| Moisture | 14 | | 0.050 | % of sample | 1 | 5/4/2011 12:58 PM |
| PH | | | SW9045D | | | Analyst: JJG |
| pH | 8.46 | H | | s.u. | 1 | 5/4/2011 09:00 AM |

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

Report Number: F11125-0156

Account Number: 91000

A & L GREAT LAKES LABORATORIES, INC.

3505 Conestoga Drive • Fort Wayne, Indiana 46808-4413 • Phone 260-483-4759 • Fax 260-483-5274

www.algreatlakes.com • lab@algreatlakes.com



QUALITY ANALYSES FOR INFORMED DECISIONS

TO: ALS LABORATORY GROUP
3352 128TH AVE
HOLLAND, MI 49424-9263

RE: 1105070

DATE RECEIVED: 05/05/2011

DATE REPORTED: 05/06/2011

PAGE: 1

P.O. NUMBER: 20-122010061

ATTN: ANN PRESTON

REPORT OF ANALYSIS

| LAB NO. | SAMPLE ID | ANALYSIS | RESULT | UNIT | METHOD |
|---------|-----------|---------------------------------|--------|---------|------------------|
| 25924 | 01C | Sat'd Paste Extraction with DIW | 1 | | USDA Handbook 60 |
| | | Conductivity (ECe) | 4.80 | mmho/cm | USDA Handbook 60 |
| | | Calcium (Sat'd Paste) | 191 | ppm | USDA Handbook 60 |
| | | Magnesium (Sat'd Paste) | 44 | ppm | USDA Handbook 60 |
| | | Sodium (Sat'd Paste) | 3200 | ppm | USDA Handbook 60 |
| | | Sodium Adsorption Ratio | 54.1 | - | USDA Handbook 60 |
| | | | | | |
| 25925 | 02C | Sat'd Paste Extraction with DIW | 1 | | USDA Handbook 60 |
| | | Conductivity (ECe) | 13.91 | mmho/cm | USDA Handbook 60 |
| | | Calcium (Sat'd Paste) | 391 | ppm | USDA Handbook 60 |
| | | Magnesium (Sat'd Paste) | 80 | ppm | USDA Handbook 60 |
| | | Sodium (Sat'd Paste) | 9400 | ppm | USDA Handbook 60 |
| | | Sodium Adsorption Ratio | 112.9 | - | USDA Handbook 60 |
| | | | | | |
| 25926 | 03C | Sat'd Paste Extraction with DIW | 1 | | USDA Handbook 60 |
| | | Conductivity (ECe) | 11.54 | mmho/cm | USDA Handbook 60 |
| | | Calcium (Sat'd Paste) | 289 | ppm | USDA Handbook 60 |
| | | Magnesium (Sat'd Paste) | 53 | ppm | USDA Handbook 60 |
| | | Sodium (Sat'd Paste) | 8400 | ppm | USDA Handbook 60 |
| | | Sodium Adsorption Ratio | 118.9 | - | USDA Handbook 60 |
| | | | | | |
| 25927 | 04C | Sat'd Paste Extraction with DIW | 1 | | USDA Handbook 60 |
| | | Conductivity (ECe) | 9.91 | mmho/cm | USDA Handbook 60 |
| | | Calcium (Sat'd Paste) | 257 | ppm | USDA Handbook 60 |
| | | Magnesium (Sat'd Paste) | 52 | ppm | USDA Handbook 60 |
| | | Sodium (Sat'd Paste) | 6700 | ppm | USDA Handbook 60 |
| | | Sodium Adsorption Ratio | 99.4 | - | USDA Handbook 60 |
| | | | | | |

ALS Group USA, Corp

Date: 28-Jul-11

Client: HRL Compliance Solutions
Work Order: 1105070
Project: Clough 104 Tank Farm

QC BATCH REPORT

Batch ID: **33126** Instrument ID **GC8** Method: **SW8015M**

| | | | | | | | | | | |
|------------------------------|--------------------------------------|-----|---------|---------------|-----------------------|---------------|---|------|--------------|------|
| MBLK | Sample ID: DBLKS1-33126-33126 | | | | Units: mg/Kg | | Analysis Date: 5/4/2011 05:53 PM | | | |
| Client ID: | Run ID: GC8_110504A | | | | SeqNo: 1618004 | | Prep Date: 5/4/2011 | | DF: 1 | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
| DRO (C10-C28) | ND | 4.2 | | | | | | | | |
| <i>Surr: 4-Terphenyl-d14</i> | 1.584 | 0 | 1.667 | 0 | 95.1 | 39-115 | 0 | | | |

| | | | | | | | | | | |
|------------------------------|--------------------------------------|-----|---------|---------------|-----------------------|---------------|---|------|--------------|------|
| LCS | Sample ID: DLCSS1-33126-33126 | | | | Units: mg/Kg | | Analysis Date: 5/4/2011 04:40 PM | | | |
| Client ID: | Run ID: GC8_110504A | | | | SeqNo: 1618001 | | Prep Date: 5/4/2011 | | DF: 1 | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
| DRO (C10-C28) | 153.7 | 4.2 | 166.7 | 0 | 92.2 | 60-130 | 0 | | | |
| <i>Surr: 4-Terphenyl-d14</i> | 1.433 | 0 | 1.667 | 0 | 86 | 39-115 | 0 | | | |

| | | | | | | | | | | |
|------------------------------|---------------------------------------|-----|---------|---------------|-----------------------|---------------|---|------|--------------|------|
| LCSD | Sample ID: DLCSDS1-33126-33126 | | | | Units: mg/Kg | | Analysis Date: 5/4/2011 04:40 PM | | | |
| Client ID: | Run ID: GC8_110504A | | | | SeqNo: 1618037 | | Prep Date: 5/4/2011 | | DF: 1 | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
| DRO (C10-C28) | 145.5 | 4.2 | 166.7 | 0 | 87.3 | 60-130 | 153.7 | 5.45 | 30 | |
| <i>Surr: 4-Terphenyl-d14</i> | 1.473 | 0 | 1.667 | 0 | 88.4 | 39-115 | 1.433 | 2.75 | 30 | |

| | | | | | | | | | | |
|------------------------------|----------------------------------|-----|---------|---------------|-----------------------|---------------|---|------|--------------|------|
| MS | Sample ID: 1105060-03A MS | | | | Units: mg/Kg | | Analysis Date: 5/4/2011 05:04 PM | | | |
| Client ID: | Run ID: GC8_110504A | | | | SeqNo: 1618002 | | Prep Date: 5/4/2011 | | DF: 1 | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
| DRO (C10-C28) | 272.1 | 8.1 | 322.4 | 0 | 84.4 | 60-130 | 0 | | | |
| <i>Surr: 4-Terphenyl-d14</i> | 2.177 | 0 | 3.224 | 0 | 67.5 | 39-115 | 0 | | | |

| | | | | | | | | | | |
|------------------------------|-----------------------------------|-----|---------|---------------|-----------------------|---------------|---|------|--------------|------|
| MSD | Sample ID: 1105060-03A MSD | | | | Units: mg/Kg | | Analysis Date: 5/4/2011 05:04 PM | | | |
| Client ID: | Run ID: GC8_110504A | | | | SeqNo: 1618038 | | Prep Date: 5/4/2011 | | DF: 1 | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
| DRO (C10-C28) | 290.6 | 7.9 | 317.5 | 0 | 91.5 | 60-130 | 272.1 | 6.56 | 30 | |
| <i>Surr: 4-Terphenyl-d14</i> | 3.308 | 0 | 3.175 | 0 | 104 | 39-115 | 2.177 | 41.2 | 30 | R |

The following samples were analyzed in this batch:

| | | |
|-------------|-------------|-------------|
| 1105070-01B | 1105070-02B | 1105070-03B |
| 1105070-04B | | |

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

Client: HRL Compliance Solutions
Work Order: 1105070
Project: Clough 104 Tank Farm

QC BATCH REPORT

Batch ID: **R89760** Instrument ID **GC9** Method: **SW8015**

| | | | | | | | | | | |
|-------------------------|--------------------------------------|----------|------------|---------------|-----------------------|---------------|---|------|--------------|------|
| MBLK | Sample ID: MBLK-R89760-R89760 | | | | Units: µg/L | | Analysis Date: 5/4/2011 07:01 PM | | | |
| Client ID: | Run ID: GC9_110504A | | | | SeqNo: 1617959 | | Prep Date: | | DF: 1 | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
| GRO (C6-C10) | ND | 200 | | | | | | | | |
| <i>Surr: Toluene-d8</i> | <i>94.07</i> | <i>0</i> | <i>100</i> | <i>0</i> | <i>94.1</i> | <i>70-130</i> | <i>0</i> | | | |

| | | | | | | | | | | |
|-------------------------|-------------------------------------|----------|------------|---------------|-----------------------|---------------|---|------|--------------|------|
| LCS | Sample ID: LCS-R89760-R89760 | | | | Units: µg/L | | Analysis Date: 5/4/2011 05:37 PM | | | |
| Client ID: | Run ID: GC9_110504A | | | | SeqNo: 1617957 | | Prep Date: | | DF: 1 | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
| GRO (C6-C10) | 27380 | 200 | 25000 | 0 | 110 | 70-130 | 0 | | | |
| <i>Surr: Toluene-d8</i> | <i>101.1</i> | <i>0</i> | <i>100</i> | <i>0</i> | <i>101</i> | <i>70-130</i> | <i>0</i> | | | |

| | | | | | | | | | | |
|-------------------------|--------------------------------------|----------|------------|---------------|-----------------------|---------------|---|-------------|--------------|------|
| LCSD | Sample ID: LCSD-R89760-R89760 | | | | Units: µg/L | | Analysis Date: 5/4/2011 06:03 PM | | | |
| Client ID: | Run ID: GC9_110504A | | | | SeqNo: 1617958 | | Prep Date: | | DF: 1 | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
| GRO (C6-C10) | 28270 | 200 | 25000 | 0 | 113 | 70-130 | 27380 | 3.2 | 30 | |
| <i>Surr: Toluene-d8</i> | <i>111.2</i> | <i>0</i> | <i>100</i> | <i>0</i> | <i>111</i> | <i>70-130</i> | <i>101.1</i> | <i>9.54</i> | <i>30</i> | |

| | | | | | | | | | | |
|-------------------------|----------------------------------|----------|------------|---------------|-----------------------|---------------|---|------|--------------|------|
| MS | Sample ID: 1105024-07A MS | | | | Units: µg/L | | Analysis Date: 5/5/2011 03:59 AM | | | |
| Client ID: | Run ID: GC9_110504A | | | | SeqNo: 1617974 | | Prep Date: | | DF: 1 | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
| GRO (C6-C10) | 25910 | 200 | 25000 | 0 | 104 | 70-130 | 0 | | | |
| <i>Surr: Toluene-d8</i> | <i>92.47</i> | <i>0</i> | <i>100</i> | <i>0</i> | <i>92.5</i> | <i>70-130</i> | <i>0</i> | | | |

| | | | | | | | | | | |
|-------------------------|-----------------------------------|----------|------------|---------------|-----------------------|---------------|---|--------------|--------------|------|
| MSD | Sample ID: 1105024-07A MSD | | | | Units: µg/L | | Analysis Date: 5/5/2011 04:25 AM | | | |
| Client ID: | Run ID: GC9_110504A | | | | SeqNo: 1617975 | | Prep Date: | | DF: 1 | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
| GRO (C6-C10) | 25170 | 200 | 25000 | 0 | 101 | 70-130 | 25910 | 2.89 | 30 | |
| <i>Surr: Toluene-d8</i> | <i>91.87</i> | <i>0</i> | <i>100</i> | <i>0</i> | <i>91.9</i> | <i>70-130</i> | <i>92.47</i> | <i>0.651</i> | <i>30</i> | |

The following samples were analyzed in this batch:

| | | |
|-------------|-------------|-------------|
| 1105070-01A | 1105070-02A | 1105070-03A |
| 1105070-04A | | |

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

Client: HRL Compliance Solutions
Work Order: 1105070
Project: Clough 104 Tank Farm

QC BATCH REPORT

Batch ID: **33171** Instrument ID **HG1** Method: **SW7471**

| | | | | | | | | | | |
|-------------|------------------------------------|-------|---------|---------------|-----------------------|---------------|---|------|--------------|------|
| MBLK | Sample ID: MBLK-33171-33171 | | | | Units: mg/Kg | | Analysis Date: 5/6/2011 01:59 PM | | | |
| Client ID: | Run ID: HG1_110506B | | | | SeqNo: 1619072 | | Prep Date: 5/6/2011 | | 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-33171-33171 | | | | Units: mg/Kg | | Analysis Date: 5/6/2011 02:01 PM | | | |
| Client ID: | Run ID: HG1_110506B | | | | SeqNo: 1619073 | | Prep Date: 5/6/2011 | | DF: 1 | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
| Mercury | 0.1684 | 0.020 | 0.1665 | | 0 | 101 | 80-120 | 0 | | |

| | | | | | | | | | | |
|-------------|------------------------------------|-------|---------|---------------|-----------------------|---------------|---|--------|--------------|------|
| LCSD | Sample ID: LCSD-33171-33171 | | | | Units: mg/Kg | | Analysis Date: 5/6/2011 02:04 PM | | | |
| Client ID: | Run ID: HG1_110506B | | | | SeqNo: 1619074 | | Prep Date: 5/6/2011 | | DF: 1 | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
| Mercury | 0.1668 | 0.020 | 0.1665 | | 0 | 100 | 80-120 | 0.1684 | 0.945 | 20 |

| | | | | | | | | | | |
|------------|---------------------------------|-------|---------|---------------|-----------------------|---------------|---|------|--------------|------|
| MS | Sample ID: 1105081-01BMS | | | | Units: mg/Kg | | Analysis Date: 5/6/2011 02:29 PM | | | |
| Client ID: | Run ID: HG1_110506B | | | | SeqNo: 1619094 | | Prep Date: 5/6/2011 | | DF: 1 | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
| Mercury | 0.1403 | 0.019 | 0.1546 | 0.01138 | 83.4 | 75-125 | 0 | | | |

| | | | | | | | | | | |
|------------|----------------------------------|-------|---------|---------------|-----------------------|---------------|---|------|--------------|------|
| MSD | Sample ID: 1105081-01BMSD | | | | Units: mg/Kg | | Analysis Date: 5/6/2011 02:31 PM | | | |
| Client ID: | Run ID: HG1_110506B | | | | SeqNo: 1619095 | | Prep Date: 5/6/2011 | | DF: 1 | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
| Mercury | 0.158 | 0.018 | 0.1502 | 0.01138 | 97.6 | 75-125 | 0.1403 | 11.9 | 35 | |

The following samples were analyzed in this batch:

| | | |
|-------------|-------------|-------------|
| 1105070-01B | 1105070-02B | 1105070-03B |
| 1105070-04B | | |

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

Client: HRL Compliance Solutions
Work Order: 1105070
Project: Clough 104 Tank Farm

QC BATCH REPORT

Batch ID: **33137** Instrument ID **ICPMS1** Method: **SW6020A**

| MBLK | Sample ID: MBLK-33137-33137 | | Units: mg/Kg | | Analysis Date: 5/5/2011 05:26 PM | | | | | |
|-------------|------------------------------------|------|-----------------------|---------------|---|---------------|---------------|------|-----------|------|
| Client ID: | Run ID: ICPMS1_110505A | | SeqNo: 1618416 | | Prep Date: 5/4/2011 | | DF: 1 | | | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
| Arsenic | 0.02904 | 0.25 | | | | | | | | J |
| Barium | ND | 0.25 | | | | | | | | |
| Cadmium | 0.01779 | 0.10 | | | | | | | | J |
| Chromium | 0.002956 | 0.25 | | | | | | | | J |
| Copper | ND | 0.25 | | | | | | | | |
| Lead | 0.001308 | 0.25 | | | | | | | | J |
| Nickel | ND | 0.25 | | | | | | | | |
| Selenium | ND | 0.25 | | | | | | | | |
| Silver | 0.01098 | 0.25 | | | | | | | | J |
| Zinc | ND | 0.50 | | | | | | | | |

| LCS | Sample ID: LCS-33137-33137 | | Units: mg/Kg | | Analysis Date: 5/5/2011 05:32 PM | | | | | |
|------------|-----------------------------------|------|-----------------------|---------------|---|---------------|---------------|------|-----------|------|
| Client ID: | Run ID: ICPMS1_110505A | | SeqNo: 1618417 | | Prep Date: 5/4/2011 | | DF: 2 | | | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
| Arsenic | 4.736 | 0.50 | 5 | 0 | 94.7 | 80-120 | 0 | | | |
| Barium | 4.92 | 0.50 | 5 | 0 | 98.4 | 80-120 | 0 | | | |
| Cadmium | 4.873 | 0.20 | 5 | 0 | 97.5 | 80-120 | 0 | | | |
| Chromium | 5.088 | 0.50 | 5 | 0 | 102 | 80-120 | 0 | | | |
| Copper | 5.131 | 0.50 | 5 | 0 | 103 | 80-120 | 0 | | | |
| Lead | 5.022 | 0.50 | 5 | 0 | 100 | 80-120 | 0 | | | |
| Nickel | 5.18 | 0.50 | 5 | 0 | 104 | 80-120 | 0 | | | |
| Selenium | 4.627 | 0.50 | 5 | 0 | 92.5 | 80-120 | 0 | | | |
| Silver | 4.894 | 0.50 | 5 | 0 | 97.9 | 80-120 | 0 | | | |
| Zinc | 4.891 | 1.0 | 5 | 0 | 97.8 | 80-120 | 0 | | | |

| LCSD | Sample ID: LCSD-33137-33137 | | Units: mg/Kg | | Analysis Date: 5/5/2011 05:38 PM | | | | | |
|-------------|------------------------------------|------|-----------------------|---------------|---|---------------|---------------|-------|-----------|------|
| Client ID: | Run ID: ICPMS1_110505A | | SeqNo: 1618418 | | Prep Date: 5/4/2011 | | DF: 2 | | | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
| Arsenic | 4.754 | 0.50 | 5 | 0 | 95.1 | 80-120 | 4.736 | 0.379 | 20 | |
| Barium | 4.759 | 0.50 | 5 | 0 | 95.2 | 80-120 | 4.92 | 3.33 | 20 | |
| Cadmium | 4.787 | 0.20 | 5 | 0 | 95.7 | 80-120 | 4.873 | 1.78 | 20 | |
| Chromium | 4.94 | 0.50 | 5 | 0 | 98.8 | 80-120 | 5.088 | 2.95 | 20 | |
| Copper | 4.98 | 0.50 | 5 | 0 | 99.6 | 80-120 | 5.131 | 2.99 | 20 | |
| Lead | 4.895 | 0.50 | 5 | 0 | 97.9 | 80-120 | 5.022 | 2.56 | 20 | |
| Nickel | 5.109 | 0.50 | 5 | 0 | 102 | 80-120 | 5.18 | 1.38 | 20 | |
| Selenium | 4.533 | 0.50 | 5 | 0 | 90.7 | 80-120 | 4.627 | 2.05 | 20 | |
| Silver | 4.78 | 0.50 | 5 | 0 | 95.6 | 80-120 | 4.894 | 2.36 | 20 | |
| Zinc | 4.673 | 1.0 | 5 | 0 | 93.5 | 80-120 | 4.891 | 4.56 | 20 | |

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

Client: HRL Compliance Solutions
Work Order: 1105070
Project: Clough 104 Tank Farm

QC BATCH REPORT

Batch ID: **33137** Instrument ID **ICPMS1** Method: **SW6020A**

| MS | | | | Sample ID: 1105064-03AMS | | | Units: mg/Kg | | Analysis Date: 5/5/2011 06:08 PM | | |
|------------|--------|------|------------------------|--------------------------|------|----------------|---------------|---------------------|----------------------------------|-------|--|
| Client ID: | | | Run ID: ICPMS1_110505A | | | SeqNo: 1618423 | | Prep Date: 5/4/2011 | | DF: 4 | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual | |
| Arsenic | 10.58 | 1.5 | 7.728 | 7.189 | 43.8 | 80-120 | 0 | | | S | |
| Barium | 55.98 | 1.5 | 7.728 | 50.41 | 72.1 | 80-120 | 0 | | | SO | |
| Cadmium | 7.478 | 0.62 | 7.728 | 0.1509 | 94.8 | 80-120 | 0 | | | | |
| Chromium | 13.44 | 1.5 | 7.728 | 6.347 | 91.8 | 80-120 | 0 | | | | |
| Copper | 11.54 | 1.5 | 7.728 | 4.988 | 84.8 | 80-120 | 0 | | | | |
| Lead | 16.08 | 1.5 | 7.728 | 10.24 | 75.6 | 80-120 | 0 | | | S | |
| Nickel | 13.68 | 1.5 | 7.728 | 9.264 | 57.1 | 80-120 | 0 | | | S | |
| Selenium | 6.986 | 1.5 | 7.728 | 0.5391 | 83.4 | 80-120 | 0 | | | | |
| Silver | 7.104 | 1.5 | 7.728 | 0.02071 | 91.7 | 80-120 | 0 | | | | |
| Zinc | 29.73 | 3.1 | 7.728 | 22.29 | 96.3 | 80-120 | 0 | | | | |

| MSD | Sample ID: 1105064-03AMSD | | | | | Units: mg/Kg | | Analysis Date: 5/5/2011 06:14 PM | | |
|------------|---------------------------|------|---------|---------------|----------------|---------------|---------------------|----------------------------------|-----------|------|
| Client ID: | Run ID: ICPMS1_110505A | | | | SeqNo: 1618424 | | Prep Date: 5/4/2011 | | DF: 4 | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
| Arsenic | 10.98 | 1.5 | 7.446 | 7.189 | 51 | 80-120 | 10.58 | 3.77 | 25 | S |
| Barium | 56.56 | 1.5 | 7.446 | 50.41 | 82.6 | 80-120 | 55.98 | 1.03 | 25 | O |
| Cadmium | 6.999 | 0.60 | 7.446 | 0.1509 | 92 | 80-120 | 7.478 | 6.61 | 25 | |
| Chromium | 13.32 | 1.5 | 7.446 | 6.347 | 93.7 | 80-120 | 13.44 | 0.859 | 25 | |
| Copper | 11.46 | 1.5 | 7.446 | 4.988 | 86.9 | 80-120 | 11.54 | 0.735 | 25 | |
| Lead | 15.66 | 1.5 | 7.446 | 10.24 | 72.8 | 80-120 | 16.08 | 2.65 | 25 | S |
| Nickel | 13.29 | 1.5 | 7.446 | 9.264 | 54.1 | 80-120 | 13.68 | 2.84 | 25 | S |
| Selenium | 6.561 | 1.5 | 7.446 | 0.5391 | 80.9 | 80-120 | 6.986 | 6.27 | 25 | |
| Silver | 6.71 | 1.5 | 7.446 | 0.02071 | 89.8 | 80-120 | 7.104 | 5.69 | 25 | |
| Zinc | 29.44 | 3.0 | 7.446 | 22.29 | 96 | 80-120 | 29.73 | 0.988 | 25 | |

The following samples were analyzed in this batch:

| | | |
|-------------|-------------|-------------|
| 1105070-01B | 1105070-02B | 1105070-03B |
| 1105070-04B | | |

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

Client: HRL Compliance Solutions
Work Order: 1105070
Project: Clough 104 Tank Farm

QC BATCH REPORT

Batch ID: **33125** Instrument ID **SVMS5** Method: **SW8270**

MBLK Sample ID: **SBLKS1-33125-33125** Units: **µg/Kg** Analysis Date: **5/4/2011 04:42 PM**

Client ID: Run ID: **SVMS5_110504A** SeqNo: **1617437** Prep Date: **5/4/2011** DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|-----------------------------------|-------------|----------|-------------|---------------|-------------|---------------|---------------|------|-----------|------|
| Acenaphthene | ND | 30 | | | | | | | | |
| Anthracene | ND | 30 | | | | | | | | |
| Benzo(a)anthracene | ND | 30 | | | | | | | | |
| Benzo(a)pyrene | ND | 30 | | | | | | | | |
| Benzo(b)fluoranthene | ND | 30 | | | | | | | | |
| Benzo(g,h,i)perylene | ND | 30 | | | | | | | | |
| Benzo(k)fluoranthene | ND | 30 | | | | | | | | |
| Chrysene | ND | 30 | | | | | | | | |
| Dibenzo(a,h)anthracene | ND | 30 | | | | | | | | |
| Fluoranthene | ND | 30 | | | | | | | | |
| Fluorene | ND | 30 | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | ND | 30 | | | | | | | | |
| Naphthalene | ND | 30 | | | | | | | | |
| Pyrene | ND | 30 | | | | | | | | |
| <i>Surr: 2,4,6-Tribromophenol</i> | <i>1007</i> | <i>0</i> | <i>1667</i> | <i>0</i> | <i>60.4</i> | <i>34-140</i> | <i>0</i> | | | |
| <i>Surr: 2-Fluorobiphenyl</i> | <i>1186</i> | <i>0</i> | <i>1667</i> | <i>0</i> | <i>71.1</i> | <i>12-100</i> | <i>0</i> | | | |
| <i>Surr: 2-Fluorophenol</i> | <i>1331</i> | <i>0</i> | <i>1667</i> | <i>0</i> | <i>79.8</i> | <i>33-117</i> | <i>0</i> | | | |
| <i>Surr: 4-Terphenyl-d14</i> | <i>1804</i> | <i>0</i> | <i>1667</i> | <i>0</i> | <i>108</i> | <i>25-137</i> | <i>0</i> | | | |
| <i>Surr: Nitrobenzene-d5</i> | <i>1398</i> | <i>0</i> | <i>1667</i> | <i>0</i> | <i>83.9</i> | <i>37-107</i> | <i>0</i> | | | |
| <i>Surr: Phenol-d6</i> | <i>1314</i> | <i>0</i> | <i>1667</i> | <i>0</i> | <i>78.9</i> | <i>40-106</i> | <i>0</i> | | | |

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

Client: HRL Compliance Solutions
Work Order: 1105070
Project: Clough 104 Tank Farm

QC BATCH REPORT

Batch ID: **33125** Instrument ID **SVMS5** Method: **SW8270**

LCS Sample ID: **SLCSS1-33125-33125** Units: **µg/Kg** Analysis Date: **5/4/2011 05:18 PM**

Client ID: Run ID: **SVMS5_110504A** SeqNo: **1617438** Prep Date: **5/4/2011** DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|----------------------------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| Acenaphthene | 1049 | 30 | 1333 | 0 | 78.7 | 45-110 | 0 | | | |
| Anthracene | 1205 | 30 | 1333 | 0 | 90.4 | 55-105 | 0 | | | |
| Benzo(a)anthracene | 1162 | 30 | 1333 | 0 | 87.1 | 50-110 | 0 | | | |
| Benzo(a)pyrene | 1234 | 30 | 1333 | 0 | 92.6 | 50-110 | 0 | | | |
| Benzo(b)fluoranthene | 1250 | 30 | 1333 | 0 | 93.8 | 45-115 | 0 | | | |
| Benzo(g,h,i)perylene | 1461 | 30 | 1333 | 0 | 110 | 40-125 | 0 | | | |
| Benzo(k)fluoranthene | 1280 | 30 | 1333 | 0 | 96 | 45-115 | 0 | | | |
| Chrysene | 1224 | 30 | 1333 | 0 | 91.8 | 55-110 | 0 | | | |
| Dibenzo(a,h)anthracene | 1450 | 30 | 1333 | 0 | 109 | 40-125 | 0 | | | |
| Fluoranthene | 1182 | 30 | 1333 | 0 | 88.7 | 55-115 | 0 | | | |
| Fluorene | 1191 | 30 | 1333 | 0 | 89.3 | 50-110 | 0 | | | |
| Indeno(1,2,3-cd)pyrene | 1462 | 30 | 1333 | 0 | 110 | 40-120 | 0 | | | |
| Naphthalene | 1052 | 30 | 1333 | 0 | 78.9 | 40-105 | 0 | | | |
| Pyrene | 1202 | 30 | 1333 | 0 | 90.1 | 45-125 | 0 | | | |
| Surr: 2,4,6-Tribromophenol | 1271 | 0 | 1667 | 0 | 76.2 | 34-140 | 0 | | | |
| Surr: 2-Fluorobiphenyl | 1356 | 0 | 1667 | 0 | 81.3 | 12-100 | 0 | | | |
| Surr: 2-Fluorophenol | 1293 | 0 | 1667 | 0 | 77.6 | 33-117 | 0 | | | |
| Surr: 4-Terphenyl-d14 | 1646 | 0 | 1667 | 0 | 98.8 | 25-137 | 0 | | | |
| Surr: Nitrobenzene-d5 | 1411 | 0 | 1667 | 0 | 84.6 | 37-107 | 0 | | | |
| Surr: Phenol-d6 | 1309 | 0 | 1667 | 0 | 78.5 | 40-106 | 0 | | | |

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

Client: HRL Compliance Solutions
Work Order: 1105070
Project: Clough 104 Tank Farm

QC BATCH REPORT

Batch ID: **33125** Instrument ID **SVMS5** Method: **SW8270**

| LCSD | | Sample ID: SLCSDS1-33125-33125 | | | | Units: µg/Kg | | Analysis Date: 5/4/2011 05:55 PM | | |
|-----------------------------------|-------------|---------------------------------------|-------------|---------------|-------------|-----------------------|---------------|---|-----------|--------------|
| Client ID: | | Run ID: SVMS5_110504A | | | | SeqNo: 1617440 | | Prep Date: 5/4/2011 | | DF: 1 |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
| Acenaphthene | 1044 | 30 | 1333 | 0 | 78.3 | 45-110 | 1049 | 0.51 | 25 | |
| Anthracene | 1193 | 30 | 1333 | 0 | 89.5 | 55-105 | 1205 | 1.06 | 25 | |
| Benzo(a)anthracene | 1171 | 30 | 1333 | 0 | 87.8 | 50-110 | 1162 | 0.772 | 25 | |
| Benzo(a)pyrene | 1224 | 30 | 1333 | 0 | 91.8 | 50-110 | 1234 | 0.841 | 25 | |
| Benzo(b)fluoranthene | 1181 | 30 | 1333 | 0 | 88.6 | 45-115 | 1250 | 5.7 | 25 | |
| Benzo(g,h,i)perylene | 1418 | 30 | 1333 | 0 | 106 | 40-125 | 1461 | 3.03 | 25 | |
| Benzo(k)fluoranthene | 1307 | 30 | 1333 | 0 | 98 | 45-115 | 1280 | 2.04 | 25 | |
| Chrysene | 1191 | 30 | 1333 | 0 | 89.4 | 55-110 | 1224 | 2.73 | 25 | |
| Dibenzo(a,h)anthracene | 1420 | 30 | 1333 | 0 | 107 | 40-125 | 1450 | 2.11 | 25 | |
| Fluoranthene | 1155 | 30 | 1333 | 0 | 86.6 | 55-115 | 1182 | 2.31 | 25 | |
| Fluorene | 1165 | 30 | 1333 | 0 | 87.4 | 50-110 | 1191 | 2.21 | 25 | |
| Indeno(1,2,3-cd)pyrene | 1425 | 30 | 1333 | 0 | 107 | 40-120 | 1462 | 2.54 | 25 | |
| Naphthalene | 1087 | 30 | 1333 | 0 | 81.6 | 40-105 | 1052 | 3.3 | 25 | |
| Pyrene | 1213 | 30 | 1333 | 0 | 91 | 45-125 | 1202 | 0.911 | 25 | |
| <i>Surr: 2,4,6-Tribromophenol</i> | <i>1259</i> | <i>0</i> | <i>1667</i> | <i>0</i> | <i>75.6</i> | <i>34-140</i> | <i>1271</i> | <i>0.896</i> | <i>40</i> | |
| <i>Surr: 2-Fluorobiphenyl</i> | <i>1392</i> | <i>0</i> | <i>1667</i> | <i>0</i> | <i>83.5</i> | <i>12-100</i> | <i>1356</i> | <i>2.62</i> | <i>40</i> | |
| <i>Surr: 2-Fluorophenol</i> | <i>1281</i> | <i>0</i> | <i>1667</i> | <i>0</i> | <i>76.8</i> | <i>33-117</i> | <i>1293</i> | <i>0.984</i> | <i>40</i> | |
| <i>Surr: 4-Terphenyl-d14</i> | <i>1666</i> | <i>0</i> | <i>1667</i> | <i>0</i> | <i>100</i> | <i>25-137</i> | <i>1646</i> | <i>1.21</i> | <i>40</i> | |
| <i>Surr: Nitrobenzene-d5</i> | <i>1454</i> | <i>0</i> | <i>1667</i> | <i>0</i> | <i>87.3</i> | <i>37-107</i> | <i>1411</i> | <i>3.05</i> | <i>40</i> | |
| <i>Surr: Phenol-d6</i> | <i>1309</i> | <i>0</i> | <i>1667</i> | <i>0</i> | <i>78.6</i> | <i>40-106</i> | <i>1309</i> | <i>0.0255</i> | <i>40</i> | |

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

Client: HRL Compliance Solutions
Work Order: 1105070
Project: Clough 104 Tank Farm

QC BATCH REPORT

Batch ID: **33125** Instrument ID **SVMS5** Method: **SW8270**

| MS | | Sample ID: 1105060-03A MS | | | | Units: µg/Kg | | Analysis Date: 5/4/2011 06:31 PM | | |
|-----------------------------------|-------------|----------------------------------|-------------|---------------|-------------|-----------------------|---------------|---|-----------|--------------|
| Client ID: | | Run ID: SVMS5_110504A | | | | SeqNo: 1617441 | | Prep Date: 5/4/2011 | | DF: 1 |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
| Acenaphthene | 1939 | 60 | 2646 | 0 | 73.3 | 45-110 | 0 | | | |
| Anthracene | 2114 | 60 | 2646 | 0 | 79.9 | 55-105 | 0 | | | |
| Benzo(a)anthracene | 2121 | 60 | 2646 | 24.15 | 79.3 | 50-110 | 0 | | | |
| Benzo(a)pyrene | 2203 | 60 | 2646 | 25.14 | 82.3 | 50-110 | 0 | | | |
| Benzo(b)fluoranthene | 2127 | 60 | 2646 | 25.14 | 79.4 | 45-115 | 0 | | | |
| Benzo(g,h,i)perylene | 2336 | 60 | 2646 | 18.19 | 87.6 | 40-125 | 0 | | | |
| Benzo(k)fluoranthene | 2475 | 60 | 2646 | 29.44 | 92.4 | 45-115 | 0 | | | |
| Chrysene | 2131 | 60 | 2646 | 33.08 | 79.3 | 55-110 | 0 | | | |
| Dibenzo(a,h)anthracene | 2425 | 60 | 2646 | 0 | 91.7 | 40-125 | 0 | | | |
| Fluoranthene | 2100 | 60 | 2646 | 54.58 | 77.3 | 55-115 | 0 | | | |
| Fluorene | 2156 | 60 | 2646 | 0 | 81.5 | 50-110 | 0 | | | |
| Indeno(1,2,3-cd)pyrene | 2405 | 60 | 2646 | 16.21 | 90.3 | 40-120 | 0 | | | |
| Naphthalene | 1980 | 60 | 2646 | 0 | 74.8 | 40-105 | 0 | | | |
| Pyrene | 2081 | 60 | 2646 | 39.03 | 77.2 | 45-125 | 0 | | | |
| <i>Surr: 2,4,6-Tribromophenol</i> | <i>2424</i> | <i>0</i> | <i>3308</i> | <i>0</i> | <i>73.3</i> | <i>34-140</i> | <i>0</i> | | | |
| <i>Surr: 2-Fluorobiphenyl</i> | <i>2455</i> | <i>0</i> | <i>3308</i> | <i>0</i> | <i>74.2</i> | <i>12-100</i> | <i>0</i> | | | |
| <i>Surr: 2-Fluorophenol</i> | <i>2438</i> | <i>0</i> | <i>3308</i> | <i>0</i> | <i>73.7</i> | <i>33-117</i> | <i>0</i> | | | |
| <i>Surr: 4-Terphenyl-d14</i> | <i>2460</i> | <i>0</i> | <i>3308</i> | <i>0</i> | <i>74.4</i> | <i>25-137</i> | <i>0</i> | | | |
| <i>Surr: Nitrobenzene-d5</i> | <i>2739</i> | <i>0</i> | <i>3308</i> | <i>0</i> | <i>82.8</i> | <i>37-107</i> | <i>0</i> | | | |
| <i>Surr: Phenol-d6</i> | <i>2427</i> | <i>0</i> | <i>3308</i> | <i>0</i> | <i>73.4</i> | <i>40-106</i> | <i>0</i> | | | |

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

Client: HRL Compliance Solutions
Work Order: 1105070
Project: Clough 104 Tank Farm

QC BATCH REPORT

Batch ID: **33125** Instrument ID **SVMS5** Method: **SW8270**

| MSD | | | | Sample ID: 1105060-03A MSD | | | Units: µg/Kg | | Analysis Date: 5/4/2011 07:08 PM | |
|-----------------------------------|--------|-----|---------|-----------------------------------|------|---------------|-----------------------|------|---|------|
| Client ID: | | | | Run ID: SVMS5_110504A | | | SeqNo: 1617443 | | Prep Date: 5/4/2011 | |
| | | | | | | | | | DF: 1 | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
| Acenaphthene | 2047 | 59 | 2627 | 0 | 77.9 | 45-110 | 1939 | 5.43 | 30 | |
| Anthracene | 2219 | 59 | 2627 | 0 | 84.5 | 55-105 | 2114 | 4.87 | 30 | |
| Benzo(a)anthracene | 2222 | 59 | 2627 | 24.15 | 83.7 | 50-110 | 2121 | 4.65 | 30 | |
| Benzo(a)pyrene | 2294 | 59 | 2627 | 25.14 | 86.4 | 50-110 | 2203 | 4.02 | 30 | |
| Benzo(b)fluoranthene | 2563 | 59 | 2627 | 25.14 | 96.6 | 45-115 | 2127 | 18.6 | 30 | |
| Benzo(g,h,i)perylene | 1872 | 59 | 2627 | 18.19 | 70.6 | 40-125 | 2336 | 22 | 30 | |
| Benzo(k)fluoranthene | 2421 | 59 | 2627 | 29.44 | 91.1 | 45-115 | 2475 | 2.21 | 30 | |
| Chrysene | 2268 | 59 | 2627 | 33.08 | 85.1 | 55-110 | 2131 | 6.26 | 30 | |
| Dibenzo(a,h)anthracene | 2105 | 59 | 2627 | 0 | 80.2 | 40-125 | 2425 | 14.1 | 30 | |
| Fluoranthene | 2354 | 59 | 2627 | 54.58 | 87.5 | 55-115 | 2100 | 11.4 | 30 | |
| Fluorene | 2262 | 59 | 2627 | 0 | 86.1 | 50-110 | 2156 | 4.82 | 30 | |
| Indeno(1,2,3-cd)pyrene | 2090 | 59 | 2627 | 16.21 | 78.9 | 40-120 | 2405 | 14 | 30 | |
| Naphthalene | 2102 | 59 | 2627 | 0 | 80 | 40-105 | 1980 | 5.96 | 30 | |
| Pyrene | 2059 | 59 | 2627 | 39.03 | 76.9 | 45-125 | 2081 | 1.04 | 30 | |
| <i>Surr: 2,4,6-Tribromophenol</i> | 2688 | 0 | 3284 | 0 | 81.9 | 34-140 | 2424 | 10.3 | 40 | |
| <i>Surr: 2-Fluorobiphenyl</i> | 2593 | 0 | 3284 | 0 | 79 | 12-100 | 2455 | 5.46 | 40 | |
| <i>Surr: 2-Fluorophenol</i> | 2545 | 0 | 3284 | 0 | 77.5 | 33-117 | 2438 | 4.3 | 40 | |
| <i>Surr: 4-Terphenyl-d14</i> | 2566 | 0 | 3284 | 0 | 78.2 | 25-137 | 2460 | 4.23 | 40 | |
| <i>Surr: Nitrobenzene-d5</i> | 2855 | 0 | 3284 | 0 | 87 | 37-107 | 2739 | 4.15 | 40 | |
| <i>Surr: Phenol-d6</i> | 2582 | 0 | 3284 | 0 | 78.6 | 40-106 | 2427 | 6.17 | 40 | |

The following samples were analyzed in this batch:

| | | |
|-------------|-------------|-------------|
| 1105070-01B | 1105070-02B | 1105070-03B |
| 1105070-04B | | |

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

Client: HRL Compliance Solutions
Work Order: 1105070
Project: Clough 104 Tank Farm

QC BATCH REPORT

Batch ID: **R89681** Instrument ID **VMS8** Method: **SW8260**

| MBLK | Sample ID: VBLKW1-110504-R89681 | | | | Units: µg/L | | Analysis Date: 5/4/2011 12:45 PM | | | |
|----------------|--|-----|---------|---------------|-----------------------|---------------|---|------|--------------|------|
| Client ID: | Run ID: VMS8_110504A | | | | SeqNo: 1616905 | | Prep Date: | | DF: 1 | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
| Benzene | ND | 1.0 | | | | | | | | |
| Ethylbenzene | ND | 1.0 | | | | | | | | |
| m,p-Xylene | ND | 2.0 | | | | | | | | |
| o-Xylene | ND | 1.0 | | | | | | | | |
| Toluene | ND | 1.0 | | | | | | | | |
| Xylenes, Total | ND | 2.0 | | | | | | | | |

| LCS | Sample ID: VLCSW1-110504-R89681 | | | | Units: µg/L | | Analysis Date: 5/4/2011 11:23 AM | | | |
|----------------|--|-----|---------|---------------|-----------------------|---------------|---|------|--------------|------|
| Client ID: | Run ID: VMS8_110504A | | | | SeqNo: 1616453 | | Prep Date: | | DF: 1 | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
| Benzene | 21.85 | 1.0 | 20 | 0 | 109 | 80-120 | 0 | | | |
| Ethylbenzene | 22.58 | 1.0 | 20 | 0 | 113 | 75-125 | 0 | | | |
| m,p-Xylene | 44.61 | 2.0 | 40 | 0 | 112 | 75-130 | 0 | | | |
| o-Xylene | 22.68 | 1.0 | 20 | 0 | 113 | 80-120 | 0 | | | |
| Toluene | 22 | 1.0 | 20 | 0 | 110 | 75-120 | 0 | | | |
| Xylenes, Total | 67.29 | 2.0 | 60 | 0 | 112 | 75-130 | 0 | | | |

| LCSD | Sample ID: VLCSDW1-110504-R89681 | | | | Units: µg/L | | Analysis Date: 5/4/2011 11:50 AM | | | |
|----------------|---|-----|---------|---------------|-----------------------|---------------|---|------|--------------|------|
| Client ID: | Run ID: VMS8_110504A | | | | SeqNo: 1616551 | | Prep Date: | | DF: 1 | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
| Benzene | 21.25 | 1.0 | 20 | 0 | 106 | 80-120 | 21.85 | 2.78 | 30 | |
| Ethylbenzene | 21.82 | 1.0 | 20 | 0 | 109 | 75-125 | 22.58 | 3.42 | 30 | |
| m,p-Xylene | 42.03 | 2.0 | 40 | 0 | 105 | 75-130 | 44.61 | 5.96 | 30 | |
| o-Xylene | 21.71 | 1.0 | 20 | 0 | 109 | 80-120 | 22.68 | 4.37 | 30 | |
| Toluene | 21.44 | 1.0 | 20 | 0 | 107 | 75-120 | 22 | 2.58 | 30 | |
| Xylenes, Total | 63.74 | 2.0 | 60 | 0 | 106 | 75-130 | 67.29 | 5.42 | 30 | |

The following samples were analyzed in this batch:

| | | |
|-------------|-------------|-------------|
| 1105070-01A | 1105070-02A | 1105070-03A |
| 1105070-04A | | |

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

Client: HRL Compliance Solutions
Work Order: 1105070
Project: Clough 104 Tank Farm

QC BATCH REPORT

Batch ID: **33161** Instrument ID **WETCHEM** Method: **SW7196A**

| | | | | | | | | | | |
|----------------------|------------------------------------|------|---------|---------------|-----------------------|---------------|---|------|--------------|------|
| MBLK | Sample ID: MBLK-33161-33161 | | | | Units: mg/Kg | | Analysis Date: 5/6/2011 12:00 PM | | | |
| Client ID: | Run ID: WETCHEM_110506B | | | | SeqNo: 1618844 | | Prep Date: 5/4/2011 | | DF: 1 | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
| Chromium, Hexavalent | ND | 0.48 | | | | | | | | |

| | | | | | | | | | | |
|----------------------|-----------------------------------|------|---------|---------------|-----------------------|---------------|---|------|--------------|------|
| LCS | Sample ID: LCS-33161-33161 | | | | Units: mg/Kg | | Analysis Date: 5/6/2011 12:00 PM | | | |
| Client ID: | Run ID: WETCHEM_110506B | | | | SeqNo: 1618842 | | Prep Date: 5/4/2011 | | DF: 1 | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
| Chromium, Hexavalent | 1.879 | 0.49 | 1.953 | 0 | 96.2 | 75-110 | 0 | | | |

| | | | | | | | | | | |
|----------------------|------------------------------------|------|---------|---------------|-----------------------|---------------|---|------|--------------|------|
| LCSD | Sample ID: LCSD-33161-33161 | | | | Units: mg/Kg | | Analysis Date: 5/6/2011 12:00 PM | | | |
| Client ID: | Run ID: WETCHEM_110506B | | | | SeqNo: 1618843 | | Prep Date: 5/4/2011 | | DF: 1 | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
| Chromium, Hexavalent | 1.956 | 0.50 | 1.984 | 0 | 98.6 | 75-110 | 1.879 | 4.04 | 20 | |

| | | | | | | | | | | |
|----------------------|----------------------------------|------|---------|---------------|-----------------------|---------------|---|------|--------------|------|
| MS | Sample ID: 1104770-01B MS | | | | Units: mg/Kg | | Analysis Date: 5/6/2011 12:00 PM | | | |
| Client ID: | Run ID: WETCHEM_110506B | | | | SeqNo: 1618836 | | Prep Date: 5/4/2011 | | DF: 1 | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
| Chromium, Hexavalent | 1.363 | 0.48 | 1.931 | 0 | 70.6 | 60-130 | 0 | | | |

| | | | | | | | | | | |
|----------------------|-----------------------------------|------|---------|---------------|-----------------------|---------------|---|------|--------------|------|
| MSD | Sample ID: 1104770-01B MSD | | | | Units: mg/Kg | | Analysis Date: 5/6/2011 12:00 PM | | | |
| Client ID: | Run ID: WETCHEM_110506B | | | | SeqNo: 1618837 | | Prep Date: 5/4/2011 | | DF: 1 | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
| Chromium, Hexavalent | 1.471 | 0.49 | 1.946 | 0 | 75.6 | 60-130 | 1.363 | 7.61 | 30 | |

The following samples were analyzed in this batch:

| | | |
|-------------|-------------|-------------|
| 1105070-01B | 1105070-02B | 1105070-03B |
| 1105070-04B | | |

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

Client: HRL Compliance Solutions
Work Order: 1105070
Project: Clough 104 Tank Farm

QC BATCH REPORT

Batch ID: **R89712** Instrument ID **WETCHEM** Method: **A4500-H B**

DUP Sample ID: **1105073-01B DUP** Units: **s.u.** Analysis Date: **5/4/2011 09:00 AM**

Client ID: Run ID: **WETCHEM_110504H** SeqNo: **1617170** Prep Date: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| pH | 7.39 | 0 | 0 | 0 | 0 | 0-0 | 7.39 | 0 | 20 | |

DUP Sample ID: **1105070-01B DUP** Units: **s.u.** Analysis Date: **5/4/2011 09:00 AM**

Client ID: **Staw Bale Check Dam** Run ID: **WETCHEM_110504H** SeqNo: **1617172** Prep Date: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| pH | 8.04 | 0 | 0 | 0 | 0 | 0-0 | 8.04 | 0 | 20 | H |

DUP Sample ID: **1105085-01A DUP** Units: **s.u.** Analysis Date: **5/4/2011 09:00 AM**

Client ID: Run ID: **WETCHEM_110504H** SeqNo: **1617181** Prep Date: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---------|--------|-----|---------|---------------|------|---------------|---------------|------|-----------|------|
| pH | 8.48 | 0 | 0 | 0 | 0 | 0-0 | 8.48 | 0 | 20 | |

The following samples were analyzed in this batch:

| | | |
|-------------|-------------|-------------|
| 1105070-01B | 1105070-02B | 1105070-03B |
| 1105070-04B | | |

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

Client: HRL Compliance Solutions
Work Order: 1105070
Project: Clough 104 Tank Farm

QC BATCH REPORT

Batch ID: **R89723** Instrument ID **MOIST** Method: **A2540 G**

| | | | | | | | | | | |
|-------------|---------------------------------|-------|---------|---------------|---------------------------|---------------|---------------|---|--------------|------|
| MBLK | Sample ID: WBLKS1-R89723 | | | | Units: % of sample | | | Analysis Date: 5/4/2011 12:58 PM | | |
| Client ID: | Run ID: MOIST_110504A | | | | SeqNo: 1617466 | | 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-R89723 | | | | Units: % of sample | | | Analysis Date: 5/4/2011 12:58 PM | | |
| Client ID: | Run ID: MOIST_110504A | | | | SeqNo: 1617462 | | 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: 1105060-03ADUP1 | | | | Units: % of sample | | | Analysis Date: 5/4/2011 12:58 PM | | |
| Client ID: | Run ID: MOIST_110504A | | | | SeqNo: 1617434 | | Prep Date: | | DF: 1 | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
| Moisture | 23.83 | 0.050 | 0 | 0 | 0 | 0-0 | 21.64 | 9.63 | 20 | |

| | | | | | | | | | | |
|------------|-----------------------------------|-------|---------|---------------|---------------------------|---------------|---------------|---|--------------|------|
| DUP | Sample ID: 1105060-03ADUP2 | | | | Units: % of sample | | | Analysis Date: 5/4/2011 12:58 PM | | |
| Client ID: | Run ID: MOIST_110504A | | | | SeqNo: 1617435 | | Prep Date: | | DF: 1 | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
| Moisture | 22.89 | 0.050 | 0 | 0 | 0 | 0-0 | 21.64 | 5.61 | 20 | |

| | | | | | | | | | | |
|---------------------------------------|-----------------------------------|-------|---------|---------------|---------------------------|---------------|---------------|---|--------------|------|
| DUP | Sample ID: 1105070-01B DUP | | | | Units: % of sample | | | Analysis Date: 5/4/2011 12:58 PM | | |
| Client ID: Staw Bale Check Dam | Run ID: MOIST_110504A | | | | SeqNo: 1617457 | | Prep Date: | | DF: 1 | |
| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
| Moisture | 13.24 | 0.050 | 0 | 0 | 0 | 0-0 | 14.63 | 9.97 | 20 | |

The following samples were analyzed in this batch:

| | | |
|-------------|-------------|-------------|
| 1105070-01B | 1105070-02B | 1105070-03B |
| 1105070-04B | | |

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



ALS Laboratory Group

225 Commerce Drive, Fort Collins, Colorado 80524
TF: (800) 443-1511 PH: (970) 490-1511 FX: (970) 490-1522

Chain-of-Custody

Form 202r8

WORKORDER #

1105070

| | | | | | | | | | | | | | | | | | |
|--------------------|---------------------------------|-------------------------------|-------------|--------------------|-----------|----------------------|----|---|---|----------|--|----------|--|----------------------------|--|--|--|
| PROJECT NAME | | Clough 104 Tank Farm | | SAMPLER | | Reed Wold | | DATE | | 5/2/2011 | | PAGE | | 1 of 1 | | | |
| PROJECT No. | | | | SITE ID | | Clough 104 Tank Farm | | TURNAROUND | | 2 Day | | DISPOSAL | | By Lab or Return to Client | | | |
| COMPANY NAME | | HRL COMPLIANCE SOLUTIONS Inc. | | EDD FORMAT | | | | BTEX GRO DRO / PAH / Metals (table 910-1) SAR / EC / PH | | | | | | | | | |
| SEND REPORT TO | | Mark Mumby | | PURCHASE ORDER | | | | | | | | | | | | | |
| ADDRESS | | 744 HORIZON CT SUITE 140 | | BILL TO COMPANY | | HRL Compliance | | | | | | | | | | | |
| CITY / STATE / ZIP | | GRAND JUNCTION CO 81506 | | INVOICE ATTN TO | | Mark Mumby | | | | | | | | | | | |
| PHONE | | 970-243-3271 | | ADDRESS | | | | | | | | | | | | | |
| FAX | | 970-243-3280 | | CITY / STATE / ZIP | | | | | | | | | | | | | |
| E-MAIL | | Mmumby@hrlcomp.com | | PHONE | | | | | | | | | | | | | |
| | | | | FAX | | | | | | | | | | | | | |
| | | | | E-MAIL | | | | | | | | | | | | | |
| Lab ID | Field ID | Matrix | Sample Date | Sample Time | # Bottles | Pres. | QC | | | | | | | | | | |
| 01 | Staw Bale Check Dam | SO | 4/29/2011 | 10:20 | 3 | 8 | | X | X | X | | | | | | | |
| 02 | Confluence Bar Ditch / Drainage | SO | 4/29/2011 | 9:55 | 3 | 8 | | X | X | X | | | | | | | |
| 03 | Terminus (Drainage) | SO | 4/29/2011 | 10:45 | 3 | 8 | | X | X | X | | | | | | | |
| 04 | Sample Pt 1 | SO | 4/29/2011 | 10:30 | 3 | 8 | | X | X | X | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
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| | | | | | | | | | | | | | | | | | |

*Time Zone (Circle): EST CST MST PST Matrix: O = oil S = soil NS = non-soil solid W = water L = liquid E = extract F = filter

For metals or anions, please detail analytes below.

| | | |
|-----------|--------------------------|--------------------------------------|
| Comments: | QC PACKAGE (check below) | |
| | X | LEVEL II (Standard QC) |
| | | LEVEL III (Std QC + forms) |
| | | LEVEL IV (Std QC + forms + raw data) |
| | | |

5.6c

Preservative Key: 1-HCl 2-HNO3 3-H2SO4 4-NaOH 5-NaHSO4 7-Other 8-4 degrees C 9-5035

| | | | | |
|-----------------|---------------|---------------|--------|------|
| | SIGNATURE | PRINTED NAME | DATE | TIME |
| RELINQUISHED BY | Reed Wold | Reed Wold | 5/2/11 | 4pm |
| RECEIVED BY | Diane F. Shaw | Diane F. Shaw | 5/4/11 | 0930 |
| RELINQUISHED BY | | | | |
| RECEIVED BY | | | | |
| RELINQUISHED BY | | | | |
| RECEIVED BY | | | | |



Environmental

Subcontractor:A & L Great Lakes Agricultural La
3505 Conestoga Dr

Ft. Wayne, IN 46808

TEL: (260) 483-4759

FAX:

Acct #: 91000

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

Date: 04-May-11COC ID: 2906Due Date: 06-May-11

| Customer Information | | Project Information | | Parameter/Method Request for Analysis | | | | | | | | | | |
|---|------------------------------|----------------------|------------------------------|---------------------------------------|--------------------------------------|---|---|---|---|---|---|---|---|--|
| Purchase Order | | Project Name | 1105070 | A | Subcontracted Analyses (SUBCONTRACT) | | | | | | | | | |
| Work Order | | Project Number | | B | | | | | | | | | | |
| Company Name | ALS Group USA, Corp | Bill To Company | ALS Group USA, Corp | C | | | | | | | | | | |
| Send Report To | Ann Preston | Inv Attn | Accounts Payable | D | | | | | | | | | | |
| Address | 3352 128th Avenue | Address | 3352 128th Avenue | E | | | | | | | | | | |
| | | | | F | | | | | | | | | | |
| City/State/Zip | Holland, Michigan 49424-9263 | City/State/Zip | Holland, Michigan 49424-9263 | G | | | | | | | | | | |
| Phone | (616) 399-6070 | Phone | (616) 399-6070 | H | | | | | | | | | | |
| Fax | (616) 399-6185 | Fax | (616) 399-6185 | I | | | | | | | | | | |
| eMail Address | ann.preston@alsglobal.com | eMail CC | | J | | | | | | | | | | |
| Sample ID | Matrix | Collection Date 24hr | Bottle | A | B | C | D | E | F | G | H | I | J | |
| 1105070-01C (Staw Bale Check Dam) | Soil | 29/Apr/2011 10:20 | (1) MISC | X | | | | | | | | | | |
| 1105070-02C (Confluence Bar Ditch / Drainage) | Soil | 29/Apr/2011 9:55 | (1) MISC | X | | | | | | | | | | |
| 1105070-03C (Terminus (Drainage)) | Soil | 29/Apr/2011 10:45 | (1) MISC | X | | | | | | | | | | |
| 1105070-04C (Sample Pt 1) | Soil | 29/Apr/2011 10:30 | (1) MISC | X | | | | | | | | | | |

Comments:Please run for SAR-EC. Need results by 5/6/11

Relinquished by:

Date/Time

5/4/11

Received by:

Date/Time

Cooler IDs

Report/QC Level

Std

Relinquished by:

Date/Time

Received by:

Date/Time

Sample Receipt Checklist

Client Name: HRL

Date/Time Received: 04-May-11 09:30

Work Order: 1105070

Received by: DS

Checklist completed by Diane Shaw 04-May-11
eSignature Date

Reviewed by: Ann Preston 04-May-11
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"/> | |
| Temperature(s)/Thermometer(s): | <u>5.6 c</u> | | |
| Cooler(s)/Kit(s): | | | |
| 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: | | | |
| Login Notes: | | | |

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:

FedEx

QUANTITY SEAL

DATE

SIGNATURE

QEC

Quality Environmental Conta
800-255-3950 • 304-255-39

QEC

Quality Environmental Containers
800-255-3950 • 304-255-3900

FedEx Retrieval Copy

Date 5/10/11

Sender's Name
Account Number

Sender's Name

Reed Wild

Phone

970 243 3271

Company

HRL Compliance

Address

744 Horizon Ct Suite 140

City

Grand Junction

State

CO

ZIP

81506

2 Your Internal Billing Reference

3 To

Recipient's Name

Sample Recycling

Phone

616 399 6070

Company

ALS Group

Address

3352 128th Ave

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Dept./Floor/Suite/Room

Address

Use this line for the HOLD location address or for continuation of your shipping address.

City

Holland

State

MI

ZIP

49424

01

HOLD Weekday
FedEx location address
REQUIRED. NOT available for
FedEx First Overnight.

31

HOLD Saturday
FedEx location address
REQUIRED. Available ONLY for
FedEx Priority Overnight and
FedEx 2Day to select locations.

- 01** ☐ **FedEx Priority Overnight**
Next business morning*
FedEx 2Day
Second business day** Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- 03** ☐ **FedEx 2Day**
Second business day** Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- 05** ☐ **FedEx Standard Overnight**
Next business day**
FedEx First Overnight
Earliest next business morning delivery to select locations.*
- 20** ☐ **FedEx Express Saver**
Third business day**
Saturday Delivery NOT available.

4b Express Freight Service

** To most locations.

Packages over 150 lbs.

- 70** ☐ **FedEx 1Day Freight**
Next business day** Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- 80** ☐ **FedEx 2Day Freight**
Second business day** Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- 83** ☐ **FedEx 3Day Freight**
Third business day** Saturday Delivery NOT available.
- 5 Packaging** *Declared value limit \$500.
- 06** ☐ **FedEx Envelope*** **02** ☐ **FedEx Pak***
Includes FedEx Small Pak and FedEx Large Pak.
- 03** ☐ **FedEx Box** **04** ☐ **FedEx Tube** **01** ☐ **Other**

6 Special Handling and Delivery Signature Options

03 SATURDAY DELIVERY

- ☐ **No Signature Required**
Package may be left without obtaining a signature for delivery.
- 10** ☐ **Direct Signature**
Someone at recipient's address may sign for delivery. Fee applies.
- 34** ☐ **Indirect Signature**
If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. Fee applies.
- Does this shipment contain dangerous goods?**
One box must be checked.
- ☐ **No** **04** ☐ **Yes**
As per attached Shipper's Declaration.
- ☐ **Yes**
Shipper's Declaration not required.
- 06** ☐ **Dry Ice**
Dry ice, 8, UN 1845 x kg
- ☐ **Cargo Aircraft Only**

7 Payment Bill to:

- 1** ☐ **Sender**
Acct. No. in Section 7 will be billed.
- 2** ☐ **Recipient**
- 3** ☐ **Third Party**
- 4** ☐ **Credit Card**
- 5** ☐ **Cash/Check**
- Enter FedEx Acct. No. or Credit Card No. below.
- Obtain recip. Acct. No. ☐
- Total Packages 1 Total Weight 6.2 lbs.
- Credit Card Auth. 606

fedex.com 1.800.GoFedEx 1.800.463.3339

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0740 0071 0200